HYDROCOLONISATION IN THE LESOTHO HIGHLANDS WATER PROJECT TREATY: LEGITIMATE TREATY OR MURKY WATERS?

by

CLIVE VINTI (1562767)

Thesis submitted in fulfilment of the requirements for the degree of

DOCTOR OF PHILOSOPHY (PhD)

in

the School of Law at the University of the Witwatersrand

Supervisor

Professor Tumai Murombo

School of Law, Faculty of Commerce, Law, and Management

University of the Witwatersrand

DECLARATION

I, CLIVE VINTI, declare that this thesis is my own unaided work. It is submitted in fulfilment of the requirements of the degree of Doctor of Philosophy (PhD) in the Faculty of Commerce, Law, and Management at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

SIGNATURE……Clive Vinti

Abstract

The world is endowed with an excess amount of water. The challenge with water is that most of it is inaccessible. This creates intense competition for accessible water resources. Further compounding this issue is that most of the water on earth is shared between different countries. This obviously leads to tension between countries that share a specific watercourse. These countries have to choose to be either in conflict or to cooperate over these shared watercourses. The power imbalance of the countries in question can sometimes operate to result in an inequitable water-sharing regime. The Treaty on the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (LHWP) is an apt illustration of this conundrum. The central object of this agreement is that Lesotho will supply water to South Africa from the Orange River in return for royalties.

However, various climate change projections predict that eventually, Lesotho will be unable to meet its water supply obligations to South Africa under the LHWP. This will create a 'conflict of uses' in the LHWP. On the one hand, the LHWP appears to suggest that the supply of water to South Africa must always trump the water uses of Lesotho residents. Whereas the legislation of Lesotho provides that the 'domestic water uses' i.e. water for personal and household needs of Lesotho, trump all other uses in a conflict of uses. In this regard, the LHWP regime requires that the domestic legislation of both countries must be brought into line with the LHWP. In this way, there is a disjuncture between the domestic legislation of Lesotho and the LHWP. This disjuncture remains unresolved. Thus, in a conflict of uses, Lesotho may be compelled either to provide water for 'domestic water use' to its residents or to comply with its water supply obligation to South Africa under the LHWP. This stark choice certainly raises questions about the equitability and sustainability of the water uses in the project. Consequently, this thesis seeks to assess whether the LHWP is in line with the key underlying transboundary water principles that address the anticipated conflict of uses. That is to say, this thesis will assess whether the LHWP complies with the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources, which address the projected conflict of uses. In this regard, the study found that the LHWP is inequitable, unsustainable and violates Lesotho's right to permanent sovereignty over the water in the LHWP. It is then my recommendation, that the LHWP be amended to incorporate these principles that will address the anticipated conflict of uses and align the LHWP with international law.

Dedication

This thesis is dedicated to my mother, Margaret Vinti, who passed away at the beginning of my study of the law. Your sacrifices and commitment to my cause is unparalleled. This work is an ode to your vision and spirit. Indlamuva yinkosi.

Acknowledgments

Firstly, I thank God - I Am, whose Grace has been sufficient for me.

I am grateful to the wisdom and instruction of my supervisor Professor Tumai Murombo. This project would not have been possible without his direction. I am also grateful to Dr. Ilze Keevy, who fought the good fight to open the door for me and who was instrumental in the choice of this topic.

I am eternally grateful to my Spiritual Father, Dr. Immanuel Hlabangana - your words are spirit. I must also thank all my siblings and my late Father, Noah Vinti Snr, who made the sacrifice. I must also thank my friends who are also my family, Takaendesa Matiza, Tawanda Mukosi, Khulekani Mthimkhulu, Moffat Ndou, Swikani Ncube, Simbarashe Tavuyanago, Prince Mafu, Mmiselo Qumba and Khanya Motshabi who encouraged me and were gracious enough to read and help me edit my various drafts.

I must also thank Professor Neels Swanepoel, Professor John Mubangizi, Professor Willemien Du Plessis and Professor Hussein Solomon, who helped me with comments and insight on my work. I appreciate your guidance.

Finally, I am eternally grateful to my Mkami, Zimkhitha, your patience, love, wisdom and support throughout this journey made all this possible.

Publications and conferences papers

During my research, the following peer-reviewed publications were published or are being published from ideas and parts of the thesis. A substantial proportion of these outputs focus on the issue of sustainable development, in particular, the elusive balance between economic development and environmental protection, which is a fundamental portion of this thesis:

Articles

- Vinti C "The power to declare a prohibition or restriction on prospecting or mining to protect the environment: A critical assessment of section 49 of the Mineral and Petroleum Resources Development Act 28 of 2002 and section 24(2A) of the National Environmental Management Act 107 of 1998" *Journal of Energy & Natural Resources Law* (2018) 36(4) 411-432 DOI 10.1080/02646811.2018.1437242.
- Vinti C "The right to mine in a 'protected area' in *South Africa: Mining and Environmental Justice Community Network of South Africa v Minister of Environmental Affairs*" *South African Journal on Human Rights* (2019) 35(2) 1-12.

Conference and Symposium Paper Presentations

Presented as Panel Member on the Symposium on the "Territorial Waters, Politics and Regional Commons: What does it mean to decolonize the narratives of water, the science disciplines that structure what we know and by what means, and the role of people in the everyday management, governance and stewardship of water?" - Watershed Conference: Art, Science and Elemental Politics: University of the Witwatersrand: 10-21 September 2018.

Abbreviations and acronyms

CDF	Community Development Fund
CERDS	Charter of Economic Rights and Duties of States
CFA	Agreement on the Nile River Basin Cooperative Framework
EIA	Environmental Impact Assessment
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
ICJ	International Court of Justice
ILA	International Law Association
ILC	International Law Commission
IWRM	Integrated Water Resources Management
LFCD	Lesotho Fund for Community Development
LHDA	Lesotho Highlands Development Authority
LHRF	Lesotho Highlands Revenue Fund
LHWC	Lesotho Highlands Water Commission
LHWP	Treaty on the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa
LMC	Lancang-Mekong Cooperation Mechanism
LWA	Lesotho Water Act 15 of 2008
MPRDA	Minerals and Petroleum Resources Development Act 28 of 2002

MRA	Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (1995)
MRC	Mekong River Commission
NEMA	National Environmental Management Act 107 of 1998
NWA	National Water Act 36 of 1998
NWRS	National Water Resource Strategy: Water for an Equitable and Sustainable Future 2013
ORASECOM	Orange Senqu River Commission
PER/PELJ	Potchefstroom Electronic Law Journal
SACU	Southern African Customs Union
SADC	Southern African Development Community
SAJHR	South African Journal on Human Rights
SA Public Law	Southern African Public Law
TCTA	Trans-Caledon Tunnel Authority
UDHR	Universal Declaration of Human Rights
UNCED	United Nations Conference on Environment and Development
UNCLOS	United Nations Convention on the Law of the Sea
UNCTAD	United Nations Conference on Trade and Development
UNDRIPS	United Nations Declaration on Rights of Indigenous Peoples
UNFCCC	United Nations Framework Convention on Climate Change
WCD	World Commission on Dams
WWDR	World Water Development Report

ZAMCOM	Zambezi River Commission
ZAMCOM Agreement	Agreement on the Establishment of the Zambezi Watercourse Commission

Table of Contents

DECLARATION……..ii

Abstract ……...iii

Dedication…….....iv

Acknowledgments……v

Publications and Conference papers…….....vi

Abbreviations and acronyms…….vii

Table of contents……...x

Chapter 1: The factual and legal framework of the Lesotho Highlands Water Project

1.1 Introduction and background……2

1.2 The Agreement on the Establishment of the Zambezi Watercourse Commission (ZAMCOM Agreement) ……..... 20

1.3 Problem Statement ……23

1.4 Main Research Question and Secondary Research Questions…….....24

1.5 Literature Review…….....24

1.5.1 The underlying principles of shared watercourses……...24

1.5.1.1 The principle of ‘equitable and reasonable utilization’ …….....30

1.5.1.2 The principle of ‘sustainable development’ …….....32

1.5.1.3 The principle of ‘permanent sovereignty over natural resources’…….....34

1.6 Significance of the study and Research Objectives……37

1.7 Research methodology……38

1.8 Chapter outline……38

Chapter 2: Does the LHWP comply with the principle of 'equitable and reasonable utilization'?

2.1 Introduction……41

2.2 The principle of 'equitable and reasonable utilization'……...42

2.3 The LHWP and the principle of 'equitable and reasonable utilization'…….....47

2.4 'Equitable utilization' as a component of 'equitable and reasonable' utilization……...59

2.5 The principle of 'equitable participation'…….....76

2.6 'Benefit-sharing' as a component of the principle of equitable and reasonable utilization……..88

2.7 'Reasonable utilization' and the LHWP……104

2.8 Conclusion and recommendations……..……..107

Chapter 3: In what way does the LHWP comply with the principle of 'sustainable development' as an inherent component of the principle of 'equitable and reasonable utilization'?

3.1 Introduction……..112

3.2 The principle of 'sustainable development' and the LHWP…….....113

3.2.1 The 'integration' principle……126

3.2.2 The principle of 'sustainable utilization'……..……..…133

3.2.2.1 The 'precautionary principle'……..142

3.2.3 The principles of 'intergenerational equity' and 'intragenerational equity'……146

3.3 Conclusion……152

Chapter 4: To what extent does the LHWP comply with the principle of permanent sovereignty over natural resources?

4.1 Introduction……..158

4.2 The principles of water allocation..……...160

4.3 An assessment of whether the LHWP complies with the principle of ‘permanent sovereignty over natural resources’……164

4.4 An evaluation of Lesotho’s right to Expropriate/Nationalize the LHWP…….....189

4.5 The nexus between absolute ‘permanent sovereignty over natural resources’ and ‘power asymmetry’ in transboundary water agreements…….....212

4.6 Conclusion……219

Chapter 5: Conclusion

5.1 Introduction……. 224

5.2 Problem Statement……225

5.3 Summary of main findings……...226

5.3.1 Chapter 2: To what extent does the LHWP comply with the principle of ‘equitable and reasonable utilization’?..... 226

5.3.1.1 ‘Equitable utilization’..……...227

5.3.1.2 ‘Equitable participation’…….231

5.3.1.3 ‘Benefit-sharing’…….....234

5.3.1.4 ‘Reasonable utilization’…….....235

5.3.2 Chapter 3: In what way does the LHWP comply with the principle of ‘sustainable development’ as an inherent component of the principle of ‘equitable and reasonable utilization’?.....236

5.3.2.1 The principle of ‘integration’……..237

5.3.2.2 ‘Sustainable utilization’…….....240

5.3.2.3 The principles of ‘intergenerational equity’ and ‘intragenerational equity’……242

5.3.3 Chapter 4: To what extent does the LHWP comply with the principle of ‘permanent sovereignty over natural resources’?.....…….245

5.4 Final Reflections……...250

Chapter 6: Bibliography

6.1 Books, Monographs & Book Chapters ……252

6.2 Journal Articles ……254

6.3 Government Publications……..264

6.4 Published & Unpublished Thesis ……266

6.5 Treaties & International Instruments…….267

6.6 Internet & Other Media Articles ……...274

7. Table of Cases ……282

8. Table of Statutes and Regulations……...287

Chapter 1: The Factual and Legal Framework of the Lesotho Highlands Water Project

Chapter 1: The Factual and Legal Framework of the Lesotho Highlands Water Project

1.1 Introduction and background

Water is one of the ubiquitous natural resources in the world, yet access to water has proven elusive. The United Nations Education, Scientific and Cultural Organization (UNESCO) projects that by 2030, the world is expected to be confronted with a 40 per cent global water deficit.[1] In the Southern African Development Community (hereafter, SADC) region, 40 per cent of the inhabitants lack access to an adequate and clean drinking water supply and 60 per cent have no access to adequate ablution services.[2] All shared river basins, with 13 located fully within the SADC region, have promulgated a cooperation framework in compliance with the SADC Revised Protocol on Shared Watercourses (hereafter, the Revised Protocol).[3] It bears mention that only 60 per cent of the world's transboundary water basins have a joint water management framework.[4] In respect of the 105 water basins with common management institutions, almost two-thirds include three or more riparian States yet, less than twenty per cent of the attendant agreements are multilateral.[5] This suggests there is an unwillingness to develop mechanisms to control shared water resources and to share possible benefits efficiently and productively.[6] This conundrum has contrived to make freshwater a virtually exhaustible natural resource. To this end, in the 1950s, the apartheid government believed that to address the major water scarcity in South Africa, specifically the economic fulcrum of Gauteng: South Africa had to convince its water-endowed neighbour, Lesotho, to sell it water from the Orange/Senqu River.[7] This process resulted in the formulation and signing of the Treaty on the

[1] United Nations Education, Scientific and Cultural Organisation World Water Development Report 2015: Water for a Sustainable World 11 <http://www.unesco.org/new/en/loginarea/natural-sciences/environment/water/wwap/wwdr/2015-water-for-a-sustainable-world/> (hereafter, WWDR 2015).
[2] Southern African Development Community Regional Strategic Action Plan on Integrated Water Resources Management Phase IV 2016-2020 (hereafter, SADC Water RSAP) 1 <https://www.sadc.int/files/9914/6823/9107/SADC_Water_4th_Regional_Strategic_Action_Plan_English_version.pdf>.
[3] Ibid 3.
[4] WWDR 2015 (note 1 above) 11.
[5] Ibid 11-12.
[6] Ibid 12. P Wouters 'An Assessment of Recent Developments- in International Watercourse Law through the Prism of the Substantive Rules Governing Use Allocation' (1996) 36 *Natural Resources Journal* 417, 436.
[7] Civil Engineering 'Ninham Shand 75' (2007) 15 *Civil Engineering* 7, 7; A Turton, C Schultz & H Buckle *et al* 'Gold, Scorched Earth and Water: The Hydropolitics of Johannesburg' (2006) 22 *International Journal of Water Resources Development* 313,322.

Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (hereafter, LHWP).

The essential structure of the LHWP is that Lesotho 'sells' the water in the Orange River by 'storing, regulating, diverting and controlling the flow of the Senqu/Orange River and its effluents' to South Africa who pays royalties, which Lesotho uses to construct dams that produce electricity.[8] The Orange River is the largest in South Africa, and it emanates in the Maluti mountains of Lesotho with a catchment area of about one million square kilometres - 64 per cent of the basin covers South Africa, which contributes 53 per cent of total run-off, 24 per cent covers Namibia, which contributes five per cent of the total runoff, about eight per cent covers Botswana which contributes virtually zero per cent of total run-off and covers three per cent of Lesotho yet it contributes 40 per cent of the total run-off.[9] In this regard, the river generally flows in a westerly direction and eventually dispenses into the Atlantic Ocean at Alexander Bay.[10] Tributaries of the Orange River include the Caledon River, the Kraai River, the Vaal River, the Ongers and Sak Rivers, the Molopo and Nossob Rivers in Namibia, Botswana and the Northern Cape Province in South Africa, which have not made a contribution to the Orange River in recent history due to sedimentation and the Fish River which flows through the southern part of Namibia.[11] In this way, the Orange River constitutes a 'shared' or 'transboundary' or 'international' watercourse. These three terms will be used interchangeably throughout this thesis. In this regard, I accept that the terms 'international or shared or transboundary watercourse' as the expedient term for rivers, lakes, or groundwater sources that traverse two or more countries.[12] Such 'watercourses' will usually either "form or straddle an international boundary, or in the case of rivers, they may flow through a succession of states".[13]

---

[8] See Treaty on the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (adopted, entered into force on 24 October 1986) art 4.1 read with art 12. The calculation of royalties is a complex process guided by Article 12 of the LHWP on the basis of 56 per cent on the part of Lesotho and 44 per cent on the part of South Africa the 'net benefit' calculated in line with the requirements of paragraph 2 recalculated in line with the requirements of paragraph (6) or (7) or (8) of Article 12 where applicable. As of May 2020, South Africa had paid M 405,107,993.45 for water sales from Lesotho in 2020 and had paid M 10,643,269,693.64 since the inception of the LHWP – LHDA 'Wate r Sales' <http://www.lhda.org.ls/lhdaweb/Uploads/documents/royalties/Water%20Royalties.pdf>.

[9] Department of Water Affairs 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems Orange River: Quality and Effluent Re-Use Report' (2013) 7 <http://www.dwa.gov.za/Projects/Orange%20Recon/Docs/final/8%20Water%20Quality.pdf>; ORASECOM Integrated Water Resource Management Plan for the Orange- Senqu River Basin (2014) 3 <http://wis.orasecom.org/content/study/GIZ/The%20IWRMP/Documents/019_2014_IWRM-Plan-Main-Report.pdf>.

[10] Department of Water Affairs 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems Orange River: Quality and Effluent Re-Use Report' (note 9 above) 3.

[11] Ibid.

[12] P Birnie, A Boyle & C Redgwell *International Law and the Environment* 3 ed (2009) 536.

[13] Ibid.

Consequently, it is accepted in this study that the Orange River is a 'shared' or 'transboundary' or an 'international' watercourse. However, this analysis will not consider the legal regime for 'groundwater sources' as an aspect of 'shared watercourses'. The discussion of 'groundwater' in this thesis only serves to show how climate change impacts groundwater and how that affects the Orange River in light of the inherent link between groundwater and rivers.

In Lesotho, the LHWP is implemented and managed through the Lesotho Highlands Development Authority (hereafter, LHDA). The LHDA has the principal duty to supply specific quantities of water to South Africa.[14] In South Africa, the Trans-Caledon Tunnel Authority (hereafter, TCTA) must implement the aspects of the project in South Africa and is conferred with all the powers required for the performance of such duties.[15] The LHWP constitutes four phases and is the largest water transfer project in the basin.[16] Phase I was then split into two sub-phases: Phase IA concerned the building of the Katse dam on the Malibamatso River, the Muela hydropower plant and attendant infrastructure, while Phase 1B involved the building of the Mohale dam.[17] Phases II, III and IV involve the building of the Mashai, Tsoelike and Ntoahae reservoirs.[18] Phase 1A begun in 1987 and was concluded in 1997 and the supply of water to South Africa commenced in 1998.[19]

Recently, South Africa and Lesotho reached an agreement to implement Phase II of the project. The Agreement on Phase II of the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (hereafter, Phase II Agreement) establishes the legislative basis for the management of Phase II including the maintenance of both Phase I and Phase II of the Project.[20] If there is a conflict

[14] LHWP art 7.1 read with art 7.2 and Protocol VI System of Governance to the Treaty on the Lesotho Highlands Water Project: Supplementary Arrangements Regarding the Systems of Governance for the Project (adopted, entered into force 4 June 1999) (hereafter, Protocol VI) art 3. See also, s 20 of the Lesotho Highlands Development Authority Order, 1986 <https://www.ecolex.org/details/legislation/lesotho-highlands-development-authority-order-no-23-of-1986-lex-faoc128641/>.

[15] See LHWP art 8.1 and art 8.2. Protocol VI art 4 read with art 8 and art 8A. The work of the LHDA and TCTA is monitored by the Lesotho Highlands Water Commission as provided by art 5 of Protocol VI and art 9 of LHWP. The 'Joint Permanent Technical Commission' was renamed as the 'Lesotho Highlands Water Commission' as provided by art 2 of Protocol VI.

[16] LHWP art 5 read with LHWP: Annexure I: Project Description. See also, LHDA 'Lesotho Highlands Water Project Further Phases' (2004) <http://www.lhda.org.ls/Phase1/Reports/PDF/LHWP%20Further%20Phases.pdf >; ORASECOM Integrated Water Resource Management Plan for the Orange- Senqu River Basin (note 9 above) 5; M Thabane 'Shifts from Old to New Social and Ecological Environments in the Lesotho Highlands Water Scheme; Relocating Residents of the Mohale Dam Area' (2000) 26 *Journal of Southern African Studies* 633, 635.

[17] LHWP: Annexure I: Project Description para 2.

[18] LHWP: Annexure I: Project Description.

[19] Ibid.

[20] Agreement on Phase II of the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (adopted, entered into force 11 August 2011) art 2.

on the import of a term, the meaning stipulated in the Phase II Agreement prevails with respect to reading of this Agreement and not to the interpretation of the LHWP.[21] However, the requirements of the LHWP are binding unless amended by the Phase II Agreement.[22] Consequently, the LHWP is the overarching treaty regulating the project and the Phase II Agreement constitutes a protocol to the LHWP. Thus, throughout this study, reference to the 'LWHP' refers to the treaty as the operative regime for all the 'Phases' of the water project. This means that any inferences made about the LHWP provisions also apply to Phase II of the project and its protocol, i.e. the Phase II Agreement, to the extent that they are not amended by the Phase II Agreement. This is the import of Article 3 of the Phase II Agreement.

In this regard, the Lesotho Highlands Transfer Scheme transfers water from the Katse Dam in Lesotho to the Vaal System in South Africa.[23] The transfer capacity has steadily increased over time and has already attained its peak transfer quantity of 780 million cubic metres per annum as agreed to by the signatories to the LHWP.[24] The Caledon/Modder transfer system augments the water supply to Bloemfontein, Mangaung, Botshabelo, Thaba N'chu and various towns within the Modder/Riet River catchment,[25] whereas the Orange/Fish tunnel transfers the water to the Eastern Cape from the Gariep Dam.[26] Water is conveyed through a plethora of conduits including canals, tunnels and balancing dams to eventually supply the Nelson Mandela Bay Metro.[27] The Orange/Riet Transfer scheme, on the other hand, acquires water from Vanderkloof Dam to be conveyed to the Riet River catchment.[28] This water provides for irrigation and urban needs of Koffiefontein, Richie and Jacobsdal.[29] Lastly, the Orange-Vaal transfer is required for irrigation projects and to cater to the water requirements of the town of Douglas.[30] The quantity of transferred water hinges on the water that is accessible in the Vaal River and the amount of water in the Douglas Weir.[31] Phase II is projected to begin providing

[21] Phase II Agreement (adopted, entered into force 11 August 2011) art 1.3.
[22] Phase II Agreement art 3.
[23] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River - Current and Future Water Requirements' (2013) (hereafter, Department of Water and Sanitation 'Current and Future Water Requirements' 2013) 27 <http://www.dwa.gov.za/Projects/Orange%20Recon/Docs/final/4%20Current%20and%20future%20Water%20Requirements2.pdf>.
[24] Ibid.
[25] Ibid 28.
[26] Ibid.
[27] Ibid.
[28] Ibid.
[29] Ibid 29.
[30] Ibid 30.
[31] Ibid.

water to South Africa by 2022.[32] On the whole, it is estimated that the LHWP has provided 10 000 million cubic metres of high-quality water and it has enhanced water supply and materially lowered water treatment expenses.[33] Water is Lesotho's largest source of non-tax revenue contributing ten per cent to the overall Gross Domestic Product (GDP).[34] The project created at least 16 000 jobs in Lesotho during Phase I and also provided good quality roads, which translates to improved accessibility into the highlands areas.[35]

The significance of the Orange River to South Africa is illustrated by the fact that the river's natural flow is more than 22 per cent of the nation's surface water resources.[36] The natural water resources of the Orange River Basin are estimated to be approximately 12 000 million cubic metres with less than 50 per cent utilised by the LHWP, and these water transfers in the basin are necessitated by incongruence between the location of abundant water resources and the locations of highest demand.[37] In respect of demand, it is projected that urban/industrial demand for water will virtually double by 2040, with about 87 per cent of the demand emanating from South Africa, eight per cent in Lesotho and five per cent in Namibia at the 2012 development level and it bears mention here, that ORASECOM projects that total water demand (urban, industrial, mining, irrigation and transfers) for Namibia is expected to virtually double by 2030 whereas Botswana will remain unchanged while the demand in South Africa and Lesotho will increase by about twelve per cent and 23 per cent respectively, in the same period.[38] This means that the competition for the water in the LHWP will intensify especially on the part of South Africa and Namibia.

This will be compounded by the fact that there are plans to further abstract water from the Orange River, which include: the Karoo hydraulic fracturing project; Eskom has plans for a Solar Park at Olyvenhoutsdrift and several licences have been issued for minor solar power plants on the Lower Orange which require water from the Orange River; the Square Kilometre

[32] Ibid 28.
[33] Parliamentary Monitory Group 'Lesotho Highlands Water Project Phase 2: Progress Report with the Minister' ((26 October 2016) 1 <https://pmg.org.za/committee-meeting/23524/>.
[34] The Kingdom of Lesotho National Climate Change Policy 2017 – 2027 15 <https://www.gov.ls/documents/national-climate-change-policy/>.
[35] Parliamentary Monitory Group 'Lesotho Highlands Water Project Phase 2: Progress Report with the Minister' 1 (26 October 2016) (note 33 above) 2.
[36] Department of Water Affairs 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems Orange River: Quality and Effluent Re-Use Report' (note 9 above) 9-10.
[37] Ibid 10; ORASECOM Integrated Water Resource Management Plan for the Orange-Senqu River Basin (note 9 above) 5.
[38] Department of Water Affairs 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems Orange River: Quality and Effluent Re-Use Report' (note 9 above) iii; ORASECOM Integrated Water Resource Management Plan for the Orange-Senqu River Basin (note 9 above) 17.

Array Radio Telescope (SKA) Development project for the construction of 64 Meerkat dishes in the Karoo and licences for groundwater have been acquired for this project and there is possibility of hydropower projects at Augrabies.[39] An agreement was also concluded in 2013 between Lesotho and Botswana to evaluate the feasibility of the transfer of water from Lesotho to supplement water supply to Botswana.[40] This feasibility study is in light of the recent data on hydrology and ecological needs and the best option for this water supply.[41] Assessing the feasibility of developing Lesotho's water resources for supply to the lowlands and other riparian countries could improve water security and drought management for the southern African region.[42]

It must also be borne in mind that the Orange River is also the subject of another transboundary water agreement: The Agreement between the Governments of the Republic of Botswana, the Kingdom of Lesotho, the Republic of Namibia and the Republic of South Africa on the establishment of the Orange-Senqu River Commission Agreement (hereafter, ORASECOM Agreement). The existence of a multilateral regime in the Orange River basin does not dislodge existing bilateral agreements, nor does it prevent additional future bilateral agreements between any of the watercourse States.[43] Rather, it facilitates a wider framework for holistic dialogue and cooperation between the watercourse States for rational and integrated water resources development in the basin.[44] Within this framework, the ORASECOM Agreement appears to be, in part, a concession by South Africa in reaction to the dispute it has with Namibia over the boundary of the Orange River.[45] This builds on the Agreement between

[39] Department of Water and Sanitation 'Current and Future Water Requirements' 2013 (note 23 above) vii; See South African Radio Astronomy Observatory 'Media Release: South African-led Assembly, Integration and Verification (AIV) Consortium completes planning work for SKA' (10 July 2019) <https://www.ska.ac.za/media-releases/south-african-led-assembly-integration-and-verification-aiv-consortium-completes-planning-work-for-ska/>.

[40] Lesotho Long Term Water and Sanitation Strategy (2017) 151 <https://www.water.org.ls/download/lesotho-long-term-water-and-sanitation-strategy/>; See Memorandum of Understanding for Feasibility Study to Transfer Water from Lesotho to Botswana (2013).

[41] Department of Water and Sanitation 'Current and Future Water Requirements' 2013 (note 23 above) vii. Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (2013) 31 <http://www.dwaf.gov.za>.

[42] Department of Water and Sanitation 'Current and Future Water Requirements' 2013 (note 23 above) vii. See South African Radio Astronomy Observatory (note 39 above) vii.

[43] M Mahlakeng 'An analysis of regime capacity and a nascent environmental conflict in the Orange-Senqu, the Nile and the Niger River basins'. Thesis presented for the degree of PhD at the University of the Free State (2017) 130.

[44] Ibid.

[45] JE Kistin & PJ Ashton 'Adapting to Change in Transboundary Rivers: An Analysis of Treaty Flexibility on the Orange-Senqu River Basin' (2008) 24 *International Journal of Water Resources Development* 385, 393; IJ Demhardt 'Namibia's Orange River Boundary-Origin and Reemerged Effects of an Inattentive Colonial Boundary Delimination Demhardt' (1990) 22 *GeoJournal* 355, 359; O Varis, C Tortajada & AK Biswas *Management of Transboundary Rivers and Lakes Water Resources Development and Management* (2008) 56; See also,

the government of the Republic of Namibia and the government of the Republic of South Africa on the creation of a Permanent Water Commission, which seeks to regulate the allocation and utilization of the Orange River.[46] The Constitution of the Republic of Namibia provides that the national territory of Namibia consists of the "whole of the territory recognised by the international community through the organs of the United Nations as Namibia, including the enclave, harbour and port of Walvis Bay, as well as the off-shore islands of Namibia, and its southern boundary shall extend to the middle of the Orange River".[47] South Africa, on the other hand, alleges that the "northern high-water mark" is the boundary as was agreed between Britain and Germany in an 1890 accord.[48] This could be a potential source of conflict between these two countries because the Orange River is a fundamental resource for the southern parts of Namibia where the commercial agriculture and mining projects rely heavily on the river.[49] In light of this, the ORASECOM Agreement provides for instruments to establish "the long-term safe yield" of the water resources in the Orange River and the equitable and reasonable utilization of the water sources in the Orange River to ensure sustainable development in the territory of each party.[50] This is significant because the ORASECOM Agreement shows that 'sustainable development' cannot be achieved without 'equitable and reasonable utilization'. In the same breath, the ORASECOM Agreement advocates for the optimal use of water in the river by demanding a "long term safe yield". In this way, the ORASECOM Agreement must be commended for reconciling the concerns of the riparian States in the Orange River basin to preserve the integrity of the water system and to avoid unsustainable water abstraction.

Agreement between the Republic of South Africa and the Interim Government of the National entity of Southwest-Africa/Namibia concerning the control development and utilization of the water of the Orange River (1987); Agreement on the Vioolsdrift and Noordoewer Joint Irrigation Scheme Between the Government of the Republic of Namibia and the Government of the Republic of South Africa (adopted 14 September 1992); Agreement Between the Government of the Republic of South Africa and the Government of the Republic of Namibia on the Establishment of a Permanent Water Commission (adopted 14 September 1992).

[46] Agreement between the Government of the Republic of Namibia and the Government of the Republic of South Africa on the Establishment of a Permanent Water Commission art 1(a).

[47] Constitution of the Republic of Namibia (1990) art 1.4 <https://laws.parliament.na/namibian-constitution/>.

[48] International Boundaries Research Unit 'South Africa-Namibia boundary working group established' <http://www.informante.web.na/south-border-dispute.15089>.

[49] Mahlakeng (note 43 above) 116; United Nations Development Programme 'Development and adoption of a Strategic Action Programme for balancing water uses and sustainable natural resource management in the Orange-Senqu River trans-boundary basin (PIMS: 3243)' (2010) para 38 <https://info.undp.org/docs/pdc/Documents/ZAF/ORASECOM%20prodoc%204June2009.doc>.

[50] ORASECOM Agreement (adopted, entered into force 3 November 2000) art 5.2.1, art 5.2.2 read with art 7.2.

Nevertheless, according to ORASECOM, there is lack of basin-wide cooperation at the multi-national level and the volumetric water allocation for all riparians has not been established.[51]

Furthermore, a party proposing any project in the Orange River that may have a materially negative effect on any one or more of the other signatories or which may negatively impact the Orange River must immediately notify ORASECOM and provide all accessible and pertinent data.[52] This obligation ensures that there is cooperation between the parties and that all the parties are aware of any activity that may detrimentally affect their interests in the Orange River. This provision aims to ensure the sustainable use of the Orange River, and this will placate the fears of riparian States in the Orange River against hegemonic conduct. In this study, the term 'hegemon' refers to the 'dominance' of one State over other States.[53]

However, the ORASECOM Agreement creates a necessary exception by providing that if the implementation of any proposed measures is of the "utmost urgency in order to save life, or to protect public health and safety, or other equally important interests as a result of an emergency situation, the party planning the measures may immediately proceed with implementation or execution: Provided that in such event a formal declaration of the urgency of the measures shall be communicated to Council".[54] This provision means that the ORASECOM Members may deviate from the prior notification procedures in times of necessity. This has significant implications because the exception is open-ended and any ground may be employed provided that it is "equally important" as public health or safety and saving of lives. This would then mean that the ORASECOM Agreement permits Lesotho in times of a localised or interstate conflict for water, to divert water from the Orange River without giving prior notice in order to safeguard public health and safety and indeed, life itself.

It must be noted though, that it is difficult to reconcile the ORASECOM Agreement and the LHWP. This is because the LHWP does not explicitly provide for the principles of equitable and reasonable utilization and sustainable development, yet the ORASECOM Agreement does so. This is problematic because both agreements regulate the same watercourse. This

[51] ORASECOM 'Orange Senqu River Basin Preliminary Transboundary Diagnostic Analysis' (2008) 79 and 179 <http://www.orasecom.org/_system/writable/DMSStorage/651orange-senqu-river-basin-preliminary-transboundary-diagnostic-analysis.pdf>,
[52] ORASECOM Agreement art 7.5.
[53] For a further discussion of the genesis of this concept in respect of South Africa and Lesotho, see L Mahao 'The Power of Hegemonic Theory in Southern Africa: Why Lesotho Cannot Develop an Independent Foreign Policy'. Thesis presented for the degree of Master of Arts at Rhodes University (2006) 4-17; M Mahlakeng & H Solomon 'Internal and External Political Dynamics Influencing Lesotho's Foreign Policy' (2013) 5 *Insight on Africa* 35, 38.
[54] ORASECOM Agreement art 7.7.

conundrum is solved by Article 1.3 of the ORASECOM Agreement, which provides that this agreement does not detract from the rights and obligations of the signatories arising out of agreements that were in operation before this agreement came into force. This means that in this regard, the LHWP supersedes the ORASECOM Agreement because it came into force before the ORASECOM Agreement. Regardless, the ORASECOM Agreement is significant in that it confirms that South Africa and Lesotho accept that they are bound by the principles of 'equitable and reasonable utilization' and 'sustainable development' in respect of the Orange River. The same considerations should apply to the water allocation regime in respect of all four riparians in the Orange River basin. On the other hand, the ORASECOM Agreement highlights the pressure that the Orange River is under, to provide water for all these different riparian States.

South Africa and Namibia have also signed a Memorandum of Understanding on co-operation in the field of the Environment and Wildlife, which is premised on sustainable development and mutual cooperation on the environment.[55] Thus, there is an attempt to find an equitable approach for the utilization of the environment, including the water in the Orange River between Namibia and South Africa. Apart from these current and proposed water uses in the Orange River, it is also imperative to assess the domestic water picture in South Africa and Lesotho to illustrate the significance of the Orange River and invariably, the LHWP, to the water needs of both these countries and the likelihood of a conflict over that water in times of scarcity.

It is cogent to contextualise the water picture of the signatories to the LHWP with an outline of the world water picture. First, population growth is expected to markedly increase water demand.[56] The world's population is predicted to be increasing by approximately 80 million people per year and is thus projected to be about 9.1 billion by 2050, with about 25 per cent of these people residing in Sub-Saharan Africa, the area with the most unevenly distributed water resources and in this regard, population growth has impacted water use and demand patterns in the LHWP.[57] Second, over-abstraction of water for agriculture and energy could exacerbate water scarcity.[58] Freshwater abstractions to enable energy generation, which

[55] Memorandum of Understanding between the Government of the Republic of South Africa and the Government of the Republic of Namibia on co-operation in the field of the environment and wildlife (adopted, entered into force 5 October 2016) Preamble and art 1.
[56] WWDR 2015 (note 1 above) 11.
[57] Ibid.
[58] Ibid.

presently caters to fifteen per cent of the world's total, are expected to increase by twenty per cent through 2035 with Lesotho and South Africa projected to be under massive water stress.[59] Similarly, growth in urbanisation is triggering intensely confined pressure on freshwater availability, particularly in areas that are susceptible to drought.[60] It is also expected that increasing industrial production will increase water use, with possible effects on water quality.[61] Furthermore, the disturbance of ecosystems through unbridled urbanisation, poor agricultural methods, deforestation and pollution are impeding the environment's ability to ensure the supply of basic water-related services.[62] Degraded ecosystems struggle to resuscitate themselves leading to a deterioration in water quality and availability.[63] This may lead to inter-state and regional conflicts as a consequence of water scarcity and poor management systems.[64]

Groundwater also has a significant impact on water supply in that it maintains ecosystems and human well-being.[65] Groundwater is estimated to provide potable water to at least half of the world population and caters for 43 per cent of all water employed in irrigation.[66] Groundwater also facilitates the base flows of rivers and important aquatic ecosystems.[67] Lack of certainty over the accessibility of aquifer resources and their recharge rates presents a major risk to their development and more precisely, to their capacity to act as a repository that addresses instances of surface water scarcity and this is no more prevalent than in the LHWP where there is uncertainty about the relationship between groundwater and surface water as well as the quantity of available groundwater.[68] Groundwater supplies are decreasing and it is projected that approximately twenty per cent of the world's aquifers are over-abstracted.[69] Groundwater levels are also found to be reduced in many of the world's heavily used agricultural regions and near various large cities.[70] It is then submitted that competition for water resources between conflicting water uses and water 'users' increases the likelihood of confined conflicts and persistent unfairness in accessing the attendant services.[71] It must be

[59] Ibid; Water Research Council 'Assessing the State of the Water-Energy-Food (WEF) Nexus in South Africa' WRC Report No KV 365/18 (2018) 1 <http://www.wrc.org.za/mdocs-posts/kv-365-18/kv-365-18-2/>.
[60] WWDR 2015 (note 1 above) 11.
[61] Ibid.
[62] Ibid.
[63] Ibid.
[64] Ibid.
[65] Ibid 13.
[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] Ibid.
[71] Ibid 11.

noted that in this conflict, the need to sustain water and ecological integrity to guarantee life and economic growth is not duly evaluated.[72] Usually, the environment, as well as indigent people, will be affected by this competition for water.[73] Global environmental degradation, including the factor of climate change, has increased to a precarious level with significant ecosystems in imminent danger of a huge collapse.[74] This has been prompted by prior failures to formulate decision-making instruments that would properly regulate the environment and the earth's shared natural resources.[75] It is also projected that climate change will compound the risks connected with disparities in the distribution and accessibility of water resources.[76] Increasing variability in rainfall patterns, which has commenced in many countries, will impact the hydrological cycle, with variations in runoff and aquifer recharge, as well as water quality.[77] Even though water variability is endemic in many river basins, climate change is projected to increase such variability.[78] This means that globally, the quantity and quality of transboundary water are reducing due to factors such as urbanisation, population growth, and climate change and this may lead to interstate conflict over these shared watercourses. The signatories to the LHWP offer an apt illustration of this conundrum.

In this regard, water availability is one of the principal conundrums currently plaguing South Africa and based on recent studies, if no major intervention is taken, the water deficit by 2030 may amount to a deficit of about seventeen per cent of the available surface and groundwater.[79] The growing water needs of South Africa's neighbouring States in shared watercourses could further affect water availability in South Africa.[80] This was cited earlier in the discussion, with Namibia and Botswana both advocating for the further drawing of water from the Orange River. Water security will also be affected when supply diminishes due to

[72] Ibid.
[73] Ibid.
[74] Ibid 13.
[75] Ibid.
[76] Ibid 12.
[77] Ibid 13.
[78] D Shlomi & D Katz *et al* 'Climate change, conflict, and cooperation: global analysis of the resilience of international river treaties to increased water variability' Policy Research working paper; no. WPS 6916; 12 (2014) 2-3 <http://documents.worldbank.org/curated/en/2014/06/19646108/climate-change-conflict-cooperation-global-analysis-resilience-international-river-treaties-increased-water-variability>.
[79] Draft National Water and Sanitation Master Plan: Ready for the future and ahead of the curve (8 December 2017) 1-2 <http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/Documents/28228_171208_NWSMP%20Report%20Draft2.6.pdf>; National Water and Sanitation Master Plan: Volume 2- Plan to Action Version 4.2-Ready for the Future and Ahead of the Curve (2018) 1-5 <http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/Documents/NWSMP_Plan%20to%20Action_Reduced%20(00000002).pdf>.
[80] National Water and Sanitation Master Plan: Volume 2- Plan to Action Version 4.2 - Ready for the Future and Ahead of the Curve (2018) (note 79 above) 1-5.

adverse impacts on water availability caused by climate change, wetland degradation, and water losses and demand increases as a result of population and economic development, urbanisation, ineffective use, and modified lifestyles.[81] South Africa uses more water than the world average.[82] The country's water losses are also very high.[83] Actual physical losses are at 35 per cent.[84] The water losses are caused primarily by leakage of water due to ailing infrastructure.[85] The rainfall in early 2017, offered a temporary respite from the 2014–2016 drought, regardless, South Africa is still over abstracting its renewable water resources and, in the absence of additional initiatives, this problem will persist in the interim.[86] The 403 millimetres of rainfall that South Africa received in 2015 was the worst recorded annual precipitation total since the South African government commenced the gathering of rainfall data in 1904.[87]

Furthermore, the 2015 drought occurred after three successive years of poor rainfall totals, which made it the most extreme drought since the 1940s.[88] This prompted South Africa's average dam levels to plunge from about 93 per cent in March 2014 to approximately 48 per cent in November 2016.[89] Nationally, dam levels improved in early 2017, but they have plummeted and are now regarded as "moderately low" and recently, the government of South Africa has conceded that the water situation in South Africa is "serious" with low rainfall and water stress for 2019.[90] Thus, water availability is already a significant concern in South Africa. This may intensify competition for the water in the LHWP and may prompt further plans to abstract more water from the Orange River.

In respect of Lesotho, it has been found that the lowest average annual rainfall is ironically in the Orange/Senqu River Valley.[91] The amount of rainfall received in the LHWP constantly

[81] Ibid.
[82] Ibid.
[83] Ibid 1-6.
[84] Ibid.
[85] Ibid.
[86] Institute for Security Studies 'A Delicate balance: water scarcity in South Africa' (2018) 2 <https://issafrica.org/research/southern-africa-report/a-delicate-balance-water-scarcity-in-south-africa>.
[87] Ibid.
[88] Ibid.
[89] Ibid.
[90] Ibid. Department of Water and Sanitation 'Minister Lindiwe Sisulu announces urgent measures to address water challenges: Rapid intervention in water scarce areas' (23 October 2019) <https://www.gov.za/speeches/minister-lindiwe-sisulu-announces-urgent-measures-address-water-challenges-23-oct-2019-0000>.
[91] Lesotho's National Adaptation Programme of Action on Climate Change Under the United Nations Framework Convention on Climate Change (2015) 7 <https://unfccc.int/resource/docs/napa/lso01.pdf>.

changes resulting in frequent droughts and floods.[92] In the 19th and 20th centuries, Lesotho showed a high frequency of drought up to 1978.[93] The period 1979 to 1996 was characterised by the highest frequency of drought in 200 years, with the lengthiest drought in the country's history occurring between April 1991 to October 1995.[94] In 2016, having suffered from severely poor rainfall totals during the initial part of the rainfall season, the government of Lesotho declared a "drought emergency" and set up an Inter-Ministerial Task Force to supervise the program to address this problem.[95] The impact of the drought in Lesotho covers various sectors *inter alia*: food security, agriculture, water, and health.[96] Lesotho has, in recent times, been plagued by water scarcity that has delayed the planting season and will cause a steep reduction in food production.[97] Water shortages in Lesotho also have an adverse effect on industrial production and access to basic amenities that do not operate normally.[98] The scarcity of water severely threatens water availability in Lesotho's dams and has caused water rationing in numerous areas.[99] The water shortages from the drought are already a danger to human life and are having significant health effects on affected communities.[100] The Lesotho Ministry of Health has had to deal with large increases in diarrhoeal diseases.[101] Lesotho is also persistently mired in a continuing crisis of critical food insecurity and failing livelihoods.[102] This issue is particularly important in that the continued use of the 'nation-state' as the reference point to measure the adequacy of water fails to consider the water needs of people at the local level of government as has been the case in Lesotho.[103] Thus, even though Lesotho provides water to South Africa through the LHWP, Lesotho is susceptible to droughts and is likely to have localised pressure on the water that may lead to a conflict of uses over the Orange River within Lesotho and with other riparian States especially South Africa.

[92] Ibid.
[93] Ibid.
[94] Ibid.
[95] Lesotho: El Niño-related Drought Office of the Resident Coordinator Situation Update. 01 (as of 19 Jan 2016) 1 <https://www.undp.org/content/dam/unct/lesotho/docs/Humanitarian%20efforts/Home%20page/Lesotho%20El%20Ni%C3%B1o%20-%20related%20Drought%20Situation%20Update%20No.%2001%20(as%20of%2019%20Jan%202016).pdf>.
[96] Ibid.
[97] Ibid.
[98] Ibid.
[99] Ibid.
[100] Ibid 3.
[101] Ibid.
[102] Lesotho's National Adaptation Programme of Action on Climate Change Under the United Nations Framework Convention on Climate Change 2015 (note 91 above) 4.
[103] S Emerson & H Solomon *African security in the twenty-first century* (2018) 184.

Furthermore, the capacity of Lesotho to maintain the water supplies to South Africa through the LHWP appears to be under threat from the deleterious effects of climate change. Article 1.2 of the United Framework Convention on Climate Change (hereafter, UNFCCC) defines 'climate change' as a "change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods". It must be noted though, that despite constant advances in climate change research, there is still scientific uncertainty concerning the veracity of regional climate change models.[104] However, it is not the focus of this study to discuss the merits of 'climate change' suffice it to say that it is assumed for purposes of this thesis, that 'climate change' is occurring and this position has been adopted by both South Africa and Lesotho who are the subject of this study.

In this regard, the effects of climate change on the hydrological cycle, especially in the SADC region, are unknown and this could have a profound effect on the water resources in the region.[105] Studies have shown that southern Africa has some of the most inconsistent rainfalls and stream flows in the world.[106] The possibility of climate change raises significant problems with the feasibility of current economic patterns and the environment in Southern Africa.[107] In the same vein, the Intergovernmental Panel on Climate Change (hereafter, IPCC) has identified the SADC region as one of the most susceptible to the projected effects of climate change.[108] A result of the accumulating greenhouse gases is an anticipated increase in global temperature.[109] Higher temperatures will affect precipitation.[110] The expected elevation in temperature that will or may follow global warming will have a significant impact on evaporation rates.[111] This will impact atmospheric water retention, and additionally, the intensity and magnitude of precipitation events.[112] What is apparent is that the atmospheric quantities of carbon dioxide are elevating at an estimated rate of 0.4 per cent year.[113] Even if mitigation measures were administered under the Kyoto Protocol, this would affect rainfall

[104] ORASECOM 'Orange Senqu River Basin Preliminary Transboundary Diagnostic Analysis' (note 51 above), which cites, the following factors *inter alia*: natural climatic variability and uncertainty regarding future GHG emissions.
[105] SADC Water RSAP (note 2 above) 28.
[106] ORASECOM 'Orange Senqu river basin Preliminary Transboundary Diagnostic Analysis' (note 51 above) 14.
[107] Ibid 15.
[108] Ibid 14.
[109] Ibid.
[110] Ibid.
[111] Ibid.
[112] Ibid 14-15.
[113] Ibid.

distribution and its inter-annual variability.[114] These factors will have an impact on the scale and consistency of streamflow in river basins.[115]

To this end, Lesotho ratified the UNFCCC in 1995.[116] Lesotho is susceptible to environmental pressures such as drought, soil erosion, and land degradation, desertification, deforestation and rangeland destruction, loss of biodiversity and parching of wetlands.[117] These issues will be exacerbated if climate change occurs.[118] Lesotho fulfils the criteria stipulated in Article 4.8 of the UNFCCC, for States that are susceptible to the deleterious impacts of climate change, and have poor adaptive capacity and thus requires singular consideration.[119] Lesotho: "is small and landlocked, is liable to drought and desertification, has a fragile mountainous ecosystem, is prone to natural disasters, is situated in the sub-tropics and has a semiarid climate".[120] Lesotho is also the 14th most vulnerable country in the world, yet it is the 51st least ready country to stave off climate change.[121] Climate change is projected to affect regional freshwater resources as Lesotho constitutes a significant source of freshwater and drainage areas reaching the Atlantic basin through South Africa, Namibia, and Botswana.[122] It has been found that in the semi-dry areas of the Orange-Senqu basin, with their already hugely inconsistent climate and water supply, development challenges will probably increase in more temperate areas of the basin.[123] Global warming and climate change will impact several interrelated environmental and developmental projects within the Orange River.[124] This includes the LHWP. These challenges include ensuring sustainable water availability and quality, providing sufficient food, preserving flora and fauna, abating and mitigating land degradation, and ensuring sustainable industrial development.[125] Thus, it is predicted that the effect of climate change on the farming industry in Lesotho will be massive.[126]

---

[114] Ibid.
[115] Ibid.
[116] Lesotho Climate Change Handbook 6 <http://lesmet.org.ls/publications/climate-change-handbook>.
[117] Lesotho's National Adaptation Programme of Action on Climate Change Under the United Nations Framework Convention on Climate Change (2015) (note 91 above) 3.
[118] Ibid.
[119] UNFCCC art 4.8(i).
[120] Lesotho's National Adaptation Programme of Action on Climate Change Under the United Nations Framework Convention on Climate Change (2015) (note 91 above) 3.
[121] The Kingdom of Lesotho National Climate Change Policy 2017-2027 (note 34 above) 2.
[122] Ibid 15.
[123] ORASECOM 'Orange Senqu River Basin Preliminary Transboundary Diagnostic Analysis' (note 51 above) 28.
[124] Ibid 15.
[125] Ibid.
[126] Lesotho's National Adaptation Programme of Action on Climate Change Under the United Nations Framework Convention on Climate Change (2015) (note 91 above) 4.

Furthermore, in light of the significant role in facilitating national and regional socio–economic development, climate change demands sustainable use of public water.[127] Since Lesotho is highly vulnerable, there are concerns about its ability to address climate change, which depends on a sound and well-structured climate change policy.[128] Although Lesotho expressed its fears about the deleterious effects of climate change by ratifying UNFCCC, the Kyoto Protocol and the Paris Agreement, it had still not, until 2017, formulated a comprehensive national policy to address the challenge except through sparse reference in a few policies/strategies.[129] In 2017, Lesotho promulgated its National Climate Change Policy to provide a coherent response to the vulnerabilities posed by climate change.[130]

The newly minted Lesotho National Climate Change Policy provides that climate change will negatively influence water resources in Lesotho, as declining rainfall totals will reduce surface and aquifer resources.[131] Similarly, the Lesotho government has found that climate change will result in lower precipitation and will probably lead to dissipated surface and subsurface runoff.[132] This implies that at the present population growth rate and levels of service, pressure on water availability may occur earlier.[133] Reduced runoff will probably result in parching up of aquifers, lower water tables, and high water stress, especially for rural communities who largely rely on groundwater for potable water uses.[134] The vulnerable communities rely on water resources to maintain their livelihoods.[135] The water sources in rural communities include aquifers, rivers, and wetlands.[136] Thus, the government of Lesotho has conceded that climate change models project that Lesotho will suffer from elevated temperatures and more unreliable rainfall trends in future and there are strong indications that the instruments that are presently being implemented, such as tree planting and donga reclamation, are inadequate to address environmental degradation and desertification as well

[127] The Kingdom of Lesotho National Climate Change Policy 2017-2027 (note 34 above) 15.
[128] Ibid 3.
[129] Ibid. See for instance, s 3(2)(i) of Lesotho Environment Act 10 of 2008 and the Lesotho National Environment Policy 1998 Preamble and para 4.11 <https://www.liportal.de/fileadmin/user_upload/oeffentlich/Lesotho/30_wirtschaft-entw/National_Environmental_Policy_1998.pdf>.
[130] See The Kingdom of Lesotho National Climate Change Policy 2017-2027 (note 34 above).
[131] Ibid 15.
[132] Ministry of Natural Resources: Lesotho Meteorological Services 'Climate Change in Lesotho: A handbook for Practitioners' (2001) 16 <http://www.lesmet.org.ls/sites/default/files/publications/cchandbook.pdf>.
[133] Ibid.
[134] Ibid.
[135] Lesotho's National Adaptation Programme of Action on Climate Change Under the United Nations Framework Convention on Climate Change 2015 (note 91 above) 3.
[136] Ibid.

as resuscitate the delicate mountain ecosystems.[137] The destruction and loss of crucial habitats will materially affect the ability of catchments to acquire and retain water.[138] Ironically, this affects both floods and water availability.[139] Already catchment yields have reduced to the extent that springs that used to be perpetual, have run dry, and the once large rivers have severely dissipated.[140] The Disaster Management Authority of Lesotho has conceded that there are widespread water shortages in Lesotho.[141] This has compelled the government of Lesotho to seek donor funding to purchase water tankers, medicine, food, and other logistics.[142] Thus, Mahlakeng has opined that scant attention has been given to climate change factors in the policy-making processes of the Orange River basin.[143] The utilization and conservation of water resources has thus evolved into a significant conundrum for the economic development of Lesotho.[144] Droughts will reduce freshwater supply.[145] It had been estimated that Lesotho would suffer water stress by 2019 and a period of water scarcity by 2062.[146] The onset of climate change could accelerate the occurrence of these conditions.[147] It is then expected that water transfers to South Africa through the LHWP, will be increasingly vulnerable in the coming decades with the analysis finding that in ten per cent of the climate scenarios, the average amount of unmet water transfers increases from about 500 million cubic metres in the 2016–2020 period to almost 2 billion cubic metres in the 2046–2050 period, in the absence of implementation of the additional phases envisaged.[148] Based on current research, it is conceivable that Lesotho's ability to comply with its water supply obligations in the Orange-Senqu Basin to the lower riparian States will probably become an even bigger legal and

[137] Lesotho National Strategic Development Plan 2012/13 – 2016/17 - Growth and Development Strategic Framework: "Towards an accelerated and sustainable economic and social transformation" (2012) 128 <http://www.gov.ls/gov_webportal/important%20documents/national%20strategic%20development%20plan%20201213 - 201617/national%20strategic%20development%20plan%20201213-201617.pdf>.

[138] Lesotho National Strategic Development Plan 2012/13 – 2016/17 - Growth and Development Strategic Framework: "Towards an accelerated and sustainable economic and social transformation" (2012) (note 137 above) 128.

[139] Ibid.

[140] Lesotho's National Adaptation Programme of Action (NAPA) on Climate Change under the United Nations Framework Convention on Climate Change 2015 (note 91 above) 3.

[141] G Mutizwa 'Lesotho's 'green drought' pushes thousands deeper into hunger' *The Guardian* (18 February 2016) <https://www.theguardian.com/global-development/2016/feb/18/lesotho-green-drought-hunger-rain-malnutrition-disease>.

[142] Ibid.

[143] Mahlakeng (note 43 above) 134.

[144] Lesotho's National Adaptation Programme of Action (NAPA) on Climate Change under the United Nations Framework Convention on Climate Change 2015 (note 91 above) 3.

[145] Ibid.

[146] Ibid.

[147] Ibid.

[148] World Bank 'Lesotho Water Security and Climate Change Assessment 6' (2016) 4-6 <https://openknowledge.worldbank.org/handle/10986/24905>.

resource-utilization conundrum than it is currently, and will lead to increased competition for water resources.[149] This suggests that Lesotho may be unable to meet its obligations to provide specific water quantities to South Africa as required by the LHWP. This means that climate change and droughts may compel Lesotho to choose between providing water to its residents or to comply with its obligation to supply water to South Africa under the LHWP.

However, this right of election is nullified by the LHWP. This is because the LHWP prohibits Lesotho from unilaterally suspending, altering, reducing or interfering with the amount of water that is to be supplied to South Africa. Articles 4.1, 5.2, 6.8 and 7 of the LHWP and more specifically, Annexure V of the Phase II Agreement, require that Lesotho must provide South Africa with predetermined water quantities in exchange for royalties and there shall be no unilateral deviation from the terms of these agreements. This is buttressed by the Phase II Agreement, which stipulates that there must not be any hindrance to the implementation of the project and that the domestic legislation of Lesotho and South Africa must be in line with the agreement and the LHWP.[150] This virtually eviscerates Lesotho's right of election to choose whether to provide water to South Africa as required by the LHWP or to supply water for its domestic needs if the need arises. The overall effect of these provisions is that South Africa has virtually colonised Lesotho's water rights over the Orange River. This is what I term as 'hydrocolonisation', which occurs when a State unlawfully appropriates another State's water resources.[151] This means that there may be a conflict over the water in the Orange River between South Africa and Lesotho, which is called a 'conflict of uses'. A 'conflict of uses' denotes a situation whereby the "quantity or quality" of water in a transboundary watercourse is inadequate to meet the needs of all transboundary water States.[152]

The government of South Africa is of the view that if a conflict of uses occurs, watercourse States should find a fair and accommodating mechanism that may involve a diminution from existing, although as yet undeveloped, lawful rights and better use of water to the common

[149] ORASECOM 'Orange Senqu River Basin Preliminary Transboundary Diagnostic Analysis' (2008) (note 51 above) 28; S Emerson and H Solomon (note 103 above) 186.
[150] Phase II Agreement art 18.2.
[151] See C Vinti in R Mabula 'Whose Water is it Anyway? South Africa's Hydrocolonization of Lesotho' (2018) 4 *Curiosity Magazine* 26, 27 <https://issuu.com/witscommunications/docs/curiosity_issue_4>.
[152] A Rieu- Clarke, R Moynihan & BO Magsig 'United Nations Watercourses User's Guide' (2012) (hereafter, User's Guide) 109 <http://www.unece.org/fileadmin/DAM/env/water/meetings/Water_Convention/2016/10Oct_From_Practitioner_to_Practitioner/UN_Watercourses_Convention_-_User_s_Guide.pdf>.

benefit of all of the watercourse States.[153] This submission is vague at best, but it accepts considerations of what is 'equitable' and 'sustainable' as encapsulated by the principles of 'equitable and reasonable utilization', 'sustainable development' and 'permanent sovereignty over natural resources'. It is with this proposition in mind that this study of the possible legal responses to the projected conflict of uses in the Orange River will be conducted. Consequently, this research will assess whether the LHWP is in line with the key underlying principles of transboundary freshwater law that address the anticipated conflict of uses situation. That is to say; this research will assess whether the LHWP is in accordance with the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources. This thesis then extrapolates the principles and issues identified in the LHWP, on to the Agreement on the Establishment of the Zambezi Watercourse Commission (ZAMCOM Agreement) as a proximate transboundary water agreement in the SADC region to illustrate the inequity of the LHWP.

1.2 The Agreement on the Establishment of the Zambezi Watercourse Commission (ZAMCOM Agreement)

The ZAMCOM Agreement was established in 2014 as a joint water management agreement between eight riparian States that share the Zambezi River Basin, namely, the Republic of Angola, the Republic of Botswana, the Republic of Malawi, the Republic of Mozambique, the Republic of Namibia, the Republic of Tanzania, the Republic of Zambia and the Republic of Zimbabwe. The negotiations for the establishment of the Zambezi Watercourse Commission were completed in Namibia in 2004.[154] Subsequently, the agreement to create the Zambezi Watercourse Commission was concluded in 2004.[155] The ZAMCOM Agreement eventually took effect in 2011 after six of the eight basin States ratified this Agreement.[156] The principal object of the ZAMCOM Agreement is to facilitate the equitable and reasonable utilization and sustainable development of the Zambezi watercourse.[157] The Zambezi Watercourse Commission was established to administer the ZAMCOM Agreement.[158]

[153] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 41 above) 36.
[154] ZAMCOM 'ZAMCOM History' <http://www.zambezicommission.org/zamcom-history>.
[155] Ibid.
[156] Ibid.
[157] ZAMCOM Agreement (adopted 13 July 2004, entered into force 19 June 2011) art 5.
[158] ZAMCOM Agreement art 4 and art 5.

The population of the Zambezi River Basin is estimated to be 30 million, most of which live in Malawi, Zimbabwe, and Zambia within four sub-basins: Kafue, Kariba, Tete, the Shire River and Lake Malawi/Niassa/Nyasa.[159] The Zambezi River Basin is endowed with natural resources and the principal economic projects include fisheries, farming, and tourism.[160] Pursuant to the approach in respect of the LHWP, it is required that there must be an assessment of the possibility of the occurrence of a conflict of uses in the Zambezi River.

The Zambezi River has endured a marked change in its natural environment, mainly because of climate change and unsustainable development.[161] This has led to problematic rates of water pollution in transboundary water resources, high loss of biodiversity, and the drying up of valuable wetland ecosystems.[162] SADC projects a downward trend in rainfall in the ZAMCOM region.[163] Climate change has affected the basin's water resources, such as in Lake Liambezi in Namibia, which has experienced depletion in recent years.[164] This has resulted in below-average rainfalls and frequent droughts.[165] Although rainfall predictions are subject to some uncertainty, most projections based on global circulation models estimate reduced rainfall for much of the region in winter.[166] It is also expected that precipitation patterns will vary in intensity and frequency, causing more severe events and longer gaps between rainfalls.[167] Studies have generally found that the impact of climate change in the ZAMCOM Basin will encompass the following: the Zambezi River Basin will become largely arider; rainfall will dissipate by ten to fifteen per cent by 2050; droughts will be drier and wet years

[159] ZAMCOM 'The Zambezi River Basin A Multi-Sector Investment Opportunities Analysis: Volume 1 Summary Report' (2010) 7 <http://www.zambezicommission.org/sites/default/files/publication_downloads/a-multi-sector-investment-opportunities-analysis-vol.1-summary-report.pdf>.
[160] Ibid.
[161] ZAMCOM 'Zambezi River Basin Atlas of the Changing Environment' (2014) 122 <http://zambezicommission.org/publication/zambezi-river-basin-%E2%80%93-atlas-changing-environment-2014>.
[162] Ibid.
[163] Southern African Development Community 'Climate Change Adaptation in SADC: A strategy for the Water Sector' (2011) 5 <https://www.sadc.int/files/2213/5293/3544/SADC_Climate_Change_Adaptation_for_the_Water_Sector_booklet.pdf>.
[164] ZAMCOM 'Zambezi River Basin Atlas of the Changing Environment' (2014) (note 161 above) 122.
[165] Ibid 122-123.
[166] Southern African Development Community 'Climate Change Adaptation in SADC: A strategy for the Water Sector' (2011) (note 163 above) 5.
[167] Ibid.

will have excessive rain, and there will be an alteration in the wet season, which may have already commenced.[168]

Furthermore, the population of the Zambezi River Basin is growing.[169] Due to population increase, water availability is reducing due to increased demand causing pressure on current water supply.[170] A rising population requires more food and will inevitably cause a conflict of uses over water allocation.[171] This demands more food to be produced using finite land and water resources.[172] Production and consumption must increase in an ecosystem of increasing population, which leads to additional demands and pressure on exhaustible water and land resources.[173] The increasing population is causing an over-utilization of water.[174] The unrelenting increase in the human population results in competition for resources with wildlife, thereby causing conflict.[175] The overall effect of climate change and the increasing demand for water resources are negatively affecting electricity generation in various countries in the ZAMCOM basin.[176] Four main regions with diverse rainfall projections are regarded as relevant for the Zambezi Basin: the south region comprising southern Zambia, Botswana, Namibia, Zimbabwe, and Mozambique; the northeastern part of the Basin covering eastern Zambia including portions of Kafue and Luangwa, and central and north Malawi; the northwest part which covers western Zambia, Angola Upper Catchment and Kafue and the coastal portion of the Basin, which covers southern Malawi and coastal Mozambique including the Lower Shire and the Delta.[177]

The IPCC estimates that the Zambezi River Basin will suffer a decrease in precipitation, a significant increase in potential evaporation, and a huge decline in the runoff.[178] This will impact the potential output of hydroelectric facilities.[179] For instance, the water level of the Kariba Dam declined significantly between 1981 and 1992, causing a dissipation of the dam's

[168] ZAMCOM Zambezi Environment Outlook (2015) 36 <http://www.zambezicommission.org/sites/default/files/publication_downloads/zeo_zambezi_environment_outlook.pdf>.
[169] Ibid 40.
[170] Ibid 40-41.
[171] Ibid 41.
[172] Ibid.
[173] Ibid.
[174] Ibid.
[175] Ibid.
[176] B Petrie 'Cooperative Water Governance for Climate Resilience: Are Institutional Arrangements in Southern Africa Fit for Purpose' Occasional Paper 268 (2017) 21 <http://www.saiia.org.za/research/cooperative-water-governance-for-climate-resilience-are-institutional-arrangements-in-southern-africa-fit-for-purpose/>.
[177] ZAMCOM Zambezi Environment Outlook (2015) (note 168 above) 99.
[178] Ibid 146.
[179] Ibid.

ability to produce hydropower.[180] It is projected that a significant dissipation in water levels over Victoria Falls could reduce annual electricity production, and this is beginning to occur with the reduction in the flow of the Zambezi significantly reducing electricity supply for both Zimbabwe and Zambia.[181] The IPCC has found that all riparian States in the ZAMCOM could suffer more water shortages, although factors such as population and economic growth could have an impact on future water availability in this basin.[182] Thus, the ZAMCOM concedes that conflicts in water resource allocation will inevitably increase.[183] It can then be argued, that climate change could result in a conflict of uses in the ZAMCOM basin, as is the case with the LHWP. This study will then seek to assess what lessons can be learned from the LHWP that can be extrapolated onto the ZAMCOM Agreement.

1.3 Problem Statement

The LHWP does not permit Lesotho to unilaterally suspend, alter, reduce or interfere with the quantity of water that is to be supplied to South Africa even if a conflict of uses occurs. Articles 4.1, 5.2, 6.8 and 7 of the LHWP and, more specifically, Annexure V of the Phase II Agreement, require that Lesotho must provide South Africa with predetermined water quantities in exchange for royalties and there shall be no unilateral deviation from the terms of these agreements. This is emphasised by the Phase II Agreement, which stipulates that there not be any hindrance to the implementation of the project and that domestic legislation of Lesotho and South Africa must be in line with this agreement and the LHWP.[184] However, it has been found that climate change and drought will result in reduced rainfall and diminished water retention, which will mean that Lesotho has insufficient water to provide for both the needs of its residents and to meet its obligations under the LHWP. Therefore, Lesotho will inevitably be faced with the conundrum of choosing either to provide water to South Africa as required by the LHWP or to provide water to its residents. Contrary to the LHWP, the Lesotho Water Act provides that in the case of conflicting water uses and if water is inadequate to cater for other uses, 'domestic use' i.e. *including* the 'taking' or 'impounding' of water from a watercourse to satisfy 'personal and household needs', must prevail and be accorded first preference over other uses and it also establishes the 'reserve' that also prioritises water for

[180] Ibid.
[181] Ibid; G Porter Jr & J Hodges 'Drought dries up Kariba power output' *Business Day* (24 June 2019) <https://www.businesslive.co.za/bd/world/africa/2019-06-24-drought-dries-up-kariba-power-output/>.
[182] Intergovernmental Panel on Climate Change '5th Assessment Report: Climate Change 2014: Impacts, Adaptation, and Vulnerability' (2014) 1217 <http://www.ipcc.ch/report/ar5/syr/>.
[183] ZAMCOM Zambezi Environment Outlook 2015 (note 168 above) 41.
[184] Phase II Agreement art 18.2.

'domestic water uses'.[185] This means that the Lesotho Water Act and the LHWP could be found to be incompatible. Consequently, this thesis will assess whether the LHWP is in line with the key underlying principles of transboundary freshwater law governing the conflict of uses situation. That is to say; this thesis will assess whether the LHWP is in accordance with the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources.

1.4 Main Research Question and Secondary Research Questions

This thesis will assess whether the LHWP is in line with the key underlying principles of transboundary freshwater law that address the conflict of uses situation. That is to say, this thesis will assess whether the LHWP is in accordance with the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources. This overarching question devolves into the following secondary research questions:

a. To what extent does the LHWP comply with the principle of 'equitable and reasonable utilization'?

b. In what way does the LHWP comply with the principle of 'sustainable development' as an inherent component of the principle of 'equitable and reasonable utilization'?

c. To what extent does the LHWP comply with the principle of 'permanent sovereignty over natural resources'?

d. If the LHWP is not in accordance with these underlying freshwater principles, what are the implications for similar transboundary water agreements with a specific focus on the Agreement on the Establishment of the Zambezi Water Commission?

1.5 Literature Review

1.5.1 The underlying principles of shared watercourses

It is my view that the LHWP does not provide for a conflict of uses clause that caters to the water needs of both South Africa and Lesotho. Consequently, this study seeks to assess the LHWP's compliance with the key underlying international freshwater law conflict of use principles, namely, equitable and reasonable utilization, sustainable development and

[185] See s 1,s 13,s 5(2) and s 6 of Lesotho Water Act 15 of 2008 (hereafter, LWA) <https://www.water.org.ls/download/lesotho-water-act-no-15-of-2008/>.

permanent sovereignty over natural resources. There may well be other transboundary freshwater principles that the LHWP does not comply with, but they are not the focus of this thesis. The identification of these conflict of uses principles is informed by my view, as will be shown later in this thesis, that these principles are established principles of law.

First, the United Nations Convention on the Law of Non-navigational Uses of International Watercourses (hereafter, UN Watercourses Convention) and the Revised Protocol have as treaties, recognised and entrenched these principles as the superordinate norms to resolve a conflict of uses in respect of a shared watercourse.[186] South Africa and Lesotho have both ratified the Revised Protocol, but only South Africa has ratified the UN Watercourses Convention. This means that both countries are bound by the Revised Protocol. Even if there was a question of whether South Africa is bound by an agreement it has ratified, the court in *Glenister v President of the Republic of South Africa* (hereafter, *Glenister*), held that the ratification of a treaty by Parliament is an affirmation by Parliament, that subject to the prescripts of the Constitution of the Republic of South Africa, 1996, it will act in accordance with the ratified agreement.[187] The government of South Africa explicitly accepts this approach.[188] As will be shown later in this discussion, the LHWP is regulated by the legislation of both South Africa and Lesotho. This would mean that the LHWP must comply with the Revised Protocol and the UN Watercourses Convention, which collectively provide for the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources.

Furthermore, international conventions, both those that are binding and those that are not regarded as binding, occupy a significant place in South African law.[189] Even though they have no legal consequences in the domestic legal framework, international agreements may be

[186] See also UN Watercourses Convention (adopted 21 May 1997, entered into force 17 August 2014) art 5, art 6 and art 8.1; Revised Protocol (adopted 7 August 2000, entered into force 22 September 2003) art 3.2, art 3.4, art 3.7, art 3.8 and art 6.5; See also, see S McCaffrey 'The contribution of the UN Convention on the law of non-navigational uses of international watercourses' (2001) 1 *International Journal of Global Environmental Issues* 250, 252; See also, *Gabcikovo-Nagymaros Project (Hungary/Slovakia)*, Judgment, 1.C.J. Reports 1997, p. 7 (hereafter, *Case Concerning Gabcikovo Nagymaros*) para 85; P Sands 'International Courts and the Application of the Concept of "Sustainable Development"' (1999) 3 *Yearbook of UN Law* 389,389. User's Guide (note 152 above) 104.

[187] (CCT 48/10) 2011 (3) SA 347 (CC) (17 March 2011) para 96; See also C Vinti 'A Spring without Water: The Conundrum of Anti-Dumping Duties in South African Law' (2016) 19 *PER/PELJ* 1, 19; F Sucker 'Approval of an International Treaty in Parliament: How Does Section 231(2) 'Bind the Republic'?' (2013) V *Constitutional Court Review* 417-434.

[188] See Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 41 above) 8-20.

[189] *Glenister* (note 187) para 96.

used as aids to interpretation to comprehend the Bill of Rights.[190] This means that even if Lesotho and South Africa had not ratified the UN Watercourses Convention and the Revised Protocol, both agreements must be used to interpret the provisions of the LHWP and the subsequent agreements. Vinti opines that the decision of the court in *International Trade Administration Commission v SCAW South Africa (Pty) Ltd* (hereafter, *SCAW*), in its radical method on ratification, epitomises a progressive nod towards advocating for the cogent approach that liberates adjudicators from the idealistic requirements of formal law and endorses the notion that not all treaties have to be promulgated in municipal law to enter into force.[191] In *SCAW*, the court had found that the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 is binding on South Africa in international law even though it has not been explicitly promulgated into municipal law.[192] It has been submitted that at present, it is accepted that treaties are ratified but not promulgated in municipal law unless incorporation into domestic law is required to comply with South African law.[193] This custom implies that South Africa usually becomes bound by treaties without enacting them in municipal law.[194] This means that since South Africa has ratified the UN Watercourses Convention and the Revised Protocol, it is immaterial that it may not have explicitly incorporated them into domestic law. These treaties collectively establish the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources. This, in turn, means that these principles are part of South African law.

Second, these principles have been accepted by the International Court of Justice (hereafter, ICJ) as epitomising rules of customary international law.[195] It is argued that the

[190] Ibid.
[191] Vinti (note 187 above) 19; See *International Trade Administration Commission v SCAW South Africa (Pty) Ltd* 2012 4 SA 618 (CC) para 25; See also *Progress Office Machines CC v South African Revenue Services* 2008 (2) SA 13 (SCA) para 6; Sucker (note 187 above) 417-434; J Dugard & M Du Plessis *et al Dugard's International Law: A South African Perspective* 5 ed (2018) 86, 91-98.
[192] *SCAW* (note 191 above) para 25.
[193] Sucker (note 187 above) 427.
[194] Ibid.
[195] On equitable and reasonable utilization and sustainable development: *Case relating to the Territorial Jurisdiction of the International Commission of the River Order* (hereafter, *River Order*) 1929 P.C.I.J. (ser. A) No. 23 (Sept. 10) para 74; *Lac Lanoux Arbitration* (France v. Spain) (1957) 12 R.I.A.A. 281; 24 I.L.R. 101 (1 November 16, 1957) (hereafter, *Lac Lanoux*) para 24; *Pulp Mills on the River Uruguay (Argentina v. Uruguay),*(hereafter, *Pulp Mills*) Judgment, I.C.J. Reports 2010, p. 14, para 175; *Case Concerning Gabcikovo Nagymaros* (note 186 above) para 85. On sovereignty, see *Case of Free Zones of Upper Savoy and the District of Gex* C.I.J., Series A/B, No. 46 (1932) at p. 166) para 222; *Case of the S.S. Wimbledon* (P.C.I. J. Series A, No. 1 (1923).

primary duty of the ICJ is to decide whether the content of multilateral treaties are part of customary international law.[196]

However, the Phase II Agreement provides that in the event of a dispute, the adjudicator must apply the provisions of that agreement together with the rules of international law that are not in conflict with this agreement and the LHWP.[197] This approach is in line with the Constitution of the Republic of South Africa 1996 (hereafter, Constitution of South Africa), which provides that "customary international law is law in the Republic unless it is inconsistent with the Constitution or an Act of Parliament".[198] In this way, the Phase II Agreement and section 232 of the Constitution of South Africa could be used to exempt the LHWP treaty and its protocols from the rules of customary international law that are in conflict with these treaties. However, the Constitution of South Africa provides that when reading any statute, every court must accept any "reasonable interpretation" of the statute that is in accordance with international law over any "alternative interpretation" that is in conflict with international law.[199] This is in keeping with the ethos of Article 14.3 of the LHWP, which stipulates that the LHWP must be read in a manner that does not detract from the principles of international law relating to treaties.[200] To this end, the government of South Africa has stated that regardless of the fact that not all four of the Orange River watercourse States are signatories to the UN Watercourses Convention, it is universally accepted that this agreement reflects the customary law of international watercourses and would probably be accepted as such by a court should any dispute arise between the watercourse States.[201] It can be contended then, that South Africa accepts that the principles of sustainable development and equitable and reasonable utilization are part of customary international law as they are recognised by the UN Watercourses Convention. As will be shown later in this chapter, these principles are central to water management under the environmental legislation of South Africa and Lesotho. This means that there is no conflict between customary international law and South African law in this regard.

[196] R Jennings 'Need for Environmental Court?' (1992) 22 *Environmental Policy and Law* 312,313; O McIntyre 'The Role of Customary Rules and Principles of International Environmental Law in the Protection of Shared International Freshwater Resources' (2006) 46 *Natural Resources Journal* 157, 166.
[197] Phase II Agreement art 18.9.
[198] Section 232 of the Constitution of South Africa.
[199] Section s 233 and s 39(1)(a)-(b) of the Constitution of South Africa.
[200] LHWP art 14.3.
[201] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 41 above) 33; J Glazewski *Environmental law in South Africa* Loose Leaf (2018) para 1.4.2.

The Revised Protocol is, however, more proximate to the basin States and must be regarded as altering the customary law - that is, changing the UN Watercourses Convention.[202] The Revised Protocol provides that the parties must comply with the current rules of customary and general international law.[203] This means that the existing rules of transboundary water law as proposed in the Helsinki Rules on the Uses of the Waters of International Rivers (hereafter, the Helsinki Rules) and then entrenched by the Revised Protocol and the UN Watercourses Convention must be complied with in the LHWP. Since these agreements give effect to the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources, this means that these principles bind the LHWP. On the whole, since these principles are part of customary international law and they are part of the domestic law of both South Africa and Lesotho, this means they are part of South African and Lesotho law. It is common cause that reading the LHWP in line with these principles is the "reasonable interpretation" that is in line with current rules of international law.

Third, and more importantly, the government of South Africa has emphatically resolved the uncertainty about whether the LHWP must comply with the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over water resources.[204] This is because the government of South Africa has stated that the Constitution of South Africa, the National Water Act 36 of 1988, the UN Watercourses Convention, Revised Protocol, SADC Regional Water Policy 2005, ORASECOM Agreement, the Agreement on the Establishment of the Vioolsdrift and Noordoewer Joint Irrigation Scheme on the lower Orange River (1992) and the Memorandum of understanding for feasibility study to transfer water from Lesotho to Botswana, bind the water allocation, implementation and interpretation of the LHWP.[205] These treaties and legislation collectively recognise and give effect to the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources. This means that the resolution of the conflict of uses in the Orange River must be based on these principles.

Fourth, based on the rationale for the decision of the ICJ in the *Case Concerning Gabcikovo Nagymaros*, it is immaterial that the LHWP predated the UN Watercourses

[202] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 41 above) 33.
[203] Revised Protocol art 3.3.
[204] See Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 41 above) 8.
[205] Ibid.

Convention and the Revised Protocol.[206] In this regard, Article 15 of the LHWP requires that the parties recognise the need to adapt the LHWP because it is not inert and requires the signatories to "take all reasonable measures" to protect the "existing quality" of the environment. Under Article 15, new environmental norms can be assimilated into the LHWP as they fall into the category of "reasonable measures" required to protect the "existing quality" of the environment.[207] This notion has been emphatically confirmed in the *Award in the Arbitration regarding the Indus Waters Kishenganga between Pakistan and India*, which held that it is trite law that principles of international environmental law must be considered when reading treaties completed before the development of that area of law.[208] This decision also held that the *Iron Rhine* decision had also employed principles that predated the dispute to resolve the matter.[209] Therefore, the LHWP must be measured against the principles of sustainable development, equitable and reasonable utilization and permanent sovereignty over natural resources, which adapt the LHWP to protect the "existing quality" of the environment, regardless of whether or not this treaty predated these principles.

Lastly, based on the approach of the *Trail Smelter Arbitration* decision, a peek at 'general principles of law' advances the case of the principles of sustainable development, equitable and reasonable utilization and permanent sovereignty over natural resources in line with Article 38 of the Statute of the International Court of Justice.[210] According to Article 38.1(c), 'general principles of law' are sources of law. In essence, these are principles that are recognised in the major legal systems of the world.[211] To this end, the National Water Act 36 of 1998 (hereafter, NWA) establishes the principles of 'sustainability' and 'equity' as the "central guiding principles" and objects of water utilization in South Africa.[212] To this end, the NWA regulates water resources, which includes 'watercourses' and 'surface waters'.[213] A 'watercourse' includes a "river or spring; a natural channel in which water flows regularly or intermittently and a wetland, lake or dam into which, or from which, water flows".[214] It follows that the Orange River falls within the definition of a 'watercourse' under the NWA.

[206] See *Case Concerning Gabcikovo Nagymaros* (note 186 above) para 112; See also J Glazewski *Environmental Law in South Africa* 2 ed (2005) 39.
[207] See *Case Concerning Gabcikovo Nagymaros* (note 186 above) para 112.
[208] *Award in the Arbitration regarding the Indus Waters Kishenganga between Pakistan and India* 20 December 2013 Volume XXXI pp.1-358 para 452.
[209] Ibid.
[210] *Trail smelter case (United States, Canada)* 16 April 1938 and 11 March 1941 Volume III pp. 1905-1982 (hereafter, *Trail Smelter Arbitration*) 1963.
[211] A Kiss & D Shelton *International Environmental Law* (2004) 50.
[212] Chapter 1 and s 2(a)-(b) and (d) of the NWA.
[213] Section 1 of the NWA.
[214] Section 1 of the NWA.

Furthermore, the government of South Africa views the Orange River as a 'watercourse'.[215] Therefore, the LHWP is subject to the NWA. This means that the LHWP must comply with the principles of 'equity' and 'sustainability', which are central principles of the NWA.

In this regard, the LWA provides in section 3 that equity and sustainability are one of the "general principles" of proper water management in Lesotho. This is augmented by sections 3 and 4 of the Lesotho Environment Act 10 of 2008, which collectively call for equitable utilization and sustainable development of natural resources. Furthermore, the LWA makes it clear in section 4, that the "ownership" of all water in Lesotho vests in the people of Lesotho, which evokes the principle of permanent sovereignty over natural resources. This is the same ethos followed by section 3 of the NWA.

It is common cause that 'equity', 'sustainability' and 'permanent sovereignty over natural resources' are general principles of water law in Lesotho, Namibia, and Zimbabwe as the SADC States.[216] Similarly, major transboundary water agreements collectively endorse the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources.[217] It follows then, that these principles are 'general principles of law' recognised by the major water agreements in the world. This would mean that these principles are general principles of law based on the approach of the *Trail Smelter Arbitration* in line with Article 38 Statute of the International Court of Justice.[218]

Consequently, it is accepted in this study, that the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources are the key underlying conflict of uses principles that bind the LHWP. The discussion to follow will proffer an exposition into these principles.

1.5.1.1 The principle of 'equitable and reasonable utilization'

'Equitable and reasonable utilization' connotes a "perfect equality of all Riparian States in the use of the whole course of the river and the exclusion of any preferential privilege of any one

[215] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 41 above) 7.
[216] Section 3 of LWA; Sections 3 and 4 of the Water Resources Management Act 11 of 2013 of Namibia <https://laws.parliament.na/cms_documents/water-resources-management-a6c63808b7.pdf>; See ss 6(1)(c) and 54 of the Water Act (Chapter 20:24) 1998 of Zimbabwe <https://zimlii.org/zw/legislation/act/1998/31>; Revised Protocol art 3.
[217] Guarini Aquifer Agreement (adopted 2 August 2010) art 2, art 3 and art 4; Convention on the Protection and Use of Transboundary Watercourses and International Rivers (adopted 17 March 1992, entered into force 6 October 1996) art 2 and Agreement on the Nile River Basin Cooperative Framework (adopted 14 May 2010) art 3.
[218] *Trail Smelter Arbitration* (note 210 above) 1963.

riparian State in relation to the others".[219] It emanates from the theory of 'limited territorial sovereignty', which provides that States are entitled to equivalent entitlements to the use of a transboundary watercourse.[220] The first formulation of the principle of 'equitable and reasonable utilization' is found in the Helsinki Rules, which is a 'soft law' instrument that was endorsed internationally as part of customary international law.[221] Subsequently, the UN Watercourses Convention was formulated, which is predicated on the Helsinki Rules.[222] In essence, the UN Watercourses Convention entrenched the principle of 'equitable and reasonable utilization' by providing that the watercourse States must participate in the utilization of a transboundary watercourse equitably and reasonably based on a list of factors.[223] This list is not closed and due consideration must be accorded to all relevant factors which may be affected by the proposed use of the watercourse.[224] Similarly, Article 3.7(a) read with Article 3.8 of the Revised Protocol, further entrench the principle of 'equitable and reasonable utilization' in the same manner and language of the UN Watercourses Convention.[225]

The principle of 'equitable and reasonable utilization' has also received judicial recognition. It has been submitted that the principle of 'equitable and reasonable utilization' was approved by implication in the *River Order* case and in the *Lac Lanoux* arbitration.[226] The principle was also endorsed by the ICJ in the *Pulp Mills on the River Uruguay* case, and the *Case Concerning Gabcikovo-Nagymaros*, which held that unilateral uses of a shared watercourse are an affront to the principle of 'equitable and reasonable utilization'.[227] In light of this finding, Sands opines that 'equity' will become prominent in the years to come.[228] Salman asserts that the ruling of the ICJ in the *Case Concerning Gabcikovo-Nagymaros* entrenched the principle of 'equitable and reasonable utilization' as the foremost principle in

[219] *Territorial Jurisdiction of Int'l Comm'n of River Oder* (U.K. v. Pol.), 1929 P.C.I.J. (ser. A) No. 23 (Sept. 10) para 74.
[220] User's Guide (note 152 above) 100.
[221] See SMA Salman 'The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law' (2007) 23 *International Journal of Water Resources Development* 625,630. See art V read with arts VI, VII and VIII, which explain the contours of what constitutes reasonable use in Chapter II of the Helsinki Rules (adopted August 1966).
[222] Salman (note 221 above) 632.
[223] UN Watercourses Convention art 5.2 and art 6.
[224] Birnie, Boyle & Redgwell (note 12 above) 543.
[225] See also, African Convention on the Conservation of Natural Resources (adopted 15 September 1968) art VII.3.
[226] Birnie, Boyle & Redgwell (note 12 above) 542; *River Oder* (note 219 above) para 74; *Lac Lanoux* (note 195 above) para 24.
[227] *Pulp Mills* (note 195 above) para 175; Case *Concerning Gabcikovo Nagymaros* (note 186 above) para 85.
[228] P Sands *Principles of International Environmental Law* 2 ed (2003) 263; See *Case Concerning Gabcikovo-Nagymaros* (note 186 above) para 85.

transboundary water law.[229] Wouters criticises this decision in that it affirmed the UN Watercourses Convention as the binding pronouncement of international watercourses law and endorsed the principle of 'equitable and reasonable utilization' regardless of the fact that at that time, this treaty was not in force.[230] Harris contends that the principle of equitable and reasonable use, which has now expanded to "utilization" of freshwater, has become a peremptory norm that requires strict adherence.[231]

In this regard, 'reasonable utilization' prevents unsustainable water use.[232] Unsustainable utilization of water cannot be regarded as 'reasonable' in light of the present knowledge on the symbiotic relationship between the environment and economic development.[233] 'Reasonableness' is employed in the assessment of the nature of the use.[234] The 'reasonable man' test can be used to create a neutral mechanism to measure 'reasonableness'.[235] Thus, it has been opined that 'reasonableness' does not require the most effective use available nor is it evocative of the use of contemporary technology.[236] It encapsulates the current notion of 'rationality' and involves a consideration of factors like the phase of development of a State.[237] These are the underlying considerations in respect of the principle of 'reasonable utilization'. It is against this backdrop that the relevant provisions of the LHWP and the Phase II Agreement will be scrutinised to assess whether they comply with the principle of 'equitable and reasonable utilization'.

1.5.1.2 The principle of 'sustainable development'

'Equitable and reasonable utilization' and 'sustainable development' are intricately connected. In its simplest form, 'sustainable development' demands the integration of economic, ecological and social factors.[238] State practice implies that the principle of 'sustainability' emanated as early as 1893 when the United States of America advocated for a right to countenance the lawful and appropriate use of seals and to shelter them from wanton

[229] SMA Salman 'Legal Regime for Use and Protection of International Watercourses in the Southern African Region: Evolution and Context' (2001)41 *Natural Resources Journal* 981, 1009.
[230] P Wouters 'Legal responses to water scarcity and water conflict: The UN Watercourses Convention and Beyond' paper presented at the Summer Conference on Allocating and Managing Water for a Sustainable Future: Lessons from Around the World (11-14 June 2002) 40.
[231] DJ Harris *Cases and Materials on International Law* 6 ed (2004) 62.
[232] Wouters (note 230 above) 37.
[233] Ibid.
[234] User's Guide (note 152 above) 107.
[235] Ibid.
[236] Ibid.
[237] Ibid.
[238] D Tladi 'Strong sustainable development, weak sustainable development and the earth charter: towards a more nuanced framework of analysis' (2004) 11 *South African Journal of Environmental Law and Policy* 17, 19.

destruction.[239] Others contend that the advent of the principle of 'sustainable development' is drawn from the Stockholm Declaration on the United Nations Conference on the Human Environment (hereafter, Stockholm Declaration).[240] Thereafter, the principle was expressly recognised in the Rio Declaration on Environment and Development (hereafter, Rio Declaration).[241] The UN Watercourses Convention accepts sustainable utilization as a general principle and as an inherent component of 'equitable and reasonable utilization'.[242] The Revised Protocol followed suit and provides that the essential goal of this protocol is to ensure stronger cooperation for sustainable utilization of shared watercourses.[243] Thus, the principle of 'sustainable development' has been widely endorsed by many international agreements and is now the superordinate norm of the majority of international environmental law agreements.[244]

In the *Case Concerning Gabcikovo-Nagymaros*, the ICJ held that the need to strike a balance between economic development and the protection of the environment is found in the concept of 'sustainable development'.[245] 'Sustainable development' was also affirmed in the *Pulp Mills* case where the ICJ held that there is a link between 'equitable and reasonable utilization' of a shared watercourse and 'sustainable development'.[246] 'Sustainable development' has also found credence in the international trade law context. According to the Appellate Body in the *Shrimp Turtle* decision, 'sustainable development' is an objective of the World Trade Organization and its agreements and it "has been generally accepted as integrating economic and social development and environmental protection". [247] Consequently, it has been

[239] Sands (note 228 above) 253.See also *Award between the United States and the United Kingdom relating to the rights of jurisdiction of United States in the Bering's sea and the preservation of fur seals* :15 August 1893 Report of International Arbitral Awards Volume XXVIII (hereafter, *Pacific Fur Seals Arbitration*) pp. 263-276.
[240] D Tladi 'Sustainable Development in International Law: An analysis of key enviro-economic instruments' (2008) 19-20 <http://www.pulp.up.ac.za/monographs/sustainable-development-in-international-law-an-analysis-of-key-enviro-economic-instruments>; See Stockholm Declaration on the United Nations Conference on the Human Environment (adopted 16 June 1972) principles 1,8 and 11.
[241] Rio Declaration on Environment and Development (adopted June 1992) art 3 read with art 4.
[242] UN Watercourses Convention Preamble read with art 5.1 and art 24.2.
[243] Revised Protocol art 2 read with art 3.1 and art 3.7(a); See also, SADC Regional Water Policy 2005 para 1.3.1 <http://www.sadc.int/files/1913/5292/8376/Regional_Water_Policy.pdf>. SADC RSAP 2016-2020 (note 2 above) 24-25.
[244] Agenda 21 (adopted June 1992; United Nations Framework Convention on Climate Change (adopted 4 June 1992, entered into force 21 March 1994) art 3.4; United Nations General Assembly Resolution 55/2 of 8 September 2000: United Nations Millennium Declaration (2000) para 22; Johannesburg Declaration on Sustainable Development (adopted 4 September 2002) para 5.
[245] *Case Concerning Gabcikovo-Nagymaros Project* (note 186 above) para 140.
[246] *Pulp Mills* (note 195 above) paras 75 and 177.
[247] WTO Appellate Body Report, *Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58/AB/R (Shrimp Turtles), adopted on 6 November 1998, paras 129 and 153 read with footnote 107; See also, Marrakesh Agreement Establishing the World Trade Organization (adopted 15 April 1994) Preamble.

submitted that the principle of 'sustainable development' has become part of customary international law.[248] New watercourse agreements recognise the prominence of sustainable development as a goal.[249]

Finally, even though commentators on international law have been reluctant to explain the principle of 'sustainable development', they have recognised the "evolving elements" of the principle of sustainable development.[250] These include the principle of integration, sustainable utilization of natural resources, the quest for equity in the utilization and apportionment of natural resources, that is, the principles of intra-generational equity, and intra-generational equity.[251] For purposes of this study, I accept that 'sustainable development' encompasses these "evolving elements" as postulated by Sands and endorsed by Justice Ngcobo in the *Fuel Retailers* judgment.[252] Consequently, this paper will assess the LHWP's compliance with these "evolving elements" of the principle of 'sustainable development'. The need to construe and implement rules of international law in a coherent manner was also identified as a principle of sustainable development by Sands and the court in *Fuel Retailers*, but it does not fall within the scope of this discussion. The content and implications of the right to development as an aspect of the principle of sustainable development will be explored only in so far as it strengthens the advocacy for the right to permanent sovereignty over natural resources in Chapter 4 of this thesis.

1.5.1.3 The principle of 'permanent sovereignty over natural resources'

'Sovereignty' enables a State to dispose of its natural resources as it pleases.[253] 'Permanent sovereignty over natural resources' encapsulates "independence, autonomy, non-intervention,

[248] Sands (note 228 above) 254. Birnie, Boyle & Redgwell (note 12 above) 561-562; T Murombo 'The utility of environmental rights to sustainable development in Zimbabwe: A contribution to the constitutional reform debate' (2011) 11 *SAJHR* 120,129-130, who although disagreeing that the principle is part of customary international law, acknowledges that it enjoys widespread recognition in domestic and international law.
[249] Birnie, Boyle & Redgwell (note 12 above) 562.
[250] *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province* (CCT67/06) 2007 (6) SA 4 (CC) (7 June 2007) (hereafter, *Fuel Retailers*) para 51.
[251] *Fuel Retailers* (note 250 above) para 51; Sands (note 228 above) 253.
[252] *Fuel Retailers* (note 250 above) para 51; P Sands & J Peel *et al Principles of International Environmental Law* 4 ed (2018) 219.
[253] Birnie, Boyle & Redgwell (note 12 above) 540; N Schrijver *Sovereignty over Natural Resources: Balancing Rights and Duties* (1997) 2.

and self-determination" into the economic domain.[254] Thus, it represents an economic manifestation of State sovereignty.[255]

Within this framework, it has been submitted that 'equitable utilization' hinges on 'shared sovereignty'.[256] 'Shared sovereignty' requires a consideration of the uses of each State and thus, connotes 'equitable utilization'.[257] This means that the attainment of 'equitable utilization' may require that States have to limit aspects of their permanent sovereignty over their natural resources. Since 'equitable utilization' is a sub-principle of the principle of 'sustainable development', this means that sustainable development may require shared sovereignty. The problem with the waiver of aspects of a State's sovereignty is that it may mean that a State may have to forego some of its economic development and social upliftment projects to 'equitably' share and 'sustainably' use the natural resources in a shared watercourse. The inevitable economic losses may compel States to litigate for an 'absolute' form of 'permanent sovereignty over shared natural resources' to the exclusion of the interests of the other riparian States in a shared watercourse. However, absolute 'permanent sovereignty over natural resources' could sometimes hinder the 'equitable and reasonable utilization' and 'sustainable development' of the shared watercourse. This posits the question as to whether the principles of equitable and reasonable utilization and sustainable development can be read in concert with the principle of permanent sovereignty over natural resources.[258] Schrijver is of the view that these resource-controlling principles are complementary.[259] Thus, Schrijver asserts that permanent sovereignty over natural resources can serve as the foundation for sustainable development.[260] In this study, it is my view that these principles not only regulate resource allocation but also function as instruments to prevent and regulate a conflict of uses over shared natural resources.

To this end, sovereignty is recognised as *jus cogens* by Article 2 of the Charter of the United Nations. Brownlie asserts that it is the genesis of international law.[261] The relationship

[254] P Gümplová 'Restraining permanent sovereignty over natural resources' (2014) 53 *Enrahonar. Quaderns de Filosofia* 93,102.
[255] Ibid.
[256] Birnie, Boyle & Redgwell (note 12 above) 542.
[257] Ibid.
[258] N Schrijver 'Sovereignty over natural resources: balancing rights and duties in an interdependent world'. Thesis presented for the degree of PHD at the University of Groningen (1995) 235.
[259] Ibid.
[260] Ibid 376-377.
[261] I Brownlie *Principles of Public International Law* 6 ed (2003) 287. See further, the Treaty of Augsburg (1555) and the Peace of Westphalia (1648).

between permanent sovereignty over natural resources and environment protection was aptly captured by principle 21 of the Stockholm Declaration.[262] Principle 21 of the Stockholm Declaration provides that States have, in line with the Charter of the United Nations and international law, the sovereign right to utilize their natural resources with due consideration of their environmental policies. According to Sands, principle 21 is the foundation of international environmental law.[263] This principle was reaffirmed in the Rio Declaration that stipulates that States have, in line with the Charter of the United Nations and international law, the sovereign right to utilize their resources with due cognisance of their own environmental and economic developmental plans.[264]

Within the United Nations, this right was sparked by the General Assembly Resolution 1803 (XVII) (hereafter, Resolution 1803), which entrenched the right to permanent sovereignty over national resources as an international legal right.[265] It is contended that Resolution 1803 appears to epitomise the current state of customary law and there is agreement that these rules enjoy universal acceptance.[266] Subsequently, Resolution 1803 has been endorsed in various arbitral awards as encapsulating customary international law.[267] It has also been held that international courts are reluctant to recognise agreements that prejudice the territorial sovereignty of a State.[268] The status of the principle of permanent sovereignty over natural resources is also shown by its common use in various iterations by international environmental conventions.[269] The ICJ has confirmed in the *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)* case, that the right to 'permanent sovereignty over natural resources' is a rule of customary international law.[270] Thus, the right to permanent sovereignty over natural resources is a fundamental rule of customary international law.[271] Consequently, this study will assess whether the LHWP complies with the principle of permanent sovereignty over natural resources. The divergence of views on whether 'permanent

[262] Sands (note 228 above) 237.
[263] Ibid 236.
[264] Rio Declaration principle 2.
[265] United Nations General Assembly Resolution 1803 (XVII) of 14 December 1962: 'Permanent sovereignty over natural resources' and Declaration on the Granting of Independence to Colonial Countries and Peoples. Sands (note 228 above) 236-237.
[266] *Texaco Overseas Protection Co. and California Asiatic Oil Co. v Libya* (1977) 53 ILR 389,389.
[267] Harris (note 231 above) 578.
[268] *Lac Lanoux Arbitration* (note 195 above) para 11.
[269] Sands (note 228 above) 237.
[270] *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)* Judgment I.C.J. Reports 2005, p. 168 para 244; *Island of Palmas (Netherlands, USA)* 4 April 1928 VOLUME II pp. 829-871 838. *Texaco* (note 266 above) para 59.
[271] *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda* (note 270 above) para 244.

sovereignty over natural resources' sovereignty' is 'absolute' or 'limited' also merits further inquiry. Within this discussion, this study will also assess the possibility of 'expropriation' or 'nationalization' as an incidence of the right to permanent sovereignty over natural resources and the impact of 'power asymmetry' on Lesotho's right to permanent sovereignty.[272]

1.6 Significance of the study and Research Objectives

The Orange River is shared by South Africa, Lesotho, Namibia, and Botswana. The economic development of these countries depends on the water supply from this River. However, there is no basin-wide covenant on how the water in this River can be shared by all these riparian States. This is despite the fact that these riparian States have concluded the ORASECOM Agreement to establish a regime for the common management and utilization of the River. The significant problem with the ORASECOM Agreement is that it provides in Article 1.3 that it does not have a legal effect on agreements that predated its inception, such as the LHWP. Thus, the ORASECOM Agreement offers no tangible solutions for a conflict of uses in the Orange River save for suggesting principles that could guide the utilization of the Orange River and invariably, the interpretation of the LHWP. The impact of the ORASEOM Agreement is further restricted by the fact that the LHWP makes it clear that it is not bound by agreements that are in conflict with the LHWP. In this regard, the ORASECOM Agreement endorses the principles of sustainable development and equitable and reasonable utilization, which are not expressly provided for by the LHWP. Thus, it is unclear whether the LHWP provides for the key underlying freshwater principles that govern a conflict of uses, namely, the principles of sustainable development, equitable and reasonable utilization and permanent sovereignty over natural resources. This issue is compounded by the subsequent promulgation of legislation by Lesotho that further contradicts the LHWP despite this agreement being in force since 1986. This is contrary to the LHWP, which requires that both countries align their domestic laws to the LHWP. This is disconcerting since the LHWP is also regulated by the domestic laws of both Lesotho and South Africa. It is then my view that this disharmony in the legislative scheme of the LHWP suggests Lesotho's underlying frustration with the water supply obligations of

[272] See A Jägerskog 'Getting Transboundary Water Right: Theory and Practice for Effective Cooperation' (2009) <https://www.uea.ac.uk/polopoly_fs/1.147024!ZeitounJagerskog_SIWI_TB_Report.pdf>.See A Turton 'Hydr o-hegemony in the context of the Orange River Basin' (2008) 10 *Water Policy* 51–69; The Department of International Relations and Co-operation of South Africa 'Government Media Statement on the unfolding situation in Lesotho available' (2014) <http://www.dirco.gov.za/docs/2014/leso0619.html>.

the LHWP. This could cause interstate conflict over the water in the Orange River, particularly if there is a conflict of uses due to water scarcity.

Furthermore, Lesotho is not a model of stable government and has been plagued by political instability and constant change of governments since independence from colonial rule. This murky legal regime is further exacerbated by the power imbalance between South Africa and Lesotho, which may have had an impact on the water supply obligations of the LHWP. Consequently, this study seeks to assess whether the LHWP complies with the key underlying freshwater principles that address the projected conflict of uses in the LHWP, namely, equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources.

In light of the foregoing, this study sees to achieve the following objectives:

The principal objective of this thesis is to propose legal responses to the projected conflict of uses in the LHWP. In the same breath, this thesis seeks to highlight the possibility of a conflict of uses in the LHWP because of the projected impact of climate change, drought, pollution, and land degradation in the Orange River basin. This works in tandem with the objective to avert a military conflict over the water in the LHWP and this is particularly significant in light of what some have called the 'water war' of 1998 when South Africa and Botswana 'intervened' in Lesotho to bring peace after a *coup* but focused their primary efforts at securing the Katse Dam. This study also seeks to advocate for an equitable and sustainable sharing and utilization of the water in the Orange River. In the final analysis, the study seeks to establish the legal obligations of Lesotho and South Africa in the LHWP to bring the much-needed legal certainty in this legal regime.

1.7 Research Methodology

I am doing a Desktop review of literature engaging with international legal instruments, constitutions, legislation, relevant case law and domestic as well as international law.

1.8 Chapter Outline

Chapter One:

This chapter establishes the factual and legal framework of the LHWP with a specific focus on identifying the relevant legal principles that should inform the interpretation and application of the LHWP.

Chapter Two:

This chapter assesses whether the LHWP complies with the principle of ‘equitable and reasonable utilization’.

Chapter Three:

This chapter will discuss whether the LHWP is in accordance with the principle of ‘sustainable development’.

Chapter Four:

The chapter will examine whether the LHWP is in accordance with the principle of ‘permanent sovereignty over natural resources’.

Chapter Five:

This chapter will suggest recommendations and solutions to the problems identified in the research.

Chapter Six:

This chapter provides the bibliography for this study.

Chapter 2: Does the LHWP comply with the principle of 'equitable and reasonable utilization'?

Chapter 2: Does the LHWP comply with the principle of 'equitable and reasonable utilization'?

2.1 Introduction

The main research question in this study is whether the Treaty on the Lesotho Highlands Water Project between the Government of the Republic of South Africa and the Government of the Kingdom of Lesotho (hereafter, LHWP) complies with the key underlying international freshwater law conflict of uses principles with a specific focus on the principles of 'equitable and reasonable utilization', 'sustainable development' and 'permanent sovereignty over natural resources'. The focus of this chapter is to assess whether the LHWP is in accordance with the principle of 'equitable and reasonable utilization'. In this regard, I explore the principles of 'equitable utilization', 'equitable participation', 'benefit sharing', and 'reasonable utilization' as the constitutive elements of the principle of 'equitable and reasonable utilization'. This study then necessitated an assessment of the potential consequences and implications of the LHWP findings for similar transboundary freshwater treaties with a specific focus on the Agreement on the Establishment of the Zambezi Water Commission (hereafter, ZAMCOM Agreement) as a proximate transboundary freshwater agreement to demonstrate the inequity of the LHWP.

The evaluation of the LHWP's compliance with the principle of 'equitable and reasonable utilization' will be conducted from an international and local perspective. This approach is motivated by the fact that the government of South Africa has stated that the following legislation, treaties and policy documents have a bearing on international obligations regarding water allocations out of the LHWP: Constitution of the Republic of South Africa, 1996; the National Water Act 36 of 1998; Convention on the Law of the Non-navigational Uses of International Watercourses 1997 (hereafter, UN Watercourses Convention); Law on Transboundary Aquifers (UN Resolution 11 December 2008); Convention on Wetlands of international importance especially as waterfowl habitat; SADC Revised Protocol on Shared Watercourses (hereafter, Revised Protocol); the SADC Regional Water Policy 2005; Agreement between the governments of the Republic of Botswana, Kingdom of Lesotho, Republic of Namibia and the Republic of South Africa on the establishment of the Orange-Senqu River Commission Agreement (2000) (hereafter, ORASECOM Agreement); LHWP; Agreement on Phase II of the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (2011) (hereafter,

Phase II Agreement); Stockholm Convention on Persistent Organic Pollutants (2001); the Agreement on the Establishment of the Vioolsdrift and Noordoewer Joint Irrigation Scheme on the lower Orange River (1992) and Memorandum of understanding for feasibility study to transfer water from Lesotho to Botswana (2013); the Water Services Act 108 of 1997 and the National Environment Management Act 107 of 1998 are the applicable legislation from South Africa.[1] Secondly, the Lesotho Highlands Development Authority (hereafter, LHDA) has also stated that the Lesotho Highlands Water Project is also regulated by the National Environment Act of 2008 and the Environmental Impact Assessment (EIA) Guidelines (2002) of Lesotho.[2] Thirdly, the government of South Africa has accepted that the principle of equitable and reasonable utilization as espoused by the UN Watercourses Convention and the Revised Protocol is binding on the LHWP.[3] Furthermore, it is in Lesotho's interests that the LHWP be read in conformance with the UN Watercourses Convention and the Revised Protocol as they collectively establish and entrench the principles of 'equitable and reasonable utilization', 'sustainable development' and 'permanent sovereignty over natural resources'. This approach incorporates both municipal and international law and will be followed in all the chapters of this thesis. Consequently, the LHWP's compliance with the principle of 'equitable and reasonable utilization' will be evaluated according to this approach.

2.2 The principle of 'equitable and reasonable utilization'

Various States have advocated divergent claims for international watercourses: on the one hand, States have argued for unrestricted utilization of shared watercourses that are located within their territory irrespective of the requirements of other riparian States.[4] This is the principle of absolute sovereignty over natural resources that will be discussed in Chapter 4 of this study. On the other hand, States have also argued for an undisturbed use of a shared watercourse.[5] A mutually beneficial solution between these two different entitlements was required, and this has been achieved through the principle of limited territorial sovereignty, in which States have similar entitlements to the utilization of shared watercourses and are subject

[1] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (2014) 8-9 <http://www.dwaf.gov.za>.
[2] LHDA 'Public Disclosure of Phase II Environmental and Social Management Programme' (2014) 1 <http://www.lhda.org.ls/phase2/documents/Compensation_Policies/ES%20background%20document_Final12Dec2014.pdf>.
[3] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 1 above) 11-17 and 33.
[4] A Rieu Clarke & C Spray 'Ecosystem services and international water law: towards a more effective determination and implementation of Equity' (2013) 16 *PER/PELJ* 12, 18.
[5] Ibid.

to the duty to honour the mutual rights of other riparian States.[6] Within this framework of shared watercourses, the principle of limited territorial sovereignty has been translated into the principle of 'equitable and reasonable utilization', which is regarded as the superordinate principle that regulates the utilization of shared watercourses.[7] It is the principle of 'equitable and reasonable utilization' that is the subject of this chapter.

The principle of 'equitable and reasonable utilization' was first mooted in The Helsinki Rules on the Uses of the Waters of International Rivers (hereafter, Helsinki Rules), which were then incorporated into customary international law.[8] The matter of a 'reasonable and equitable' share requires due consideration of all the pertinent factors, which include the geography of the basin, the hydrology of the basin and the climate impacting the basin.[9] Thus, the Helsinki Rules provided the first clear criteria for ascertaining whether a water use is 'reasonable and equitable'. The Helsinki Rules also established the oft reiterated approach that the weight to be bestowed to each factor is to be made in consideration of its significance in comparison to the other elements.[10] It has been opined that the 'reasonable and equitable' sharing principle in the Helsinki Rules seeks to provide the most benefit to each riparian State, and is therefore evocative of the principle of 'optimal utilization' under the UN Watercourses Convention.[11] In both cases, the identification of relevant factors and the context are cardinal to the principle of equitable and reasonable utilization.[12]

In respect of a conflict of uses, the Helsinki Rules provided that a water use does not have the right to any "inherent preference" over any other use.[13] This means that there is no water use in a shared watercourse that enjoys priority over other uses. This has profound implications for the LHWP because it means that neither Lesotho nor South Africa may claim that its water use takes preference over other uses under the Helsinki formulation even in a conflict of uses.

---

[6] Ibid.
[7] Ibid.
[8] See SMA Salman 'The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law' (2007) 23 *International Journal of Water Resources Development* 625,630. See the Helsinki Rules on the Uses of the Waters of International Rivers (adopted August 1966) art V must be read with arts VI, VII and VIII that explain the contours of what constitutes reasonable use in Chapter II.
[9] Helsinki Rules art V.II and art VI.
[10] Helsinki Rules art V.III.
[11] M Abseno 'Role and relevance of the 1997 UN Watercourses Convention in resolving transboundary water disputes in the Nile' (2013) 11 *International Journal of River Basin Management* 193,198.
[12] Ibid.
[13] Helsinki Rules art VI.

Whilst the Helsinki Rules constituted the first international codification of freshwater law, there was a need for a comprehensive and binding international water law treaty that would be universally accepted to regulate interstate disputes over shared watercourses. This clamour culminated with the promulgation of the UN Watercourses Convention. Incidentally, the UN Watercourses Convention emanates from the Helsinki Rules.[14] This view has been affirmed by the ICJ.[15] Thus in principle, there was already a significant acceptance of the principle of the equitable utilization of shared water resources prior to the advent of the UN Watercourses Convention.[16] However, despite this correlation, it is common cause that the Helsinki Rules are not accorded the same recognition as the UN Watercourses Convention, which is considered an indispensable pronouncement of relevant international law.[17]

In essence, the UN Watercourses Convention established and entrenched the principle of equitable and reasonable utilization.[18] Article 5.2 and Article 6 of the UN Watercourses Convention ensure that watercourse States must be involved in the utilization of an international watercourse in an 'equitable and reasonable' way. Under the UN Watercourses Convention, the list of factors that are relevant to establish whether a use of water is equitable and reasonable can be classified into three general groups:

(i) factors of a natural character (hydrographic, hydrological, climatic, ecological)

(ii) economic and social ones (economic needs, population dependent on watercourse, effects of use on co-riparians, existing and potential uses, conservation measures, and availability of alternatives);

(iii) and environmental factors.[19]

In this way, the principle of equitable and reasonable utilization fulfils two objectives: first, it ascertains the legality of a utilization of the transboundary watercourse; and second, it fulfils a significant 'procedural' function that requires a holistic evaluation of all relevant considerations when ascertaining whether a use is equitable and reasonable.[20] However, the list of factors to be evaluated under the principle is not exhaustive, and due regard must be accorded

[14] Salman (note 8 above) 632; SMA Salman 'The United Nations Watercourses Convention Ten Years Later: Why Has its Entry into Force Proven Difficult?' (2007) 32 *Water International* 1, 6.
[15] *Kasikili/Sedudu Island (Botswana / Namibia,)* Judgment, I. C. J. Report 1999, p. 1045 para 27.
[16] Ibid para 28.
[17] P Heyns, M Patrick & A Turton 'Transboundary Water Resource Management in Southern Africa: Meeting the Challenge of Joint Planning and Management in the Orange River Basin' (2008) 24 *International Journal of Water Resources Development* 371,374.
[18] UN Watercourses Convention (adopted 21 May 1997, entered into force 17 August 2014) art 5.1.
[19] UN Watercourses Convention art 6.1; A Rieu-Clarke, R Moynihan & BO Magsig 'United Nations Watercourses User's Guide' (2012) (hereafter, User's Guide) 112 <https://www.iucn.org/sites/dev/files/un_watercourses_convention_-_users_guide.pdf>.
[20] User's Guide 106.

to all relevant factors.[21] This approach is in line with the Helsinki Rules and affords flexibility in complex water management regimes.

The UN Watercourses Convention was then affirmed and followed by the Revised Protocol. South Africa and Lesotho have ratified the Revised Protocol. It is common cause that both treaties are applicable to the conflict of uses problem in the LHWP. Pursuant to this approach, it must be noted that the Revised Protocol reiterates the Helsinki Rules and the UN Watercourses Convention.[22] More specifically, the Revised Protocol rehashes the same criteria as the UN Watercourses Convention on its elaboration of the principle of equitable and reasonable utilization.[23] The Revised Protocol further endorses the approach that the weight to be accorded to each element in the equitable and reasonable utilization criteria depends on the importance of each component and that this process must be conducted holistically.[24] Significantly, the Revised Protocol in conformance with the UN Watercourses Convention, also provides the necessary ingredients for the achievement of equitable and reasonable utilization by requiring that watercourse States must regularly exchange data regarding the shared watercourse and that they must notify each other of any planned activity that will affect the shared watercourses.[25]

In this regard, the International Law Association Berlin Rules on Water Resources (hereafter, the Berlin Rules), which are a soft law instrument, provide that basin States must in their own countries, use the transboundary water in an 'equitable and reasonable' manner taking cognisance of the duty to avoid causing material harm to other riparian States.[26] In this way, it can be seen that there is a link between the principle of 'equitable and reasonable utilization' and the 'do no harm' principle.[27] The 'do no harm' principle then seeks to prohibit a riparian State from embarking on projects that reduce the quality of water for other riparian

[21] P Birnie, A Boyle & C Redgwell *International Law and the Environment* 3 ed (2009) 543; See also, C Leb 'The UN Watercourses Convention: the éminence grise behind cooperation on transboundary water resources' (2013) 38 *Water International* 146,151; C Leb 'The right to water in a transboundary context: emergence of seminal trends' (2012) 37 *Water International* 640, 647.
[22] See UN Watercourses Convention Preamble.
[23] Revised Protocol (adopted 7 August 2000, entered into force 22 September 2003) art 3.7(a) read with art 3.8.
[24] Revised Protocol art 3.8(b).
[25] Revised Protocol art 4.
[26] Berlin Rules (adopted 17 August 2004) art 12. Soft law instruments here also include amongst others, the Stockholm Declaration on the United Nations Conference on the Human Environment (adopted 16 June 1972), the Rio Declaration on Environment and Development (adopted June 1992) and International Law Association's New Delhi Declaration of Principles of International Law Relating to Sustainable Development (adopted 6 April 2002).
[27] UN Watercourses Convention art 7.2 and Revised Protocol art 3.10; S McCaffrey 'The contribution of the UN Convention on the law of non-navigational uses of international watercourses' (2001) 1 *International Journal of Global Environmental Issues* 250, 260.

States.[28] This implies that a riparian State that does not use the transboundary water source equitably or reasonably would automatically be in violation of the 'do no harm' principle.[29] In this way, it is then argued that the Berlin Rules subjugate the principle of 'equitable and reasonable utilization' to the principle of 'do no harm'.[30] Similarly, it has been argued that the UN Watercourses Convention prioritises the 'do no harm' rule over the principle of 'equitable and reasonable utilization'.[31] Regardless, it is not the focus of this thesis to explore the 'do no harm' principle. The seminal output of the Berlin Rules and the UN Watercourses Convention in this regard, is that there is a connection between the principle of 'equitable and reasonable utilization' and the 'do no harm' principle.

Furthermore, the criteria for ascertaining whether a use is 'equitable and reasonable' under the Berlin Rules mirrors Article 6 of the UN Watercourses Convention. The Berlin Rules provide that States are entitled to be involved in the management of a transboundary watercourse in an equitable, reasonable, and sustainable manner.[32] This provision, like its corollary in the UN Watercourses Convention, requires a participating State to adhere to the principle of equitable and reasonable utilization of transboundary watercourses.[33] This provision also mimics the UN Watercourses Convention by demanding sustainable participation.[34] Also, basin States must utilize shared watercourses in a manner that seeks to achieve the best and sustainable use and benefits, with due regard to the interests of other riparian States, in accordance with proper protection of the waters.[35] This conceptualization resembles the method of the Helsinki Rules.[36] Consequently, Harris contends that the principle of equitable and reasonable 'utilization' of freshwater has become *jus cogens*.[37] In this way, the principle of equitable utilization is regarded as the central governing principle of international watercourses.[38] This discussion merely sought to proffer an exposition on the

[28] D Brooks 'Response to Late developers and the inequity of "equitable utilization" and the harm of "do no harm" by Kai Wegerich and Oliver Olsson, Water International, 35 (6), 707–717 (November 2010)' (2011) 36 *Water International* 407, 408.
[29] K Wegerich & O Olsson 'Late developers and the inequity of "equitable utilization" and the harm of "do no harm"' (2010) 35 *Water International* 707, 709.
[30] Ibid 711; Salman (note 8 above) 637.
[31] Salman (note 14 above) 9; See UN Watercourses Convention, art 7.
[32] Berlin Rules art 10.1.
[33] ILA Berlin Rules Commentary on Water Resources 19 <https://www.unece.org/fileadmin/DAM/env/water/meetings/legal_board/2010/annexes_groundwater_paper/Annex_IV_Berlin_Rules_on_Water_Resources_ILA.pdf>; See UN Watercourses Convention art 5.2.
[34] ILA Berlin Rules Commentary on Water Resources (note 33 above) 19.
[35] Berlin Rules art 12.
[36] ILA Berlin Rules Commentary on Water Resources (note 33 above) 20.
[37] DJ Harris *Cases and Materials on International Law* 6 ed (2004) 62.
[38] Birnie, Boyle & Redgwell (note 21 above) 543; P Wouters 'The Yin and Yang of International Water Law: China's Transboundary Water Practice and the Changing Contours of State Sovereignty' (2014) 23 *Review of*

principle of 'equitable and reasonable utilization'. The discussion to follow will then comprehensively explain the contours of the principle of 'equitable and reasonable utilization' and in the same breath, juxtapose and assess the LHWP's compliance in this regard.

2.3 The LHWP and the principle of 'equitable and reasonable utilization'

It has already been established that the Helsinki Rules constitute the earliest written pronouncement of transboundary water law. [39] The Helsinki Rules provided that each basin State has the right, within its territorial boundary, to a "reasonable and equitable share in the beneficial uses of the waters of an international drainage basin".[40] Under the Helsinki Rules, the following elements amongst others, would assist in establishing whether a water use is "reasonable" and "equitable":

> (i) The geography of the basin, including in particular the extent of the drainage area in the territory of each basin State;
>
> (ii) The hydrology of the basin, including in particular the contribution of water by each basin State;
>
> (iii)The climate affecting the basin;
>
> (iv)The past utilization of the waters of the basin, including in particular existing utilization;
>
> (v)The economic and social needs of each basin State;
>
> (vi) The population dependent on the waters of the basin in each basin State;
>
> (vii) The availability of other resources.[41]

It is submitted that a comprehensive assessment of these elements requires cooperation between the riparian States.[42] This means that cooperation is a *sine qua non* of the fulfilment of 'equitable and reasonable utilization'. Factors and circumstances are not fixed, and they may vary over time.[43] This is not a prerogative of a single State, as many will hinge on the understanding of the whole basin.[44] This is significant for the LHWP in that Lesotho should be permitted to participate properly in the identification of the factors that are relevant for the determination of which water use takes precedence if a conflict of uses occurs in the LHWP.

European Community & International Environmental Law 67, 69; O McIntyre 'Utilization of shared international freshwater resources – the meaning and role of "equity" 'in international water law' (2013) 38 *Water International* 112,129.

[39] Salman (note 8 above) 630.

[40] Helsinki Rules art IV.

[41] Helsinki Rules art V.II.

[42] A Rieu-Clarke & G Gooch 'Governing the Tributaries of the Mekong—The Contribution of International Law and Institutions to Enhancing Equitable Cooperation Over the Sesan' (2010) 22 *Global Business & Development Law Journal* 194, 211.

[43] Ibid.

[44] Ibid.

Nevertheless, it must be noted that the Helsinki Rules as a soft law instrument, are not legally binding.[45] However, until the advent of the UN Watercourses Convention, the Helsinki encapsulated the single most fundamental rules in respect of the utilization of shared watercourses.[46] Unfortunately, a fatal flaw of the Helsinki Rules is that they provide that a use or type of uses is not regarded as having "any inherent preference" over other uses.[47] Since the Helsinki Rules do not permit "preferential use" of the shared watercourse in times of water scarcity, they would not be able to respond to the conflict of uses conundrum in the Orange River. Thus, while the Helsinki Rules provided a normative genesis of the principle of 'equitable and reasonable utilization', they do not offer a pragmatic solution on whether one water use prevails over another during a conflict of uses.

The Helsinki Rules were then supplanted by the UN Watercourses Convention. The UN Watercourses Convention firmly established the principle of 'equitable and reasonable utilization' and provides for a list of elements that are relevant for this determination.[48] These factors include, amongst others:

> (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character;
>
> (b) The social and economic needs of the watercourse States concerned;
>
> (c) The population dependent on the watercourse in each watercourse State;
>
> (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States;
>
> (e) Existing and potential uses of the watercourse.[49]

Despite a difference in terminology in the articulation of the factors that determine whether a water use is 'equitable and reasonable', it can then be seen that the UN Watercourses Convention mimics the Helsinki Rules in this respect. The UN Watercourses Convention's approach in this regard evokes similar considerations with the principle of 'sustainable development' with its reference to socio-economic factors, economic development and protecting the water resources. The principle of 'sustainable development' will be discussed in Chapter 3 of this thesis.

As a point of departure, the UN Watercourses Convention reiterates the Helsinki Rules in that it stipulates that the value to be accorded to each element will hinge upon its value in

[45] Salman (note 8 above) 630.
[46] Ibid.
[47] Helsinki Rules art VI.
[48] UN Watercourses Convention art 5.1 read with art 6.
[49] UN Watercourses Convention art 6.

comparison with the other factors, and this determination must be made holistically.[50] Some commentators have suggested that this method of the UN Watercourses Convention affords the latitude to be flexible in its application.[51] This method of the UN Watercourses Convention is also commendable in that it creates a holistic approach that uses natural, social, and economic factors to determine whether a use is "equitable" and "reasonable". The UN Watercourses Convention's regime on 'equitable and reasonable utilization' is operationalised by the requirement to ensure the regular exchange of information.[52] This provision is augmented by the requirement to notify other riparian States in a shared watercourse of a planned activity that materially and negatively affects the watercourse.[53] This cooperation paradigm ensures the regular exchange of data that is crucial to the achievement of 'equitable and reasonable utilization'.

However, the formulation of the principle of 'equitable and reasonable utilization' in the UN Watercourses Convention does not offer any direction as to the value to be given to the elements listed as relevant to 'equitable utilization' and thus, does not assist in resolving a conflict of uses.[54] It is unclear how these different factors can be harmonised to achieve 'equity' and therefore, it has been argued that 'equity' proffers no pragmatic guidelines for water allocation.[55] In the same vein, due to its normative ambiguity, some commentators have doubts about the utility of the principle despite its procedural value.[56] The lack of guidance on how the factors under Article 6 of the UN Watercourses Convention are to be interpreted and applied undermines the applicability of the principle in transboundary disputes.[57] Indeed, it is argued one would struggle to find mutual ground on what the relevant factors are likely to be.[58] This constrains negotiations.[59] The argument here is that Article 6 fails to direct how water must be allocated and has a vague reference to which need assumes priority or how the factors are ranked in the determination of water allocation.[60] In short, the UN Watercourses Convention

[50] UN Watercourses Convention art 6.3.
[51] Leb (note 21 above) 151.
[52] UN Watercourses Convention art 9.
[53] UN Watercourses Convention art 11 and art 12.
[54] McIntyre (note 38 above) 120.
[55] See further, K Vink 'Transboundary water law and vulnerable people: legal interpretations of the 'equitable use' principle' (2014) 39 *Water International* 743,749-752.
[56] McIntyre (note 38 above) 120.
[57] P Beaumont 'The 1997 UN Convention on the Law of Non-Navigational Uses of International Watercourses: Its Strengths and Weaknesses from a Water Management Perspective and the Need for New Workable Guidelines' (2000) 16 *International Journal of Water Resources Development* 475, 482.
[58] Ibid.
[59] Ibid.
[60] B Lankford 'Does Article 6 (Factors Relevant to Equitable and Reasonable Utilization) in the UN Watercourses Convention misdirect riparian countries?' (2013) 38 *Water International* 130, 141.

does not clarify which factors under Article 6 pertain to 'equitable use' and which factors would be applicable to 'reasonable uses'. This normative ambivalence plagues the Helsinki Rules, the UN Watercourses Convention and the Revised Protocol.

Furthermore, Article 6 of the UN Watercourses Convention has been criticised for not catering to the ecological component of the water resources and thus, does not afford due consideration to the provision of water for environmental integrity.[61] This is also termed the 'Ecological Reserve'. In the same vein, it is also argued that the factors listed are susceptible to numerically identical allocations.[62] However, it has also been submitted that the principle encompasses a harmonisation of needs, which considers the uses of each riparian State and thus, enjoys universal support.[63] Commentators have commended the fair and holistic nature of the language in Articles 5 and 6 of the UN Watercourses Convention.[64] It is my view that since the factors under Article 6 of the UN Watercourses Convention invariably incorporates the principle of 'sustainable development', this agreement creates a flexible approach to this principle that adapts the model of 'sustainable development' to the pillar, i.e. environmental protection or economic development or social upliftment, that requires the most attention. However, the principle of 'equitable and reasonable utilization' assumes the propensity of riparians States to unite and work together to determine what constitutes "equitable" or "reasonable" use.[65] This evaluation process of Article 6 could be seen as idealistic, susceptible to subjective interpretation, and not affording due consideration to pragmatic factors such as 'power asymmetry' in a particular basin. The impact of 'power asymmetry' in the LHWP will be fully discussed in Chapter 4 of this study. At this juncture, it is apposite to posit that the very absence of the principle of 'equitable and reasonable utilization' in the LHWP might be a consequence of this normative ambiguity.

The UN Watercourses Convention also requires that international watercourse States must utilize transboundary water in an "optimal and sustainable" manner taking into consideration the rights of the watercourse States, in line with proper conservation of the watercourse.[66] Thus, the UN Watercourses Convention regards "sustainable use" as an inherent

[61] Ibid 140.
[62] Ibid 139.
[63] Birnie, Boyle & Redgwell (note 21 above) 543; SMA Salman 'Downstream riparians can also harm upstream riparians: the concept of foreclosure of future uses' (2011) 35 *Water International* 350–364.
[64] J Azarva 'Conflict on the Nile: International Watercourse Law and the Elusive Effort to Create a Transboundary Water Regime in the Nile Basin' (2011) 25 *Temple International and Comparative Law Journal* 457, 478.
[65] Ibid.
[66] UN Watercourses Convention art 5.1.

component of 'equitable and reasonable utilization'. 'Equitable utilization' and 'sustainable utilization' differ because a water use could be 'equitable' between riparian States but still be deemed 'unsustainable'.[67] The notion of 'sustainable use' will be explored later in Chapter 3 of this study.

However, Article 10 of the UN Watercourses Convention proffers some guidance in the event of a conflict of uses. First, Article 10.1 of the UN Watercourses Convention provides that no use has intrinsic significance over another. This is in keeping with the Helsinki Rules, which denies a preferential right of use over shared watercourses. Despite its normative ambivalence, Article 6 of the UN Watercourses Convention provides an instructive starting point for the utilization of shared watercourses. Article 10.1 of the UN Watercourses Convention appears to buttress Article 6 by according equal significance to all water uses in order to ensure the equality of all riparian States. It is presumed that Article 10.1 operates as a general rule in times when there is no conflict of uses and preserves the "perfect equality" and community of interests of all riparian States.

On the other hand, Article 10.2 of the UN Watercourses Convention provides that in the absence of an agreement between the parties, a conflict of uses must be resolved according to the principle of 'equitable and reasonable utilization' but with "special" consideration for the requirements of 'vital human needs'. This then means that Article 10.2 must be read together with Articles 5 and 6 of the UN Watercourses Convention, which embody the principle of 'equitable and reasonable utilization'. Thus, Article 10.2 requires that a conflict of uses must firstly be resolved according to the principle of 'equitable and reasonable utilization'. Whilst this approach is logical within the framework of the UN Watercourses Convention, it is unsound. This is because it has already been shown that Article 6 of the UN Watercourses Convention breeds normative ambiguity. Thus it appears that Article 10.2 creates a two-tier approach to regulating a conflict of uses in that it requires that one must first have resort to the elements identified in Article 6 of the UN Watercourses Convention before moving on to according more weight to the 'vital human needs'. This is a futile exercise. Perhaps aware of this problem, Article 10.2 of the UN Watercourses Convention allows the according of "special" consideration to what it calls the 'vital human needs' criteria. This construction is important. In this way, the UN Watercourses Convention subtly and tacitly elevates and

[67] P Wouters 'Legal responses to water scarcity and water conflict: The UN Watercourses Convention and Beyond' (Paper presented at Summer Conference 'Allocating and Managing Water for a Sustainable Future: Lessons from Around the World' 11 -14 June 2002) 37.

accords more weight to the 'vital human needs' criteria in the event of a conflict of uses as an incidence of the principle of equitable and reasonable utilization by virtue of the lexicon and structure of Article 10.2. Thus, Article 10.2 of the UN Watercourses Convention provides a useful and effective mechanism to resolve a conflict of uses. It follows then that there must be an evaluation of the concept of 'vital human needs'.

The UN Watercourses Convention became the primary water-based agreement that gave prominence to the term 'vital human needs', which are defined as the adequate water that is required to maintain human life, together with potable water and water needed to make food in order to stave off a famine.[68] The Berlin Rules define 'vital human needs' as waters used for "immediate human survival, including drinking, cooking, and sanitary needs, as well as water needed for the immediate sustenance of a household".[69] It is submitted that judicial pronouncements have long accorded primacy in domestic law to "'vital human needs'".[70] In this regard, the Revised Protocol provides that 'domestic use' means "use of water for drinking, washing, cooking, bathing, sanitation and stock watering purposes".[71] 'Vital human needs' must be uses that meet "natural wants" or "ordinary uses" instead of "artificial uses" or "extraordinary uses" on the other.[72] Thus, the International Law Association submits that 'vital human needs' must incorporate water needed for "immediate human consumption" and these include drinking, cooking, and washing, and for other uses required for the "immediate sustenance of a household" including watering animals for household use.[73] All other uses, including using water for business enterprises such as mining or manufacturing, fall outside of the concept of 'vital human needs'.[74] Thus, it seems sound to presume that 'vital human needs' prioritise the most critical uses to avoid death by way of dehydration or famine.[75] The term "'special regard'" in Article 10.2 connotes that water for vital human needs enjoys primacy over other water uses, and this actually accords with 'equity'.[76] This finding is in line with the Statement of Understanding accompanying the United Nations Convention on the Law of Non-Navigational Uses of Watercourses (A/51/869 of 11 April 1997), which provided that 'vital

[68] User's Guide (note 19 above) 129.
[69] Berlin Rules art 3.20.
[70] ILA Berlin Rules Commentary on Water Resources (note 33 above) 12 and 22; S McCaffrey 'A human right to water: domestic and international implications' (1992) 5 *Georgetown International Environmental Law Review* 1, 22.
[71] Revised Protocol art 1.
[72] ILA Berlin Rules Commentary on Water Resources (note 33 above) 12.
[73] Ibid.
[74] Ibid. See Birnie, Boyle and Redgwell (note 21 above) 564.
[75] User's Guide (note 19 above) 129.
[76] Ibid 130. Leb (note 21 above) 647.

human needs' refers to providing adequate water to "sustain human life, including both drinking water and water required for the production of food in order to prevent starvation".[77] This approach is further validated by General Comment 15, which provides that any projects embarked on within a country's jurisdiction must never deny another State of the right to achieve the right to water in its territory.[78]

In this regard, Article 14 of the Berlin Rules on Water provides that in ascertaining an equitable and reasonable use, States must first prioritise water to satisfy 'vital human needs' and that no other use must have an intrinsic significance over any other use. This nexus between equitable utilization and the vital human needs criteria is aptly captured by the Berlin Rules, which provide that everyone has a right of access to adequate, clean, acceptable, physically accessible and reasonably priced water to satisfy vital human needs.[79] It is then submitted that Article 14 of the Berlin Rules clarifies what was implied in the Helsinki Rules.[80] The language of the Berlin Rules is much more emphatic in determining an equitable and reasonable use by providing that one has the duty to "first allocate waters to satisfy vital human needs".[81] Thus, the Berlin Rules resolve the ambiguity borne out of the tentative approach of the UN Watercourses Convention.[82] Regardless, it would be inconceivable to see how some uses will be regarded as 'equitable' if they fail to prioritise vital human needs.[83] There is credence to the notion that the only instance where 'vital human needs' may not enjoy "priority" within a specific watercourse is when there are alternative sources of water that could satisfy those vital human needs.[84]

On this score, Agenda 21 provides that in utilizing water resources, basic needs and environmental protection must be given priority.[85] This mimics the 'Reserve' that comprises of the 'Basic Human Needs Reserve,' i.e. potable water and cooking and the 'Ecological Reserve,' i.e. water for maintaining the integrity or survival of an ecosystem. Agenda 21 represents a political commitment and a nuanced template for sustainable development. Whilst

[77] Statement of Understanding accompanying the United Nations Convention on the Law of Non-Navigational Uses of Watercourses (A/51/869 of 11 April 1997) para 8 <http://www.un.org/law/cod/watere.htm>.
[78] Committee on Economic, Social and Cultural Rights, General Comment 15: The Right to Water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights) (2002) para 31 <https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf>.
[79] Berlin Rules art 17.1.
[80] ILA Berlin Rules Commentary on Water Resources (note 33 above) 22.
[81] User's Guide (note 19 above) 130.
[82] Ibid.
[83] Ibid.
[84] Ibid.
[85] Agenda 21 (adopted June 1992) para 18.8.

Agenda 21 is not a binding instrument, it is significant in its recognition of 'basic needs' which mirrors the 'vital human needs' criteria of the UN Watercourses Convention and the Berlin Rules. Unfortunately, there is no clarification of the meaning of the term 'basic needs' suffice it to say that it can be equated to the 'vital human needs' criterion of Article 10 in the UN Watercourses Convention. Regardless, Agenda 21 adds impetus to the notion that water for domestic uses and to preserve the ecosystem, must always trump all other uses in times of scarcity. This has the effect of resolving a conflict of uses in the LHWP.

Perhaps initiatives like the recent construction of the Metolong Dam in Maseru could be cited by South Arica as an alternative avenue to address a conflict of uses. Unfortunately, the Lesotho government has established that the Metolong dam will not solve the long-term demand challenges in the lowland (35 years +), nor for the greater Maseru area.[86] Ironically, the International Law Association provides that the 'vital human needs' does not include the water required to augment traditional economic activity despite arguments to the contrary.[87] Job creation and other advantages of improved economic activity are valid considerations, but those issues need to be integrated under Articles 12 and 13 of the Berlin Rules with comparable needs in other riparian States and against the duty of sustainable development.[88] It is my view that the construction of 'vital human needs' in the Berlin Rules is the correct one and is in line with the 'Basic Human Needs Reserve' which is a guaranteed water use in municipal law. For instance, the National Water Act 36 of 1998 (hereafter, NWA) provides that the 'basic human needs reserve' comprises water for basic potable use, personal hygiene, and food preparation.[89] By the same token, the Basic Human Needs Reserve also enjoys primacy together with Ecological Reserve in the Lesotho Water Act 15 of 2008 (hereafter, LWA).[90] 'Vital human needs' criteria could also include the 'Ecological Reserve', which guarantees water to 'protect' the integrity of the aquatic water system, much like the broader concept of the 'Reserve'.[91] This mandate to 'protect' the water places an added obligation on the State to ensure that the water is free from pollution and that its use is ecologically sustainable, which is one of the

[86] Lesotho Long-term Water and Sanitation Strategy (2014) 151 <https://www.water.org.ls/download/lesotho-long-term-water-and-sanitation-strategy/>.
[87] ILA Berlin Rules Commentary on Water Resources (note 33 above) 22.
[88] Ibid.
[89] Section 16 of the NWA.
[90] Section 13(2)(a) of the LWA.
[91] See s 1 and 16 of the NWA, which encapsulate both the Human Needs Reserve and the Ecological Reserve.

objectives of the NWA.[92] This approach is grounded in logic because without water in the aquatic ecosystem, there would be no water to guarantee the Basic Human Needs Reserve.

Consequently, for purposes of this thesis, it is accepted that the 'vital human needs' concept refers to the water for potable uses, personal hygiene and for food preparation as well as preserving an ecosystem. These water uses must be given priority in the event of a conflict of uses in the LHWP. This would mean that sections 5 and 6 of the LWA, which prioritise 'domestic uses,' i.e. water for personal and household needs, in a conflict of uses, would trump the LHWP water supply obligations to South Africa.

Building on the UN Watercourses Convention, the Revised Protocol provides that watercourse States must in their jurisdictions, use a shared watercourse in an 'equitable and reasonable' manner.[93] The Revised Protocol affirmed Agenda 21.[94] The utilization of shared watercourses must be achieved by taking into account similar factors like that of the UN Watercourses Convention.[95] This approach is sound because the Revised Protocol was drafted on the basis of the Helsinki Rules and the UN Watercourses Convention.[96] Thus, the Revised Protocol follows the mantra of not affording more weight to one factor over another and propagates a holistic approach.[97] However, the Revised Protocol does not provide for the 'vital human needs' concept and is thus not useful in the resolution of a conflict of uses. Elucidation of the principle of 'equitable and reasonable utilization' is also proffered by various judicial pronouncements.

It has been submitted that the principle was implicitly accepted in the *River Oder* case and in the *Lac Lanoux* arbitration.[98] In *River Oder*, the Permanent Court of International Justice found that when there is a shared watercourse between two States, a conflict of uses will be resolved according to the 'community of interest'.[99] The 'community of interests' connotes the "perfect equality of all riparian States in the use of the whole course of the river and the

[92] Kotze LJ 'Phiri, the plight of the poor and the perils of climate change: time to rethink environmental and socio-economic rights in South Africa?' (2010) 1 *Journal of Human Rights and the Environment* 135,145; See s 1 of the NWA on the definition of the term 'protect' and s 2(g) on the objectives of the NWA; See also, s 24(b) of the Constitution of South Africa.
[93] Revised Protocol art 3.7.
[94] Revised Protocol Preamble.
[95] Revised Protocol art 3.8.
[96] See Revised Protocol Preamble.
[97] Revised Protocol art 3.8(b).
[98] Birnie, Boyle & Redgwell (note 21 above) 542-543.
[99] *Territorial Jurisdiction of Int'l Comm'n of River Oder (U.K. v. Pol.),* 1929 P.C.I.J. (ser. A) No. 23 (Sept. 10) (hereafter, *River Oder*) para 74.

exclusion of any preferential privilege of any one riparian State in relation to the others".[100] This 'community of interests' is employed in instances involving a shared watercourse and considerations of norms of justice and utility demand a 'community of interests' of riparian States.[101] In simple terms, the 'community of interests' encapsulates absolute "equality" between riparians and a prohibition of "preferential treatment".

Furthermore, in *Lac Lanoux*, the principle of 'equitable and reasonable utilization' was accorded more judicial recognition. This matter concerned the utilization of Lake Lanoux.[102] To this end, the *Lac Lanoux* arbitration held that riparian States that share a watercourse must consider adverse interests and afford "reasonable" accommodation of all riparian States.[103] The *Lac Lanoux* Arbitration even held that a party to a water agreement is not relieved from this duty owing to the stubbornness of the other party.[104]

Similarly, the International Court of Justice (hereafter, ICJ) in the *Pulp Mills on the River Uruguay* case then further entrenched the principle of 'equitable and reasonable utilization'.[105] In this regard, the ICJ held that the realization of 'optimum and rational utilization' requires integrating the right to use the shared watercourse for economic activities with environmental protection.[106] 'Optimal and reasonable utilization' denotes the principle of equitable and reasonable utilization. In addition, this dictum implies that the protection of the environment is thus regarded as a facet of the principle of equitable and reasonable utilization. The ICJ's dictum that there must be a balancing of the development agenda with the imperative of environmental protection means that the achievement of 'equitable and reasonable utilization requires 'sustainable development'.

Similarly, the ICJ in the *Case Concerning Gabcikovo-Nagymaros* explicitly affirmed the principle of 'equitable and reasonable utilization'.[107] In this regard, the court held that it considers that Czechoslovakia, by arbitrarily taking control of a shared watercourse, it deprived Hungary of its right to an equitable and reasonable utilization of the Danube as a shared

[100] Ibid.
[101] Ibid. Salman (note 14 above) 11.
[102] *Lake Lanoux Arbitration (France v. Spain)* (1957) 12 R.I.A.A. 281; 24 I.L.R. 101 (hereafter, *Lac Lanoux*) 1.
[103] Ibid 34.
[104] Ibid.
[105] *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports* 2010, p. 14 (hereafter, *Pulp Mills*) para 1.
[106] Ibid para 175.
[107] *Gabcikovo-Nagymaros Project (Hungary/Slovakia),* Judgment, 1. C. J. Reports 1997, p. 7 (*Case Concerning Gabcikovo Nagymaros*) para 27.

watercourse.[108] Thus, the ICJ in *Gabcikovo* reaffirmed the finding of the Permanent Court of Justice in *River Oder* on the principle of 'community of interests'.[109] The court then held that recent advances in international law have entrenched this principle for shared watercourses as evinced by the conclusion of the UN Watercourses Convention.[110]

Moreover, the court in *Gabcikovo* asserted that Hungary's acceptance of the original diversion of the Danube could not be construed as tantamount to authorizing Czechoslovakia to proceed with an arbitrary project of this size without Hungary's approval.[111] McCaffrey opines that the findings of the court in *Gabcikovo* effectively rejects the Harmon Doctrine, which propagates the principle of absolute sovereignty over water.[112] This decision is also seen as confirming the rights of all States in a water basin.[113] Thus, this decision is regarded as an authoritative affirmation of the principle of 'equitable and reasonable utilization' as a norm of customary international law.[114] Salman reiterates this view, and he submits that that the seminal principles of the UN Watercourses Convention embody customary international law.[115] Salman also submits that the ruling of the ICJ in this matter entrenched the principle of 'equitable and reasonable utilization' as the dominant instructional principle in transboundary water law.[116] To the contrary, Wouters opines that the decision in the *Gabcikovo Nagymaros* case is remarkable in that it accepted the UN Watercourses Convention as the fundamental statement of international watercourses law and entrenched the principle of 'equitable and reasonable utilization' although by that time the treaty did not enjoy any State support.[117] Nevertheless, this finding of the ICJ is significant for the LHWP in that it invalidates provisions that provide for "unilateral" and "preferential" utilization of the water in the Orange River. In other words, the *Gabcikovo Nagymaros* decision endorsed the "perfect equality" of all riparian States in a shared watercourse such as the Orange River.

In addition, the ICJ in the *Botswana v Namibia* case has emphatically confirmed the principle of 'equitable and reasonable utilization' as part of the corpus of international law.[118]

---

[108] Ibid para 85.
[109] Ibid.
[110] Ibid.
[111] Ibid para 86.
[112] McCaffrey (note 27 above) 260.
[113] Ibid.
[114] Ibid.
[115] Salman (note 14 above) 14.
[116] SMA Salman 'Legal Regime for Use and Protection of International Watercourses in the Southern African Region: Evolution and Context' (2001) 41 *Natural Resources Journal* 981, 1009.
[117] Wouters (note 67 above) 37; McCaffrey (note 27 above) 260 in which he asserts that the ICJ's decision in this regard, effectively rejected the Harmon doctrine.
[118] *Kasikili/Sedudu Island* (*Botswana/Namibia,)* (note 15 above) paras 27, 31-33.

Significantly, Kooijmans J, in his Separate Opinion on the *Botswana v Namibia* case took it a step forward from the radical approach of the ICJ in *Gabcikovo* by holding that a provision in a treaty that is not in force can bind the parties who are not party to it if it is a rule of customary international law.[119] Even more significantly, this finding means that a rule of customary international law can be read into a treaty. Regardless, the UN Watercourses Convention has now entered into force. This means that the provisions of the UN Watercourses Convention that constitute customary international law, especially the provisions on equitable and reasonable utilization, are now part of customary international law.[120]

Kooijmans J further held that both Article 5 of the UN Watercourses Convention and Article IV of the Helsinki Rules seemingly evince a territorial restriction by providing that watercourse States in their jurisdictions have the right to 'reasonable and equitable utilization' of a shared watercourse.[121] He also held that in their future endeavours concerning the utilization of the shared watercourses, countries must be "guided" by the principles as provided by the UN Watercourses Convention and the Helsinki Rules.[122] Thus, he held that countries that share a transboundary water resource must remember that the principle of equitable and reasonable utilization is based on a cogent foundation and facilitates the equitable and reasonable participation of riparian States.[123] This finding not only entrenches the principle of equitable and reasonable utilization but establishes the Helsinki Rules as a source of customary international law and lends it, the standing that it deserves. Therefore, this ratio implies that the use of shared watercourse is constrained by Article 5 of the UN Watercourses Convention and Article VI of the Helsinki Rules.

Kooijmans J also asserted that both the UN Watercourses Convention and the Helsinki Rules patently repudiate the so-called 'Harmon Doctrine', which encapsulates the idea that a State has the absolute right to use the waters of a shared watercourse in its territory.[124] This view is shared by commentators who opine that the key principle of the UN Watercourses Convention: that of equitable and reasonable utilization, is accepted as customary international law.[125] These submissions endorse the view of McCaffrey that the principle of equitable and reasonable utilization "repudiates" the Harmon Doctrine.

---

[119] Ibid para 31.
[120] Ibid para 32.
[121] Ibid para 33.
[122] Ibid para 36.
[123] Ibid.
[124] Ibid para 33.
[125] Heyns, Patrick & Turton (note 17 above) 374.

Overall, it has been established that the principle of equitable and reasonable utilization is part of customary international law. The Constitution of the Republic of South Africa, 1996 (hereafter, Constitution of South Africa) provides that customary international law is part of the law in the Republic unless it is in conflict with the Constitution or legislation.[126] Regardless, when interpreting right in the Bill of Rights, one must consider international law and prefer a cogent interpretation that is in line with international law.[127] This means that the LHWP provisions must be interpreted in line with international law. There are no viable grounds to challenge the place of this principle in transboundary water law, as stipulated by the ICJ. Despite the detailed criteria on how to determine equitable and reasonable utilization, international freshwater treaties have still not sufficiently availed a precise formula to determine when a use can be deemed 'equitable', and when it can be found to be 'reasonable'. Similarly, the decisions of the ICJ have provided some clarity on the normative contours of the principle of equitable and reasonable utilization. However, no transboundary freshwater treaty nor judicial pronouncement clarify the apparent difference between 'equitable utilization' and 'reasonable utilization'. It is necessary then, in this discussion, to evaluate the LHWP against the individual elements of 'equitable utilization' and 'reasonable utilization' as separate sub-principles of the principle of 'equitable and reasonable utilization'. In light of this finding, the discussion to follow will then assess the LHWP against the following sub-principles of equitable and reasonable utilization: 'equitable utilization', 'equitable participation', 'benefit sharing' and finally, 'reasonable utilization'.

2.4 'Equitable utilization' as a component of 'equitable and reasonable utilization'

It has been opined that the principle of 'equitable and reasonable utilization' would entail an assessment of whether utilization of the water in question is 'reasonable'; and second, whether such use is 'equitable'.[128] The principle of 'equitable and reasonable' use, then, accepts 'equity' as a comprehensive mechanism within which the principle of 'reasonableness' is regarded as relative.[129] In light of this approach, this part of the discussion will focus on 'equitable utilization' as a sub-principle of the principle of 'equitable and reasonable utilization'. In the absence of specific jurisprudence on 'equitable utilization', it is prudent and cogent to enquire

[126] Section 232 of the Constitution of South Africa.
[127] See s 39(1)(b) read with s 232 of the Constitution of South Africa.
[128] User's Guide (note 19 above) 109.
[129] Ibid 107.

as to the construal of the term 'equity' in international law. It is accepted that a determination of 'equity' must entail some or all of the factors listed in Article 6 of the UN Watercourses Convention and Article 3 of the Revised Protocol. This part of the discussion will segregate and find common ground, if possible, between those factors in Article 6 of the UN Watercourses Convention and Article 3 of the Revised Protocol that can be used to determine 'equitable utilization', and those factors that pertain to 'reasonable utilization'.

'Equity' is an ambiguous term.[130] It can be described as affording an adjudicator the latitude for flexibility in interpreting rules.[131] 'Equity' is often employed as denoting 'fairness' or 'justice' with both "procedural" and "substantive" aspects.[132] In this regard, the "procedural" aspect requires proper decision-making, whereas the "substantive" part attempts to achieve 'distributive justice'.[133] Thus, the notion of 'equitable utilization' refers to just and fair utilization. The 'right process' is catered to by the principle of equitable participation, which will be discussed later in this chapter.

Sands submits that 'equity' could be fundamental to the resolution of disputes pertaining to shared watercourses.[134] He opines that normative treaty rules implicitly include the principle of 'equitable and reasonable utilization'.[135] In the absence of detailed rules, 'equity' provides a useful hypothetical tool, which may explain its common use at the United Nations Conference on Environment and Development (hereafter, UNCED).[136] UNCED sought 'equity' in the ascribing of future responsibilities for environmental protection based on the principle of common but differentiated responsibility.[137] This is reflected in various UNCED instruments.[138] It is postulated that it is in the distribution of shared natural resources, that 'equity' may play a significant role, as shown by the ruling of the ICJ in the *Gabcikovo-Nagymaros* case.[139]

[130] Ibid 106.
[131] Ibid.
[132] Ibid.
[133] Ibid.
[134] P Sands *Principles of International Environmental Law* 2 ed (2003) 263; P Sands & J Peel *et al Principles of International Environmental Law* 4ed (2018) 225.
[135] Sands & Peel *et al* (note 134 above) 225.
[136] Ibid.
[137] Ibid.
[138] Ibid 225-226; Rio Declaration on Environment and Development (adopted June 1992) principle 3 and UNFCCC (adopted 4 June 1992, entered into force 21 March 1994) arts 3.1 and 4.2(a).
[139] Sands & Peel *et al* (note 134 above) 226.

To this end, the ICJ has held that 'equity' constitutes a sound basis for a State to protect its national interests.[140] The ICJ has also held that a significant dichotomy between 'law' and 'equity' is untenable in international law, but rather, States tend to merge 'law' and 'equity'.[141] This is instructive for the LHWP because it requires that its provisions must promote and facilitate 'equity'.

Furthermore, the construal of equity still bestows on the adjudicator, the discretion of the value to be ascribed to the elements in question.[142] There is no restriction as to the factors that the courts may take into consideration to ensure 'equity'.[143] This approach is in line with major transboundary water conventions such as Article 6 of the UN Watercourses Convention and Article 3 of the Revised Protocol.

The principle of 'equity' is also susceptible to subjective interpretation.[144] Thus, it has been argued that 'equity' in international law does not have a clear framework but operates instead as a medium for according due regard to the relevant circumstances in a specific matter.[145] This then means that 'equity' as a facet of international law represents a living principle that permits the interpretation of an agreement in a manner that always responds to current circumstances. Even though there may be no restriction on the considerations which States may take into consideration, this is not the case for a court employing equitable procedures.[146] There is no *numerus clausus* of the relevant elements: it is only those elements that are crucial to the management of the water, as it has evolved within the law, and to the use of equitable principles that must be considered.[147] Furthermore, the application of 'equity' demands the consideration of principles of fairness.[148] This flexible approach is favourable to Lesotho in that it allows the consideration of factors that were not considered at the drafting of the LHWP and subsequent protocols. This then means that factors such as the principle of equitable utilization would be considered in a conflict of uses. It can then be said that the principle of 'equity' is adequately responsive to the needs of the riparian States.

---

[140] *Barcelona Traction, Light and Power Company, Limited,* Judgment, I.C.J. Reports 1970, p. 3. NO paras 92-94.
[141] *Diversion of Water from Meuse (Neth. v. Belg.),* 1937 P.C.I.J. (ser. A/B) No. 70 (June 28) para 321.
[142] *Continental Shelf (Libyan Arab Jarnahiriya/Malta),* Judgment, I. C.J. Reports 1985, p. 13 para 48.
[143] Ibid.
[144] Leb (note 21 above) 151.
[145] McIntyre (note 38 above) 120.
[146] *Continental Shelf (Libyan Arab Jarnahiriya/Malta)* (note 142 above) para 48.
[147] Ibid.
[148] *North Sea Continental Shelf, Judgment,* I.C.J. Reports 1969, p. 3. para 85.

However, 'equity' does not necessarily imply equality.[149] This has significant implications for the countries in the water basin. For the LHWP, this does not mean that water must be allocated equally between South Africa and Lesotho. What is required is a consideration of the needs of both countries in this regard. Thus if climate change alters the water quantity in the LHWP, there must be a reconsideration of the water allocation based on needs but not necessarily an equal apportionment of the water.

It has also been held that the normative nature of equitable norms construed as a component of international law is significant because these seek to ensure an equitable outcome.[150] In this way, equitable exploitation of resources is a part of international law.[151] This duty requires that States must continuously review their agreements to seek an equitable arrangement.

'Equity' is also seen as an encapsulation of the principle of 'justice'.[152] Moreover, in the interpretation of the law, a court will prefer an interpretation that resonates with the requirements of 'justice'.[153] Finally, the notion of 'equity' can always be cited to protect the interests of present and future generations from unscrupulous conduct.[154] This speaks to the principle of 'intergenerational equity'. Thus, the principle of equity requires consideration of justice and fairness but does not denote allocations that are mathematically equal.

Furthermore, 'proportionality' is an inherent facet of the principle of 'equity'.[155] In *Gabcikovo-Nagymaros*, the court held that unilateral utilization of a shared watercourse and denying other riparian States an equitable and reasonable share of a transboundary watercourse contravenes the 'proportionality' requirement of international law.[156] Thus, 'proportionality' is a function of 'equity'.[157] Similarly, in *Pulp Mill*s it was held that a failure to incorporate the interests of other riparian States violates the right to equitable and reasonable utilization of a

[149] Ibid para 91.
[150] *Continental Shelf (Libyan Arab Jarnahiriya/Malta)* note 142 above) para 46.
[151] *Fisheries Jurisdiction (United Kingdom v .Iceland),* Merits, Judgment, I.C.J. Reports 1974, p. 3. paras 69 and 72; *Maritime Delimitation in the Area between Greenland and Jan Mayen*, Judgment, I.C.J. Reports 1993, p. 38 para 92.
[152] *Continental Shelf (Tunisia/Libyan Arab Jamahiriya),* Judgment, I.C.J. Reports 1982 paras 45 and 71; *Frontier Dispute, Judgment*, I.C.J. Reports 1986, p. 554 para 149; *Delimitation of the Maritime Boundary in the Gulf of Maine Area*, Judgment, 1. C.J. Reports 1984, p. 246 para 89.
[153] *Continental Shelf (Tunisia/Libyan Arab Jamahiriya*) (note 152 above) para 71.
[154] Wouters (note 67 above) 37.
[155] *Continental Shelf (Libyan Arab Jarnahiriya/Malta)* (note 142 above) para 55.
[156] *Case Concerning Gabcikovo-Nagymaros* (note 107 above) para 86.
[157] *Continental Shelf (Tunisia/Libyan Arab Jamahiriya)* (note 158 above) para 104; *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)* Judgment I.C.J. Reports 2005, p. 168 para 147; *Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion*, 1. C.J. Reports 1996, p. 226 para 30.

shared watercourse.[158] It can then be seen that both the courts in *Gabcikovo-Nagymaros* and *Pulp Mills* did not clarify the difference between 'equitable utilization' and 'reasonable utilization'. This could explain why 'proportionality' is devoid of significant support in the practice of States.[159] Regardless, 'proportionality' is regarded as a fundamental aspect of the principle of 'equity'. However, this does not provide an adequate explanation of what 'proportionality' entails. Recourse must then be had to the domestic laws of Lesotho and South Africa, which also regulate the LHWP.

In S *v Makwanyane*, it was held that 'proportionality' requires the balancing of differing interests.[160] This dictum was reiterated in *Molefi Ts'epe v Independent Electoral Commission*.[161] The court in *Molefi* then confirmed its dictum in *Attorney-General of Lesotho v Mopa* that there are three significant parts of a 'proportionality test': as a starting point, the measures employed must be prudently tailored to realise the goal in question.[162] They must be fair and rational.[163] Secondly, the mechanism employed, even if rationally linked to the objective, must affect "as little as possible" the relevant right.[164] Thirdly, 'proportionality' is required between the impacts of the instruments that restrict the right, and the goal, which has been regarded as of "sufficient importance".[165] In short, 'proportionality' demands fairness, rationality and a balancing of interests in the language of the courts in *River Oder* and *Lac Lanoux*. Therefore, 'proportionality' is a metaphor for 'equity'.

In the same vein, in *Ralekoala v Minister of Justice*, the Court of Appeal in Lesotho reiterated the rationale of the South African Constitutional Court in *Affordable Medicines Trust v Minister of Health*.[166] The court in *Ralekoala* held that despite that the significant difference from the present case and the lack of a similar provision in the Constitution of Lesotho as is provided in South African law, the judgment in *Affordable Medicines* nevertheless contains relevant considerations for its decision.[167] The court in *Affordable Medicines* had found that 'proportionality' is an incidence of 'reasonableness'.[168] The court then held that

[158] Separate Opinion of Judge Cancado Trindade in *Pulp Mills* (note 105 above) para 85.
[159] *North Sea Continental Shelf, Judgment*, I.C.J. Reports 1969, p. 3. para 98.
[160] 1995 (3) SA 391 (CC) para 104.
[161] (C of A (Civ) No. 11/05 CC 135/05) (NULL) [2005] LSHC 93 (20 April 2005) (hereafter, *Molefi*) para 24.
[162] *Molefi* (note 161 above) para 25; *Attorney-General of Lesotho v Mopa* 2002 (6) BCLR 645 (LAC) para 33; *R v Oakes* (1986) 19 CRR 308.
[163] *Mopa* (note 162 above) para 33.
[164] Ibid.
[165] Ibid.
[166] (C OF A CIV/16/2012) [2012] LSCA 38 (19 October 2012) para 13; *Affordable Medicines Trust v Minister of Health* 2006 (3) SA 247 (CC) paras 91-95.
[167] *Ralekoala* (note 166 above) para 12.
[168] *Affordable Medicines* (note 166 above) para 90.

'proportionality' ensures 'reasonableness' under a limitations test when two rights must be balanced against each other.[169] The consequence of the endorsement by the Lesotho courts, of the dictum of the South African Constitutional Court, means that the interpretation of the term 'proportionality' is similar to that of South Africa.

Furthermore, it has been held that the restriction of human rights in a democratic society demands a 'proportionality' analysis.[170] This approach essentially resembles section 36 of the Constitution of South Africa, which is the "limitations clause".[171] The 'proportionality' of the restriction of a right must be evaluated within the confines of its legislative and social backdrop.[172] In short, 'equity' demands 'proportionality'.

A discussion on 'equity' would not be complete without a peek at legislation on this principle in South Africa and Lesotho. It is prudent to note here, that 'equity' functions both as an underlying principle of transboundary watercourses and as part of the human right to water. To this end, this thesis primarily discusses 'equity' as an underlying principle of transboundary watercourses. The human right to water is only broached to the extent that it assists the conceptualisation of 'equity' and strengthens the claim for equitable utilization of water. Thus a discussion of the human right to water, in general, is beyond the scope of this paper.

In this regard, it is peculiar that the Constitution of South Africa does not expressly provide for a right to water, but rather, it provides for a right of "access" to "sufficient" water in section 27(1)(b). However, the Constitution of Lesotho does not expressly provide for a right to water nor even a right of access to water. Regardless, a close reading of section 36 of the Lesotho Constitution reveals that the right to "adequate" water is impliedly recognised. This is because section 36 of the Constitution of Lesotho provides that all citizens have the right a "sound and safe environment that is adequate for their health and well-being". In turn, the word 'environment' is defined in the Lesotho Environment Act as meaning the physical elements of the ambience of the human beings including land, water, atmosphere, climate, taste, biological aspects of animals and plants and the social factors of aesthetics.[173] This means that all citizens in Lesotho have the right to adequate water like the Constitution of the Republic of South Africa. This right to water in the Constitution of Lesotho has significant implications for the

[169] Ibid para 92.
[170] *S v Makwanyane* 1995 (3) SA 391 (CC) para 104.
[171] *Ralekoala* (note 166 above) para 13. *S v Makwanyane* (note 170 above) para 104.
[172] *S v Manamela (Director-General of Justice Intervening*) 2000 (3) SA 1 para 33; *Christian Education South Africa v Minister of Education* 2000 (4) SA 757 (CC) para 31.
[173] Section 1 of the Lesotho Environment Act 10 of 2008 <https://lesotholii.org/ls/legislation/num-act/2008/10>.

LHWP. This is because the Constitution of Lesotho requires that the water must be "adequate" to maintain health and well-being. It is not the focus of this thesis to elucidate on the discussion of how much water is needed by a human being to sustain their life and well-being. What is crucial about the Constitution of Lesotho is that it introduces an onerous duty on water managers to ensure that this threshold is met.

Furthermore, the Constitution of Lesotho provides that Lesotho must adopt policies that seek to ensure equality and 'justice' for all its citizens regardless of *inter alia*, property.[174] The LWA provides that Lesotho's Water and Sanitation Strategy binds any institution that is managing water in terms of this Act.[175] The LHWP is managed according to the LWA and thus is bound by its provisions and those of the Lesotho Water and Sanitation Strategy. In this respect, the Lesotho Water and Sanitation Strategy provides that there must be equitable sharing of water.[176] The Lesotho Water and Sanitation Strategy also entrenches 'equity' as one of the 'guiding principles' of water management and use in Lesotho.[177] This right to use water equitably is also given effect to by the LWA.[178] More specifically, 'equity' is recognised as a general principle of water management.[179] The LWA also confers on the Minister of Water Affairs, far-reaching powers in 'cases of emergency' caused by events such as climate change. According to the LWA, the Minister can declare a 'water emergency' in a specific area and can demand any person who has water supplies in excess of their domestic use to make such water available to the Minister to safeguard the public interest.[180] Thus, the principle of 'equity' is a fundamental principle of water utilization in Lesotho. This duty requires that the government of Lesotho must ensure that the agreements it enters into, promote the element of justice and fairness in the LHWP. In other words, the citizens of Lesotho have the right to adequate water that must be provided 'equitably', to sustain human health and well-being.

From the South African perspective, 'equity' is found in the National Environmental Management Act 107 of 1998, National Water Act 36 of 1998 (hereafter, NWA) and the National Water Resource Strategy 2013 of South Africa (hereafter, NWRS), which recognise

[174] Section 26(1) of the Lesotho Constitution.
[175] Section 10(5) of the LWA.
[176] Lesotho Long Term Water and Sanitation Strategy (2014) 87 <https://www.water.org.ls/download/lesotho-long-term-water-and-sanitation-strategy/>.
[177] Ibid 5.
[178] Section 5(1) of the LWA.
[179] Section 3(d) of the LWA.
[180] Section 6 of the LWA.

it as one of the 'central guiding principles' of water management and use in South Africa.[181] As a point of departure, the Constitution of South Africa provides for the right to equality and equal treatment.[182] This ensures the full and uniform application of the right of access to water.[183] Implicit in this injunction is the pursuit of 'equity'.[184] The government of South Africa is of the view that if a conflict of uses occurs in the Orange River, international law requires that: "watercourse States adopt an approach of fairness and accommodation, and in view of the limited supply of the Orange River, this might entail a trade-off between what is currently viewed as existing, although as yet undeveloped, lawful rights and the more effective application and use of water in the common interests of all of the watercourse States".[185] This endorses 'equitable utilization' because it encapsulates the values of "fairness" and "accommodation".

The National Environmental Management Act 107 of 1998 (hereafter, NEMA) provides that 'equitable' access to environmental resources must be prioritised.[186] The NEMA also provides that natural resources must be equitably exploited.[187] More specific to water, the NWA provides that 'equity' is a central guiding principle in water management.[188] However, since the advent of the NWA, 'equity' has been underutilized, thereby perpetuating unfair water allocation regimes.[189] The NWA is given a substantive effect by the NWRS.

The NWRS is the primary legislative instrument through which the water resources of South Africa must be protected and utilized.[190] The NWRS clarifies that its first objective is that of 'equity', which denotes "fairness and fair attention to the needs of future generations".[191] It has also been held that 'equity' is a part of the principle of sustainable development in South African law because it is seen as incorporating the principles of intergenerational equity and

[181] Section 2(b) read with s 3(1) of the National Water Act 36 of 1998 read with the National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) 12 <http://www.dwa.gov.za/documents/Other/Strategic%20Plan/NWRS2-Final-email-version.pdf>;See also s 9 of the Constitution of South Africa.
[182] Section 9 of the Constitution of South Africa.
[183] See s 9(2) of the Constitution of South Africa.
[184] See Employment Equity Act 55 of 1998.
[185] Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (note 1 above) 36.
[186] Section 2(4)(d) of the NEMA.
[187] Section 2(4)(a)(v) of the NEMA.
[188] Preamble, ss 2(b) and 3(1) of the NWA.
[189] National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) (note 181 above) 45.
[190] Section 5(3) of the NWRS.
[191] National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) (note 181 above) 12.

intragenerational equity.[192] The NWRS also provides that the principle of 'equity' means that special consideration must be accorded to the necessities of those that were historically deprived access to water or to the economic advantages of water.[193] 'Equity' evokes a sense of fairness, which permits differing initiatives in the management of water as a response to varying socio-economic and ecological needs.[194] Thus, it is the duty of the government of South Africa to ensure the fulfilment of the principle of equity in all its undertakings.[195] By the same token, the Draft National Water and Sanitation Master Plan 2017 provided that South Africa has an obligation to 'equitably share' transboundary watercourses with riparian States.[196] Thus, South African policy explicitly endorses the principle of 'equitable utilization' of shared watercourses, which includes the Orange River under the LHWP.

In the same breath, the Water Services Act in South Africa gives effect to the right of access to sufficient water as provided in section 27(1)(b) of the Constitution of South Africa and is now an internationally recognised human right.[197] This right was elucidated upon by the Constitutional Court in the *Mazibuko* case where the applicants asked the court to decide on a precise amount of water as "sufficient water" within the construction of section 27 of the Constitution and that this amount was argued to be 50 litres per person per day.[198] According to the court, the achievement of the value of 'equality' requires that water be made available to all without discrimination.[199] This obligation demands that the State adopt reasonable

[192] *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province* 2007 (6) SA 4 (CC) (hereafter, *Fuel Retailers*) para 51.
[193] National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) (note 181 above) 45.
[194] Ibid.
[195] Preamble to Chapter 1 of the NWA.
[196] South Africa Draft National Water and Sanitation Master Plan (2017) 2 <http://www.dwa.gov.za/>.
[197] Section 1 of the Water Services Act 108 of 1997. See United Nations Human Rights Council Resolution 16/2: The human right to safe drinking water and sanitation of 24 March 2011; World Health Assembly Resolution 64/24: Drinking-water, sanitation and health of 24 May 2011; United Nations Human Rights Council Resolution 18/1: The future we want« – Outcome document of the United Nations Conference on Sustainable Development (Rio +20), June 2012 of 28 September 2011; United Nations Human Rights Council Resolution 24/18: The human right to safe drinking water and sanitation of 23 September 2013; United Nations Human Rights Council Resolution 27/7: The human right to safe drinking water and sanitation of 25 September 2014; Goal 6 of the Sustainable Development Goals; Millennium Development Goals: Transforming our world: the 2030 Agenda for Sustainable Development 2016-2030 art 7 and art 33; United Nations General Assembly Resolution 64/292: The human right to water and sanitation of 28 July 2010; D Chirwa 'Privatisation of water in Southern Africa: A human rights perspective African Charter on Human and Peoples Rights' (2004) 4 *African Human Rights Law Journal* 218, 222; D Olowu 'Access to safe water and the Human Development Quandary in Africa: Implications of a rights based approach' (2014) 35 *Obiter* 205, 220; O Fuo 'The Right of Access to Sufficient Water in South Africa: Comments on *Federation for Sustainable Environment and Others v Minister of Water Affairs* [2012] ZAGPPHC 128' (2013) 20 *Murdoch University Law Review* 21-37.
[198] *Mazibuko v City of Johannesburg* 2010 (4) SA 1 (CC) para 44.
[199] Ibid para 2.

legislative measures, progressively to realise the right of access to sufficient water within available resources.[200] Significantly, this court went on to assert that 'equity' within the ambit of the right of access to water as a human right, demands a flexible and context-driven approach.[201] A measure will not be regarded as "reasonable" if it ignores the demands of those most desperately in need.[202] This means that 'equity' demands a flexible and contextual approach that takes into consideration the needs of vulnerable people. The key outcome of this approach is that the court in *Mazibuko* located 'equity' as a subset of the right of access to water. This has the effect of elevating 'equitable utilization' of shared watercourses to a concern of the State in light of section 7(2) of the Constitution, which requires it to fulfil the rights in the Bill of Rights.[203] At this juncture, it is imperative to note that the principle of 'equitable utilization' also incorporates the principle of 'intragenerational equity', which is an inherent component of the principle of 'sustainable development'.[204] The principle of 'sustainable development' will be discussed in Chapter 3 of this thesis.

It is in light of these considerations that the LHWP will be evaluated to see if it is in line with the principle of 'equitable utilization'. In this regard, it is my view that 'equitable utilization' requires that the water use must be just, fair, ensure "perfect equality", proportional, exclude preferential treatment, accommodating, flexible and context-specific. Employing Article 6 of the UN Watercourses Convention and Article 3 of the Revised Protocol as the embodiment of the factors under consideration in respect of 'equitable utilization', it is my view that all the factors listed in Article 6 of the UN Watercourses Convention and Article 3 of the Revised Protocol are relevant for determining whether a use is just, fair, proportional, flexible and contextual. It would be impossible to decide on the 'fairness' of a contested water use without a consideration of existing and potential water uses, the population that relies on the watercourse, the effects of this water use on another watercourse State, the availability of alternatives, socio-economic considerations of the relevant watercourse States and the climatic and ecological considerations of the project in question. In other words, the principle of 'equitable utilization' demands a reflection on all these factors as listed by Article 6 of the UN Watercourses Convention and Article 3 of the Revised Protocol. There may be other relevant factors, but they are not the subject of this study. It must be noted that if a conflict of uses

[200] Ibid para 57.
[201] Ibid para 60; E Couzens 'Avoiding Mazibuko: Water security and constitutional rights in Southern African case law' (2015) 18 *PER/PELJ* 1162-1172.
[202] *Mazibuko v City of Johannesburg* (note 198 above) para 67.
[203] B Soyapi Water Security and the Right to Water in Southern Africa: An Overview' (2017) 20 *PER/PELJ* 1, 8.
[204] Sands (note 134 above) 253.

occurs, the 'vital human needs' criterion, as is provided by Article 10.2 of the UN Watercourses Convention, must be given primary consideration as an incidence of the principle of equitable and reasonable utilization. For purposes of this study, it is accepted that the 'vital human needs' are water for drinking purposes, personal hygiene, food preparation, and preserving the ecosystem.

In this regard, Article 5.1 of the Phase II Agreement stipulates that parties must ensure that domestic legislation is consistent with their obligations under the agreement and the LHWP, either through amendment of existing legislation or promulgation of new legislation to that effect. This implies that the LHWP and the Phase II Agreement supersede the laws of Lesotho with respect to the water in the LHWP. In simple terms, the provisions of the LWA, Lesotho Environment Act and the Constitution of Lesotho must be brought into line with the LHWP or read in such a manner that they give effect to the LHWP. However, this approach is superseded by the fact that the interpretation of the conflict of uses principle in the LHWP and Phase II Agreement must comply with South Africa's international obligations. It has already been established that the South African government in respect of the LHWP, accepts that it is bound by the UN Watercourses Convention and the Revised Protocol as well as the domestic legislation of both countries. This means that the LHWP and Phase II Agreement must comply with the principle of 'equitable utilization' as espoused by the Helsinki Rules, the UN Watercourses Convention and the Revised Protocol.

The Phase II Agreement may shed more light in this regard because it provides that the LHWP must comply with other norms of international law that are compatible with this agreement.[205] This approach is unsound. This is because the principle of equitable utilization is part of customary international law as provided by the court in *Gabcikovo-Nagymaros*.[206] This court held that the principle of equitable and reasonable utilization's place is strengthened by the adoption of the UN Watercourses Convention.[207] Furthermore, the court in *Gabcikovo-Nagymaros* held that treaty interpretation is not a "static" process, and thus, treaties must be read to be in line with new emerging principles of international law.[208] This would include the principle of 'equitable utilization'. Since the principle of 'equitable and reasonable utilization'

[205] Agreement on Phase II of the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (adopted and entered into force 11 August 2011) (hereafter, Phase II Agreement) art 18.9.
[206] *Case Concerning Gabcikovo Nagymaros* (note 107 above) para 85.
[207] Ibid.
[208] Ibid para 112.

is now part of customary international law, this means that the LHWP and Phase II Agreement must comply with this principle. The only way South Africa could not be bound by the principle of equitable and reasonable utilization is if it was a 'persistent objector' to this principle.[209] On the contrary, South Africa has persistently endorsed the principle of equitable and reasonable utilization by ratifying water treaties such as the UN Watercourses Convention and the Revised Protocol and in its diplomatic statements, which all endorse this principle.[210] This then means that South Africa has accepted that it is bound by the principle of equitable and reasonable utilization. This then necessitates an inquiry into the LHWP and Phase II Agreement's compliance with the principle of 'equitable utilization' as espoused by customary international law.

In this regard, the LHWP does not adequately provide for the principle of 'equitable utilization'. This is because, in its Preamble, the LHWP merely refers to the need to "consider" the "mutual benefits" of "equitably sharing" the water resources of the Orange River. This does not represent a mandate nor a commitment to the principle of equitable utilization. Rather, it merely recognises the advantages of "equitable sharing" of the water in the Orange River. This confirms that the reference to "equitable sharing" in the Preamble of the LHWP, is a mere platitude of a symbolic nature, and does not enjoy substantive recognition and application in the LHWP. In any event, "equitable sharing" of benefits is merely one of the sub-principles of the principle of 'equitable and reasonable utilization' and thus, represents a perfunctory nod to the principle of 'equitable and reasonable utilization'.

It can then be said that the glaring absence of the incorporation and substantive application of the principle of 'equitable utilization' in the provisions of the LHWP and the Phase II Agreement implies the lack of an "equitable" arrangement for water allocation in the Orange basin. In fact, the LHWP denies and subverts the principle of 'equitable utilization' in its substantive provisions. This finding is based on an evaluation of Articles 4.1 and 4.2 of the LHWP as well as Articles 7.2 and 18 of the Phase II Agreement against the factors listed in Article 6 of the UN Watercourses Convention and Article 3.8 of the Revised Protocol. First,

[209] Sands & Peel *et al* (note 134 above) 124; *Fisheries case*, Judgment of December 18th, I95I:I.C. J. Reports 1951, p 116,129.

[210] ORASECOM Agreement (adopted, entered into force 3 November 2000) Preamble read with art 5.2.2 and art 7.2; Tripartite Interim Agreement Between the Republic of Mozambique and the Republic of South Africa and the Kingdom of Swaziland for Co-operation on the Protection and Sustainable Utilisation of the Water Resources of the Incomati and Maputo Watercourses (adopted 29 August 2002) art 3(b); T Stein 'The Approach of the Different Drummer: The Principle of the Persistent Objector in International Law' 1985 *Harvard International Law Journal* 457-482; A Rudman 'The Value of the Persistent Objector Doctrine in International Human Rights Law' (2019) 22 *PER/PELJ* 1-38.

the provisions of the LHWP and the Phase II Agreement ignore the impact of persistent droughts and climate change on the available water in the LHWP in violation of Article 6.1 of the UN Watercourses Convention and Article 3.8(a)(i) of the Revised Protocol, which require a consideration of the hydrological and climatic factors.

Second, the LHWP and the Phase II Agreement primarily cater for the social and economic needs of South Africa to the detriment of the social and economic needs of Lesotho in violation of Article 6.1 (a) of the UN Watercourses Convention and Article 3.8(a)(ii) of the Revised Protocol. Thus, the LHWP and Phase II Agreement elevate the needs of South Africa above those of Lesotho. Third, the current and potential water uses in the LHWP and Phase II Agreement favour South Africa over Lesotho in contravention of Article 6.1(e) of the UN Watercourses Convention and Article 3.8(a)(v) of the Revised Protocol, which require due consideration of the current and potential uses of the shared watercourse. It can also be argued that if a conflict of uses occurs in the LHWP, the current and projected utilization of the water in the LHWP will have a disproportionately negative impact on Lesotho as evinced by current water shortages in Lesotho. This is because the LHWP and Phase II Agreement prioritise water supply to South Africa over the needs of Lesotho. In this way, the LHWP regime would not be in accordance with Article 6.1(iv) of the UN Watercourses Convention and Article 3.8(a)(iv) of the Revised Protocol.

There is no doubt that the residents of both South Africa and Lesotho are dependent on the water in the Orange River. In this way, the LHWP does not accord due consideration to this matter as required by Article 6.1(c) of the UN Watercourses Convention and Article 3.8(a)(iii) of the Revised Protocol. In light of these considerations, it must be noted that the overall goal of the principle of 'equitable utilization' is that it must result in the fair, proportional and just sharing of the water in the LHWP without any preferential treatment. It has been established that the current water allocation provisions of the LHWP and the Phase II Agreement are unfair, unjust, disproportional and inequitable and they prevent access to the water in the LHWP to Basotho residents. This not only contravenes the right to "adequate" water for the Basotho residents but also constitutes an affront to their human dignity. The disregard for the "perfect equality" of both riparian States as well as the creation of a preferential regime in the LHWP regime, contravenes the principle of 'equitable utilization' as envisaged by customary international law, South Africa's obligations under the UN Watercourses Convention and the Revised Protocol as well as the decision of the courts, in *River Oder, Lac Lanoux, Gabcikovo*, and *Pulp Mills*. This brings into the question the legitimacy of the LHWP, which has arrogated

Lesotho's control over the water in the LHWP. It is this arrogation that lends itself to the charge of hydrocolonisation.

It has already been argued in this paper that 'vital human needs' trump all other uses, particularly in a conflict of uses. For purposes of this study, it is accepted that the 'vital human needs' constitutes water for drinking purposes, personal hygiene and food preparation as well as preserving an ecosystem. This mirrors 'domestic water use' in the manner contemplated by section 1 read with section 5 of the LWA and is in line with the 'Basic Human Needs Reserve' as stipulated by sections 2 and 13 of the LWA. This means that based on the principle of vital human needs exception, water for 'domestic water use,' i.e. *including* the 'taking' or 'impounding' or 'diversion' of water from a watercourse for personal and household needs, under sections 5 and 6 of the LWA, trumps Lesotho's obligations to South Africa under the LHWP. More specifically, section 5(2) of the LWA provides that 'domestic use' prevails over other uses in a conflict of uses. 'Domestic use' here is defined as including the 'taking', 'impounding' and 'diversion' of water from a watercourse as well as 'altering' its course. In this regard, section 1 of the LWA defines 'domestic water use' restrictively to mean water for 'personal and household needs'. It is my view that 'domestic use' and 'domestic water use' should be used interchangeably, and the difference in terminology between section 1 and section 5 of the LWA is inconsequential. Thus, it is my view that sections 1 and 5 of the LWA are complementary and must be read together. This is because section 5 of the LWA does not explicitly define the term 'domestic', and thus, section 1 is useful in this regard. Similarly, section 6 of the LWA protects domestic water uses in an "emergency" which in this case, is evocative of a conflict of uses. This correlates with the impounding or diversion of the flow of a watercourse, which is stipulated as one of the 'domestic uses' under section 5 of the LWA. This means that in a conflict of uses, the water uses of South Africa would be trumped by Lesotho's 'domestic water uses' in the manner postulated by sections 5 and 6 of the LWA.

In the alternative, the LHWP refers to measures that can be taken if *force majeure* impairs the fulfilment of the obligations in the LHWP, but it merely provides that this should be addressed according to agreement.[211] The *force majeure* would include events such as climate change, which falls under the ambit of an extreme disturbance caused by a hydrological and natural event.[212] The 'vital human needs' would in accordance with equity and trump any

[211] LHWP (adopted and entered into force on 24 October 1986) art 14.1.
[212] LHWP art 14.2(a).

agreement that does not prioritise the 'domestic water uses' of Lesotho residents in the manner contemplated by sections 5 and 6 of LWA.

By the same token, the principle of *Ubuntu* advocates for the equitable utilization of shared watercourses. This discussion is not dispositive of the concept of *Ubuntu*. This matter has been the subject of much academic writing. For purposes of this discussion, *Ubuntu* conveys a comprehensive concept that transcends the adage *umuntu ngumuntu ngabanye abantu* (which means we are because of other people).[213] In simple terms, *Ubuntu* connotes that the aspirations of the "individual" can only be achieved through 'group solidarity'.[214] Thus, I argue that "equitable sharing" is a constitutive element of the principle of *Ubuntu* through which natural resources such as water are managed by the village assembly/*inkundla* on behalf of everyone in the community. This is in accordance with the idea that *Ubuntu* concerns the exercise of individual rights based on shared responsibility and communal sharing of rights by all.[215] Thus, *Ubuntu* accords dignity to others.[216] In this way, *Ubuntu* connotes that the Orange River is shared and owned by Lesotho and South Africa and therefore, must be used to benefit both countries equitably. Consequently, the principle of *Ubuntu* would operate to elevate sections 5 and 6 of the LWA over the water supply obligations of Lesotho under the LHWP. These findings will then be extrapolated on to the ZAMCOM Agreement as a similar transboundary freshwater agreement in the regional context to illustrate the inequity of the LHWP.

Pursuant to this approach, the ZAMCOM Agreement recognises the principle of 'equitable utilization' in similar terms as the Revised Protocol.[217] The factors that must be considered include, amongst others:

> Geographic, hydrographic, hydrological, climatical and ecological and other factors of a natural factor; the social, economic and environmental needs of Member states; the population dependent on the Zambezi Watercourse in each Member state; the effects of use or uses of the Zambezi

[213] M Phooko & S Radebe 'Ubuntu and the law in South Africa: Exploring and understanding the substantive content of Ubuntu' (2017) 36 *South African Journal of Philosophy* 239, 240.
[214] See Y Mokgoro 'Ubuntu and the law in South Africa' (1998) 1 *PER/PELJ* 15-26; D Cornell 'Is there a difference that makes a difference between uBuntu and dignity?' (2010) 25 *SA Public Law* 382,392; See also, *S v Makwanyane* (note 184 above) paras 224 and 308; *Union of Refugee Women v Director: Private Security Industry Regulatory Authority* 2007 4 SA 395 (CC) para 145.
[215] N Mabovula 'The erosion of African communal values: a reappraisal of the African Ubuntu philosophy' (2011) 3 *Inkanyiso Journal of Humanities & Social Science* 38, 40; F Mangena 'Towards a *hunhu/ubuntu* dialogical moral theory' (2012) 13 *Phronimon* 1, 8.
[216] Z Dube 'Strengthening the Ubuntu social canopy after the Afrophobic attacks' (2016) 37 *Verbum et Ecclesia* 1, 2.
[217] ZAMCOM Agreement (adopted 13 July 2004, entered into force 19 June 2011) art 1 and art 13.1.See Revised Protocol art 3.7(a).

> Watercourse in one Member State on other Member State; existing and potential uses of water in the Zambezi watercourse; conservation, protection, development and economy of the use of the water resources of the Zambezi watercourse.[218]

These factors largely mimic the UN Watercourses Convention. In line with the UN Watercourses Convention, the significance to be accorded to each element is to be ascertained by its value in contrast with that of other associated factors.[219] In ascertaining what is equitable and reasonable use, all elements must be construed as a whole.[220] This is augmented by the principles of "cooperation" and "assessment of transfrontier impacts", which are crucial to the achievement of equitable utilization.[221] This cooperation is achieved through the requirement to share relevant information and the duty to notify the ZAMCOM of any planned projects on the ZAMCOM.[222] Without cooperation and information sharing, it would be impossible to decipher as to which uses are "equitable" and "reasonable", and thus, the principle of cooperation has been accepted as a rule of international law.[223] The mandate to cooperate entails the procedural obligations of "prior information and of prior consultation".[224] It can then be argued that these formal aspects of cooperation purport to give effect to the principles of equitable and reasonable utilization and no significant harm.[225] The impact of the principle of 'equitable utilization' in the ZAMCOM is evinced by the Zambezi River Authority Act (Chapter 467 of the Laws of Zambia 1987),[226] which has resulted in the Agreement between Zambia and Zimbabwe Concerning the Utilization of the Zambezi River (1987) and the Batoka Gorge Hydro Electric Dam project.

The Zambezi River Authority Act brings into effect the Agreement Between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River and regulates all matters relating to the use of the Zambezi River between these two countries.[227] First, this agreement mandates that both parties notify each other of any proposed developments on the Zambezi River, and both countries must first consult if they seek to

[218] ZAMCOM Agreement art 13.3.
[219] ZAMCOM Agreement art 14.4.
[220] ZAMCOM Agreement art 14.4.
[221] ZAMCOM Agreement art 12.1(g) and art 12.1(f).
[222] ZAMCOM Agreement art 15 read with art 16.
[223] User's Guide (note 19 above) 125; Sands & Peel *et al* (note 134 above) 215-216; See also, *Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion,* 2 April 2015, ITLOS Reports 2015, p. 4 para 210; *Case Concerning Gabcikovo-Nagymaros* (note 107 above) para 17.
[224] User's Guide (note 19 above) 125.
[225] Ibid.
[226] <http://extwprlegs1.fao.org/docs/pdf/zam2611.pdf>.
[227] Preamble to the Zambezi River Authority Act. Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River (adopted 28 July 1987) Preamble and art 3.

abstract water from the Zambezi River. [228] Both these requirements mean that the Zambezi River Authority Act ensures that all uses of the Zambezi River are regulated and managed by both parties and that the relevant data is shared between the parties. Even more significantly, this agreement is to be commended in that it makes it impossible for unilateral actions to be undertaken by either Zambia or Zimbabwe in the Zambezi River, without the required prior approval of the affected party. Thus, this agreement, unlike the LHWP, is thus based on "reasonable" accommodation and "perfect equality" in decision-making relating to the shared watercourse since the activities of both parties must be approved by the Council to this agreement.

Third, the Zambezi River Authority must collect and process hydrological and environmental data of the Zambezi River for the proper fulfilment of its tasks and objectives.[229] What more, the contracting parties to this agreement undertake to guarantee the equitable utilization of the Zambezi River.[230] Thus, this agreement explicitly recognises the principle of equitable utilization and that it seeks to ensure that the use of the water in the Zambezi River is strictly under the control of both contracting parties. This is a step forward from the LHWP in that it accords flexibility in the water allocation and it affords the necessary latitude for both parties to adjust the water allocation to changing circumstances such as a conflict of uses.

Therefore, the ZAMCOM Agreement, in tandem with the Zambezi River Authority Act, assist the fulfilment of the principle of 'equitable utilization' of the water in the Zambezi River. The accommodation of all the interests of the parties to the ZAMCOM Agreement means that there is "perfect equality" of the parties, fairness, flexibility, proportionality and denial of preferential treatment in line with the principle of 'equitable utilization'. The ZAMCOM Agreement is more suited to fulfilment of the principle of 'equitable utilization' because of a detailed and clear legislative framework that is premised on cooperation and information sharing among all the riparian countries in the Zambezi River basin. This goes a long way in curbing inequitable uses of the Zambezi River.

Similarly, the proposed Batoka Gorge Hydro-Electric Scheme mooted under the Zambezi River Authority Act regime, also reflects the implementation of the principle of

[228] Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River art art 18.1(a)-18.1(b).
[229] Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River art 9(d).
[230] Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River art 18.1.

'equitable utilization'. The Batoka Gorge Hydro-Electric Scheme will be constructed in the middle segment of the Zambezi River basin and will cross the territorial boundary between Zambia and Zimbabwe.[231] In this way, the Kariba and Batoka Dams projects offer emphatic evidence of an equitable approach to the utilization of sheared waters of the Zambezi River. Consequently, the ZAMCOM has established a proper legislative framework to achieve 'equitable utilization'.

2.5 The principle of 'equitable participation'

It is inconceivable that a shared watercourse regime mired by inequitable participation of all the riparian States will result in an equitable water-sharing agreement. The principle of 'equitable participation' originates from the Rio Declaration on Environment and Development, which provides that environmental matters require the participation of all relevant citizens, at the relevant level and States are required to ensure 'public participation'.[232] However, major water treaties do not provide adequate elaboration on the prescripts of 'equitable participation'.

As a point of departure, guidance on the content of the principle of 'equitable participation' can be sought from the dictum of the court in *Doctors for Life*, the NEMA, and the Aarhus Convention. This is because the court in *Doctors for Life* held that public participation has also manifested in the environmental context and the court cited the Rio Declaration on Environment and Development as an illustration of this point.[233] In this way, the court in *Doctors for Life* confirmed that public participation constitutes 'equitable participation' in the "environmental context". In this regard, section 2(4)(f) of the NEMA provides that public participation must result in 'equitable participation' of the relevant parties. Thus, 'equitable participation' is a goal of 'public participation. In this respect, Article 3 of the Aarhus Convention provides, in essence, that States must ensure public participation in environmental decision-making. This establishes the link between public participation and equitable participation as provided by the court in *Doctors for Life*. However, this does not sufficiently elaborate on the constitutive elements of equitable participation. Since 'public participation' connotes and facilitates 'equitable participation', the discussion to follow will

[231] Development of the Batoka Gorge Hydro – Electric Scheme Project Overview Document (2017) 6 <http://www.zambezira.org/sites/default/files/BGHES_Project%20Overview%20Document.pdf>.
[232] Rio Declaration on Environment and Development principle 10; *Doctors for Life International v Speaker of the National Assembly* 2006 (6) SA 416 (CC) (17 August 2006) (hereafter, *Doctors for Life*) para 118 read with footnote 119.
[233] *Doctors for Life* (note 232 above) para 118.

assess various legal instruments that provide for the principle of 'public participation' to substantively establish the contours of the principle of 'equitable participation' in shared watercourses.

In this regard, Agenda 21 provides that local communities must be involved in all facets of water management, with due consideration of the role of women in this regard.[234] It is normally employed to denote the vigilant involvement of the people in the procedure of decision-making.[235] Furthermore, various human rights instruments have accepted the principle of 'public participation'. 'Public participation' is implicitly recognised by the United Nations Declaration of Human Rights (hereafter, UDHR) and by the International Covenant on Civil and Political Rights (hereafter, ICCPR)**.**[236] In this regard, the UDHR provides that everyone has the right to partake in the government of their country, directly or indirectly.[237] In this regard, the ICCPR, in essence, provides that every citizen has the right without unreasonable hindrances, to participate in matters of public interest.[238] Significantly, the ICCPR ensures not only the "right" but also the "opportunity" to engage in activities that concern the public interest.[239] This requires State parties to take proper steps to guarantee that their citizens have the opportunity to vindicate their right to political participation.[240] This duty, together with Article 19 of the ICCPR, requires States to ensure public participation in public administration.[241] Both South Africa and Lesotho have ratified the ICCPR, and it is thus binding on both countries in the interpretation of the provisions of the LHWP and its Protocols.[242] Consequently, it has been held that the right to political participation is a pertinent human right recognised in various human rights instruments.[243]

On the back of the ICCPR, various human rights instruments have entrenched the right to political participation.[244] In this regard, the African Charter on Human and Peoples' Rights

[234] Agenda 21 paras 18.68(b).
[235] *Doctors for Life* (note 232 above) para 118.
[236] ILA Berlin Rules Commentary on Water Resources (note 33 above) 25.
[237] Universal Declaration on Human Rights (adopted 10 December 1948) art 21.1.
[238] International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) art 25.
[239] *Doctors for Life* (note 232 above) para 90; See ICCPR art 25.
[240] *Doctors for Life* (note 232 above) para 90.
[241] Ibid para 92.
[242] *Molefi* (note 161 above) para 17; *Doctors for Life* (note 232 above) footnote 81.
[243] *Doctors for Life* (note 232 above) para 90.
[244] Ibid para 94 and 103. American Convention on Human Rights (adopted 22 November 1969, entered into force 18 July 1978) art 23; Harare Commonwealth Declaration (adopted 20 October 1991) art 4; Inter-American Democratic Charter (adopted 11 September 2001) Preamble, art 2 and art 6.

(African Charter) was acceded to by South Africa in 1996.[245] The African Charter specifies that State parties must ensure that people are appropriately notified of their entitlements in the African Charter.[246] This is provided for by Articles 9, 13 and 25.[247] Article 9.2 of the African Charter provides that every person has the right to advocate and disseminate their views within the confines of the law. More specifically, Article 13.1 of the African Charter provides that every citizen is conferred with the right to participate freely in the government of their country in line with the law. Article 25 does not directly refer to public participation, but it enjoins respect for these rights. Thus, the African Charter has precise mandates on the right to public participation.

More specific to water, the UN Watercourses Convention provides that watercourse States must partake in the utilization of an international watercourse in an 'equitable and reasonable' way.[248] This participation includes both the right to use the watercourse and the obligation to cooperate in the utilization of the shared watercourse as required by the UN Watercourses Convention.[249] This means that under the UN Watercourses Convention, 'equitable participation' has at least two facets: States have the right to utilize the watercourse and second, the duty to cooperate in the protection and development of the shared watercourse. It has been submitted that the UN Watercourses Convention's endorsement of the principle of equitable participation confirms that only cooperation between riparian States can achieve equitable use in a transboundary watercourse.[250] Thus, it has been opined that Article 5.2 of the UN Watercourses Convention personifies the principle of 'equitable participation,' which contemplates that the required benefits can be only be achieved through cooperation by riparian States.[251] McCaffrey opines that Article 5 of the UN Watercourses Convention announces the principle of 'equitable participation'.[252] Equitable and reasonable utilization requires cooperation between riparian States.[253] This imperative is contingent on Article 8, which provides for the duty to cooperate.[254] This is also enhanced by Article 20 of the UN Watercourses Convention, which encourages States to individually and where possible, to

[245] *Doctors for Life* (note 232 above) para 93.
[246] Ibid.
[247] Ibid.
[248] UN Watercourses Convention art 5.2.
[249] UN Watercourses Convention art 5.2.
[250] Azarva (note 64 above) 478; UN Watercourses Convention art 5.
[251] User's Guide (note 19 above) 108.
[252] McCaffrey (note 27 above) 253.
[253] Ibid.
[254] Azarva (note 64 above) 478; UN Watercourses Convention art 8.

cooperate in the utilization of international watercourses.[255] It can then be seen that the obligation to share information in the UN Watercourses Convention is also crucial to the achievement of 'equitable participation'.[256] This is because it would be impossible to participate equitably in the absence of the obligation to share information between riparian States.

In the same vein, the Revised Protocol provides that parties must partake in the utilization of a shared watercourse in an 'equitable and reasonable' fashion, and this includes participation in the utilization and conservation of the watercourse.[257] The Revised Protocol also requires the sharing of data, which is a fundamental requirement for 'equitable participation'.[258] This means that under the Revised Protocol, State parties have the right to equitable participation in the use; development and protection of shared a watercourse.

Similarly, Article 4 of the Berlin Rules provide that States must take measures to ensure that persons likely to be impacted, can be involved in the decision-making process pertaining to the management of a shared watercourse.[259] This provision affirms the right to public participation.[260] States are also enjoined to take the necessary steps to guarantee the rights of communities likely to face the effects of the management of these waters, even while utilizing the water to the advantage of all affected States.[261] This means that the right to 'equitable participation' requires special consideration of vulnerable groups.

By the same token, the Aarhus Convention also recognises the principle of equitable participation.[262] The Aarhus Convention has been accepted and incorporated into South African law.[263] It is also required that the public participation procedures must include rational time frames for the different stages, providing adequate time for notifying the relevant community, and for that community to properly partake during the environmental decision-making process.[264] However, it must be noted that this right has always existed couched as mandating the duty to guarantee public involvement in water management and thus, it is not a

[255] Rieu-Clarke and Spray (note 4 above) 21.
[256] UN Watercourses Convention art 9.
[257] Revised Protocol art 3.7(b).
[258] Revised Protocol art 4.1.
[259] Berlin Rules art 4 and art 18.1.
[260] ILA Berlin Rules Commentary on Water Resources (note 33 above) 12.
[261] Berlin Rules art 20.
[262] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 25 June 1998, entered into force 30 October 2001) art 3.
[263] *Doctors for Life* (note 232 above) footnote 119.
[264] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters art 6.3.

new rule of international law.[265] Significantly, the link between access to information, information sharing, and equitable participation is aptly encapsulated in Article 3 of the Aarhus Convention, which calls for governments to promote the "compatibility" of these rights. This accords with the approach of the UN Watercourses Convention and the Revised Protocol.

Similarly, the New Delhi Principles provide that public participation and access to information are prerequisites for responsive, transparent, and accountable governance.[266] In this regard, the Espo Convention provides that the relevant community must be notified, either in public forums or personally as required, at the commencement of an environmental decision-making procedure and with sufficient time and in an effective manner, *inter alia*, of the planned project and the type of probable decision, the regulatory authority that will make the decision as well as the procedure to be employed and when the procedure will commence. [267]

The principle of 'equitable participation' has also received legislative endorsement in Lesotho and South African law. In this regard, the Lesotho Environment Act provides that the principle of 'public participation' is one of the principles of sustainable development.[268] This is augmented by the right of access to information under the Lesotho Environment Act.[269] Similarly, the LWA recognises the public participation approach as one of the principles of water management.[270] This is supplemented by the requirement to ensure that the public has the right of access to information it "needs to know".[271] This is in keeping with the Constitution of Lesotho, which provides for the right to receive information without any hindrance.[272]

In South Africa, as stated earlier in this discussion, the NEMA provides for the principle of equitable participation, which requires that the interested parties are afforded an opportunity to make submissions on matters concerning proposed development projects.[273] 'Public participation' is one of the principles of integrated environmental management.[274] This

[265] ILA Berlin Rules Commentary on Water Resources (note 33 above) 13.
[266] International Law Association's New Delhi Declaration of Principles of International Law Relating to Sustainable Development (adopted 6 April 2002) art 5.1 and art 5.2.
[267] Convention on Environmental Impact Assessment in a Transboundary Context (adopted 25 February 1991, entered into force 10 September 1997) art 6.2.
[268] Section 4(4)(d) of the Lesotho Environment Act.
[269] Sections 95-96 of the Lesotho Environment Act.
[270] Section 3(e) of the LWA.
[271] Section 31 of the LWA.
[272] Section 14(1) of the Lesotho Constitution.
[273] Section 1 of the NEMA.
[274] Section 23(2)(d) of the NEMA. Section 2 (4)(f) of the NEMA.

principle binds all organs of State and to any activity that may have an adverse effect on the environment.[275]

The NEMA also provides for the right of access to information.[276] This gives effect to section 32 of the Constitution of South Africa.[277] Significantly, the NEMA EIA Regulations elaborate on the 'public participation' requirement. First, it is required that the EIA process demands that affected parties must be afforded a period of at least 30 days to submit comments on the EIA report.[278] Second, the 'public participation' process envisaged must, in essence, ensure access to all information that is likely or may have the potential to affect any decision with regard to an application.[279] Third, the comments of registered interested parties must be incorporated in reports and plans.[280] Lastly, the communication calling for comments must be tailored to each situation and includes public notices and notices in newspapers, which are accessible to the relevant affected parties.[281] Ultimately, the significance of cooperation and information sharing to 'equitable participation' was acknowledged by the court in *VEJA*, which held that accommodating the rights of all interested parties requires giving effect to the principle of public participation.[282]

More specific to water, the NWA provides for 'public participation' in water management.[283] This is operationalised by the duty to provide access to information held by the government.[284] Similarly, the South African government has submitted that 'public participation' must enable the accommodation of the interests of affected parties.[285] Secondly, the 'public participation' process must eliminate any misapprehensions about technical issues, resolving disputes and reconciling conflicting considerations.[286] It is also required that 'public

[275] Section 2(1) of the NEMA; *BP Southern Africa Pty Ltd v MEC for Agriculture, Conservation, Environment and Land Affairs* (03/16337) [2004] ZAGPHC 18 (31 March 2004) 203; *Fuel Retailers* (note 192 above) paras 67 and 95.
[276] Section 2(4)(k) of NEMA.
[277] See *Company Secretary of Arcelormittal South Africa v Vaal Environmental Justice Alliance* (69/2014) [2014] ZASCA 184 (26 November 2014) (hereafter, *VEJA*).
[278] Section 40(1) of the NEMA Environmental Impact Assessment Regulations, 2014 GN R.982 in GG 38282 of 4 December 2014.
[279] Section 40(2) of the NEMA Environmental Impact Assessment Regulations, 2014.
[280] Sections 42- 44 of the NEMA Environmental Impact Assessment Regulations, 2014.
[281] Section 41 of the NEMA Environmental Impact Assessment Regulations, 2014.
[282] *VEJA* (note 277 above) para 73.
[283] Section 9(g) of the NWA.
[284] Section 142 of the NWA.
[285] Department of Environmental Affairs 'Public Participation guideline in terms of NEMA EIA Regulations, Department of Environmental Affairs' (2017) 6-7 <https://www.environment.gov.za/sites/default/files/docs/publicparticipationguideline_intermsofnemaEIAregulations.pdf>.
[286] Ibid.

participation' must assist the development of proper democracy and to fulfil the requirement for procedural fairness of administrative action as provided in the Promotion of Administrative Justice Act 3 of 2000.[287] 'Public participation' must also encourage transparency and accountability in the process of decision-making.[288]

Furthermore, the level of 'public participation' must be informed by the magnitude of projected impacts of the mooted project, the sensitivity of the impacted environment and the degree of discord over the project, and the characteristics of the potentially affected individuals.[289] 'Public participation' procedures must also provide for the opportunity for all stakeholders to acquire clear information about the environmental effects of the planned activity.[290] 'Public participation' must also ensure that the stakeholders have an opportunity to avail their support, cite and raise concerns regarding the project and to provide the opportunity for stakeholders to propose ways for reducing any adverse effects of the project and for enhancing its positive impacts.[291] The nature of this participation will determine the appropriate mechanism and how submissions will be made to respond to the relevant notice.[292]

'Public participation' must also be seen as part of Integrated Water Resources Management (IWRM), which is a participatory planning and implementation process that collates stakeholders together to ascertain how to reach societal goals for water while maintaining vital ecological and economic benefits.[293] Thus, it is invariably related to the principle of 'sustainable development' that will be discussed in Chapter 3 of this thesis. In addition, to be effective, participation must be a continuous process, which begins with isolating the problem and addressing it through an appropriate project.[294]

In light of the foregoing, for purposes of this thesis, it is my view that the principle of public participation *includes* consultation, accommodation of the interests of all relevant stakeholders, cooperation to be able to raise concerns and to mitigate the negative impacts of projects, access to information, accountability and transparency. Since the principle of 'public participation' connotes and informs the principle of 'equitable participation', it can then be

[287] Ibid.
[288] Ibid.
[289] Ibid 8.
[290] Ibid 6.
[291] Ibid 6-7.
[292] Ibid; A Rieu-Clarke 'Reflections on the Normative Prescription of Sustainable Development in Recent Transboundary Water Treaty Practice' (2000) 25 *Water International* 572, 573.
[293] K Lazarus *Water rights and Social justice in the Mekong Region* (2011) 22.
[294] T Murombo 'Beyond Public Participation: The disjuncture between South Africa's Environmental Impact Assessment (EIA) law and sustainable development' (2008) 3 *PER/PELJ* 1, 11.

argued that 'equitable participation' includes the right to be consulted, to have your interests accommodated, to cooperate and be able to raise concerns and to mitigate the negative impacts of projects, access to information, accountability and transparency in shared watercourse projects. The LHWP is then assessed in light of these considerations.

In respect of consulting and accommodating interested parties, the LHWP has the LHDA and TCTA, which manage the project in Lesotho and South Africa respectively.[295] This means that both countries have an opportunity to participate in the management of the project. By the same token, the Lesotho Highlands Water Commission (hereafter, LHWC) consists of an equal number of delegates from both Lesotho and South Africa and has the mandate to monitor and advise on the work of the LHDA and TCTA.[296] It must be noted that the LHWC replaced the Joint Permanent Technical Commission.[297] The LHWC has the power to formulate policies and procedures for the LHWP.[298] Thus, the LHWP creates forums for the equitable participation of both Lesotho and South Africa.

In this regard, the LHWP Phase II Compensation Policy provides that the affected communities will be consulted to explain the rationale for the calculation of the compensation rates.[299] The LHWP Phase II Compensation Policy also provides that one of its guiding principles is the ongoing consultation and disclosure of information.[300] Furthermore, the LHWP Phase II Compensation Policy provides that the LHDA will liaise with affected communities and their local regulatory authorities to implement consultation and disclosure platforms; ensure that affected communities are kept properly apprised of their rights through unimpeded access to comprehensible data and that they can partake in the evaluation and preparing of Resettlement Action Plan proposals.[301] In addition, the eligibility for relocation will be determined through a participatory evaluation with affected people.[302]

---

[295] LHWP art 8 and art 9.
[296] Protocol VI Systems of Governance: Supplementary Arrangements Regarding the Systems of Governance for the Project (adopted, entered into force 4 June 1999) (hereafter, Protocol VI) art 5.
[297] Protocol VI art 2; LHWP art 9.
[298] Protocol VI art 5.
[299] Lesotho Highlands Water Project Phase II Compensation Policy 9 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Governance/LHWP%20Phase%20II%20Compensation%20Policy%20(v8%201)%20Approved.pdf>. According to the Compensation policy, 'Affected persons' include: Persons with formal legal rights to land or assets, including customary and traditional rights recognised under the laws of Lesotho; Persons with no formal legal rights to land, but with a claim to such land or assets, provided that such claims are recognised under the laws of Lesotho or become recognised through a process identified in the Resettlement Action Plan and Persons with no recognisable legal right or claim to the land they are occupying.
[300] Lesotho Highlands Water Project Phase II Compensation Policy (note 299 above) 2.
[301] Ibid 8.
[302] Ibid 9.

Furthermore, in respect of Phase IB, a comprehensive public participation program was conducted as a significant part of the resettlement and development study and this availed significant input to the EIA.[303] Workshops were held from within the LHDA and other interested parties, which addressed the concerns of affected parties and provided information on the impacts but provided valuable feedback.[304] A summary EIA in Sesotho was presented to the people of the particularly those who project area.[305] However, at the project's inception, the EIA methods were antiquated and it became clear that the mitigation mechanisms employed at its inception were poor.[306] It is alleged that Basotho people are unhappy about its terms, which provide "cheap water" to South Africa despite freshwater being a crucial resource in the SADC region.[307]

It has also been found that the management of the compensation-related complaints arising out of Phase I of the LHWP has been slow while the complaint verification and resolution process was unsatisfactory and appeared to favour the LHDA, which acts both as a litigant and arbitrator in the disputes.[308] The object of resolving 60 per cent of old complaints by the end of 2014-/15 was not met, 37 per cent of cases were verified, 25 validated but only one per cent resolved.[309] It has also been found that wrong individuals are consulted over complaints, and there has been a poor recording of evidence.[310] Thus, in respect of Phase I, it can be argued that the LHWP did not comply with the consultation requirement.

In respect of Phase II, the EIA process has involved a multifaceted approach including: first, a Flow, Water Quality and Geomorphology and IFR Baseline Study whose objective is to establish the volume, incidence, timing and period of water flows that must be kept by the lower riparian communities after the completion of the Polihali Dam to provide proper protection to the river basin and to guarantee the sustainable use of the ecosystem services on

[303] LHDA EIA Executive Summary: Lesotho Highlands Water Project Phase IB (1997) 18 <http://documents.worldbank.org/curated/en/503161468772479396/pdf/multi-page.pdf>.
[304] Ibid.
[305] Ibid.
[306] N Mirumachi 'The politics of water transfer between South Africa and Lesotho: Bilateral cooperation in the Lesotho Highlands water project' (2007) 32 *Water International* 558,566.
[307] S Kings 'Southern Africa can avoid climate strife with water agreements' *Mail and Guardian* (5 December 2016) <https://mg.co.za/article/2016-12-05-00-southern-africa-can-avoid-climate-strife-with-water-agreements>.
[308] Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2015) 2 and 14 <http://www.lhda.org.ls>; Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2016) 20 <http://www.lhda.org.ls>; LHDA Annual Report 2016/17 20 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Annual_Reports/Annual_Report_2016_17.pdf>.
[309] Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2016) (note 308 above) 15; Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2015) (note 308 above) 14.
[310] Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2015) (note 308 above) 14.

which the lower riparian communities rely on; second, a Biological and Archaeological (including Heritage) Baseline Study that sought to ascertain possible effects on the biota and archaeological aspects caused by Phase II and to provide suitable management instruments, as well as a monitoring plan and this included standard surveys on flaura and fauna; third, a Public Health Baseline Study to establish the basic status of social elements of health and the issue of afflictions in the communities of the project area and a Health Impact Assessment and Public Health Action Plan, which evaluates the possible effects of the project on the well-being of local community.[311] Thus, in respect of Phase II, there has been a considerable attempt at complying with the consultation requirement. On the whole, then, it can then be argued that the LHWP has not complied with the consultation requirement for equitable participation.

In terms of the access to information requirement, the LHWP Phase II Compensation Policy also expressly provides that the project will displace people due to the loss of their natural resources and impede access to water.[312] Information is also provided in an 'understandable' format as the LHWP Phase II Compensation Policy provides that it is available in both Sesotho and English.[313] The LHWP has also published the Public Disclosure for the Environmental and Social Effects of the Phase II project. [314] This document seeks to facilitate public awareness of pertinent social and ecological data in a timely and accessible manner and language that stakeholders can comprehend.[315] In this way, the LHWP complies with the publicity requirement of equitable participation.

In respect of accountability and transparency, the LHWP has been hampered by the loss of valuable records relating to the resolution of compensation-related disputes and the poor recording of evidence that has hindered the successful resolution of these disputes.[316] Thus, the LHWP has not complied with this requirement of equitable participation.

Furthermore, it is my view that the provisions of the LHWP and Phase II Agreement do not reveal 'equitable participation' in the negotiation and drafting process of both these agreements. A peek at Articles 7 and 18.2 of the Phase II Agreement and Articles 4.1 and 4.2

[311] LHDA <http://www.lhda.org.ls/phase2/environmentalimpactcomponents.php>.
[312] Lesotho Highlands Water Project Phase II Compensation Policy (note 299 above) 1 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Governance/LHWP%20Phase%20II%20Compensation%20Policy%20(v8%201)%20Approved.pdf>.
[313] Ibid 3.
[314] LHDA Public Disclosure of Phase II Environmental and Social Management Programme (2014) 1 <file:///C:/Users/vintic/Downloads/vdocuments.mx_public-disclosure-of-phase-ii-environmental-disclosure-of-phase-ii-environmental.pdf>.
[315] Ibid.
[316] Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2015) (note 308 above) 14.

of the LHWP as well as Annexure II to the LHWP reveals that these instruments guarantee predetermined water supplies to South Africa with no exceptions. The stringent and unfair nature of these provisions imply that there was no 'equitable participation' of Lesotho in their drafting. This inequity could have been caused by the 'power asymmetry' between South Africa and Lesotho, which will be discussed in Chapter 4 of this study. The Treaty of the LHWP was signed shortly after Lesotho's political regime change on October 24, 1986, in which some commentators have argued that South Africa instigated the *coup d'état* and the purpose was to facilitate the negotiations regarding the LHWP.[317] However, Meissner and Turton argue that this claim is baseless.[318] Regardless, the stringent and unfair provisions of the LHWP imply that there was no 'equitable participation' of Lesotho. It can then be argued that in this regard, the LHWP and its protocols contravene the principle of 'equitable participation'.

Overall, the LHWP has an adequate framework and platforms for 'equitable participation'. Whilst significant attempts have been made to ensure equitable participation, the resolution of the key issue of compensation disputes in the project has been mired by slow progress and a failure to consult with the affected individuals in certain instances. This inequitable participation is brought to bear in the substantive provisions of the LHWP that are inequitable. Consequently, it is my view that the LHWP does not comply with the principle of equitable participation. This has significant implications for the legitimacy of the LHWP regime.

In this regard, 'equitable participation' is occurring in the ZAMCOM Agreement. First, the ZAMCOM Agreement creates a Council that is responsible for the promulgation of policies and guidelines for equitable utilization of the ZAMCOM.[319] There is also a Technical Committee that is responsible for the development of rules that ensure equitable and reasonable utilization that will be approved by the Council for the Zambezi Watercourse.[320] This is buttressed by the overall purport of the ZAMCOM, which is to promote equitable and sustainable development of the Zimbabwe watercourse.[321] Second, the Zambezi Basin

[317] Mirumachi (note 306 above) 566.
[318] Ibid. A Turton & R Meissner *et al* 'A Hydropolitical History of South Africa's International River Basins' WRC Report No. 1220/1/04 (2004) 249 <https://pdfs.semanticscholar.org/c512/03a494b1ad21f2b784aa23913e7fa3c127b4.pdf?_ga=2.96093401.410769908.1581147628-259359838.1581147628>.
[319] ZAMCOM Agreement art 8.1.
[320] ZAMCOM Agreement art 10.1(a) and art 12.1(g).
[321] ZAMCOM Agreement art 5.

Stakeholders' Forum also ensures participation by all relevant stakeholders in the ZAMCOM.[322] This forum was promulgated in 2016 and is held every year.[323] The goal of the forum is to ensure stakeholder consultation and cooperation on ZAMCOM initiatives.[324] Scientific studies have found that cooperation on current hydropower projects in the Zambezi River Basin could significantly increase energy production without any new investment.[325] More than 100 stakeholders gathered in Zambia to share information and experiences.[326] The projected forum outcomes were expected to guide the development of the Strategic Plan for the Zambezi Watercourse (ZSP).[327] Submissions from stakeholders are vital in the selection of priority issues that require intervention.[328] To complement this forum, the ZAMCOM stakeholders are striving for the equitable participation of all riparian States through the creation of a water resources information system with the ability to evaluate water resources and weather conditions in the Zambezi Basin.[329]

The implementation of the system known as the "Zambezi Water Resources Information System Enhancement 3: Hydro-meteorological Database and Decision Support System (ZAMWIS- DSS)", which commenced in January 2017, was expected to be completed by January 2019.[330] Its main purport is to augment the cooperation in the utilization of the water resources of the Zambezi watercourse in a manner that ensures sustainable and climate change resilience.[331] Thus, the system will exist as a software paradigm, which acts as a repository for information and provides management tools for the analysis of water resources.[332] Consequently, it will augment informed and transparent decision-making among the Zambezi River Basin stakeholders.[333]

---

[322] ZAMCOM 'Zambezi stakeholders discuss basin-wide planning' *Zambezi Today* (February 2018) 2(1) 1 <http://www.zambezicommission.org/sites/default/files/newsletter/zambezi_today_vol._2_no._1_february_2018.pdf>.
[323] Ibid.
[324] Ibid.
[325] Ibid.
[326] Ibid.
[327] Ibid.
[328] A Ndhlovu 'Strategic plan development for the Zambezi Basin on course' *Zambezi Today* (February 2018) 2(1) 5 <http://www.zambezicommission.org/sites/default/files/newsletter/zambezi_today_vol._2_no._1_february_2018.pdf>.
[329] N Nengomasha & H Chibuye 'ZAMCOM rolls out water resources decision support system' *Zambezi Today* (February 2018) 2(1) 4 <http://www.zambezicommission.org/sites/default/files/newsletter/zambezi_today_vol._2_no._1_february_2018.pdf>.
[330] Ibid.
[331] Ibid.
[332] Ibid.
[333] Ibid.

In addition, the ZAMCOM National Stakeholders Coordination Committees are now well-established in all riparian States of the Zambezi River Basin to facilitate stakeholder participation.[334] These work in tandem with the Basin-wide Stakeholder Coordination Committee (BASC), which frequently meet to deal with specific issues relevant to the implementation of the ZAMCOM work programme in accordance with the ZAMCOM Agreement.[335] This approach intensifies the commitment of stakeholders towards ensuring that matters of the basin are afforded due consideration.[336] Stakeholders include non-governmental organisations, academics and civil society in each riparian State.[337]

Furthermore, the ZAMCOM countries have promulgated Rules and Procedures for data that must be employed to the sharing of data and information relevant to the equitable and reasonable utilization, management and sustainable development of the Zambezi Watercourse.[338] The overall objective of these Rules and Procedures is to give effect to the data-sharing provisions in the ZAMCOM Agreement and the SADC Protocol on Shared Watercourses.[339] Thus, the ZAMCOM has an adequate legislative and practical framework for the 'equitable participation' of its members in the utilization of the Zambezi River as a shared watercourse. The equitable participation paradigm of the ZAMCOM Agreement culminated in the Zambezi River Authority Act, which resulted in the building of the Kariba Dam and now, the proposed Batoka Gorge Hydro-Electric Scheme on the Zambezi River, which are jointly owned and equitably managed by Zimbabwe and Zambia.

2.6 'Benefit-sharing' as a component of the principle of 'equitable and reasonable utilization'

Another crucial component of 'equitable and reasonable utilization' is the principle of 'benefit sharing'. 'Equity' in access to the benefits from a watercourse means that water must be utilized so that it affords a huge benefit to all.[340] McIntyre opines that 'benefit-sharing' is regarded as

[334] Ndhlovu (note 328 above) 4.
[335] See ZAMCOM Stakeholders Participation, Participation and Instruments for Basin-Wide Cooperation <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/Stakeholder-Participation_NASCs_BASCs.pdf>.
[336] Ndhlovu (note 328 above) 4.
[337] Ibid.
[338] ZAMCOM Rules and Procedures for Sharing Data and Information related to the Management of Zambezi Watercourse (adopted 25 February 2016, entered into force 26 March 2016) art 2 and art 3 <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/16.07.28-Rules_ProceduresForDataSharing_Adopted-by-Council_FinalEditing_Ver10_FINAL.pdf>.
[339] ZAMCOM Rules and Procedures for Sharing Data and Information related to the Management of Zambezi Watercourse art 3.1.
[340] National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) (note 181 above) 45.

operationalizing the principle of 'equitable and reasonable utilization', which is the pre-eminent rule of international water law.[341] The attainment of this goal demands an emphasis on accompanying opportunities such as infrastructure regeneration, investing in human resources, encouraging and technological advancement, and addressing historical inequalities.[342] It also requires an understanding of new obstacles such as climate change and how this impacts current and future plans.[343]

In respect of 'benefit sharing', Article 5.1 of the UN Watercourses Convention provides that an international watercourse must be utilized by watercourse States with the object of acquiring benefits with due consideration of the interests of the relevant watercourse States, in accordance with proper conservation of the watercourse.[344] Article 5.1 of the UN Watercourses Convention implies that customary international law foresees the probability that riparian States may either mathematically apportion shared watercourses or agree to the distribution of mutual benefits.[345] The terms 'optimal utilization' and 'benefits' do not connote the achievement of the best, the most coherent, or even the most financially prudent use.[346] Neither do they advocate that the country that uses a watercourse most effectively should have a claim that supersedes all other uses.[347] It is argued that it actually requires the achievement of the greatest fruits for all riparians while minimising potential harmful impact.[348]

In this regard, Article 8 of the UN Watercourses Convention can be regarded as a fundamental pronouncement of that rule's place in customary international law.[349] Article 8.1 of the UN Watercourses Convention provides that watercourse States must cooperate based on "mutual benefit" to attain "optimal utilization" and "adequate protection" of an international watercourse. In this way, Article 8 implies that benefit-sharing arrangements require cooperation.[350] Thus, it is submitted that benefit-sharing arrangements derive legal authority from the rule of shared watercourses law to cooperate in the utilization of an international watercourse.[351] The principle of "mutual benefit" connotes that cooperation must result in

[341] O McIntyre 'Benefit-sharing and upstream/downstream cooperation for ecological protection of transboundary waters: opportunities for China as an upstream state' (2015) 40 *Water International* 48, 52.
[342] National Water Resource Strategy: Water for an Equitable and Sustainable Future 2013 (note 181 above) 45.
[343] Ibid.
[344] UN Watercourses Convention art 5.1.
[345] McIntyre (note 341 above) 52.
[346] User's Guide (note 19 above) 107.
[347] Ibid.
[348] Ibid.
[349] McIntyre (note 341 above) 56.
[350] Ibid.
[351] Ibid.

favourable outcomes for all riparian States.[352] It can then be said that the UN Watercourses Convention contemplates the optimal sharing of benefits from a watercourse for all riparian States. This means that under the UN Watercourses Convention, there is a right to share the resources equitably.

The Revised Protocol also mimics the UN Watercourses Convention in that it requires that the sharing of benefits must be in accordance with the consideration of the interests of the relevant watercourses States in line with proper conservation of the watercourse to the advantage of existing and future generations.[353] Thus, there is a link between 'intergenerational equity', 'intragenerational equity', and benefit-sharing. It is then submitted, that benefit-sharing arrangements might be employed to be an alternative or work in tandem with plans for allocating a specific quantity of water resources.[354]

Similarly, the Berlin Rules provide basin States must cooperate in "good faith" in the utilization of waters of a shared watercourse for the "mutual benefit" of the participating riparian States.[355] Like the UN Watercourses Convention and the Revised Protocol, the Berlin Rules also regard the acquisition of benefits should be the aim of equitable and reasonable utilization.[356] Thus the International Law Association provides that this obligation requires that the right to benefit-sharing can only be achieved through conducting oneself in an equitable and reasonable manner, having due consideration of the mandate to avoid significant harm to another riparian State.[357] This then means that the achievement of equitable benefit sharing requires cooperation and behaving in an equitable and reasonable manner.

In this regard, the Southern African Development Community (hereafter, SADC) has embraced the concept of benefit sharing in its SADC Concept Paper on Benefit Sharing in the Context of Transboundary Water Resources Management and Development, which is a substantial step towards the SADC Guideline on Benefit Sharing.[358] According to the Concept Paper on Benefit Sharing, parties sharing transboundary watercourses usually meet with challenges in the allocation of accessible water.[359] The dominant cause of this is the so-called

[352] User's Guide (note 19 above) 124.
[353] Revised Protocol art 3.7(a).
[354] McIntyre (note 341 above) 52.
[355] Berlin Rules art 11.
[356] Berlin Rules art 12.2.
[357] ILA Berlin Rules Commentary on Water Resources (note 33 above) 21.
[358] SADC Concept Paper on Benefit Sharing in the Context of Transboundary Water Resources Management and Development 1 <http://www.orangesenqurak.org/UserFiles/File/SADC/SADC%20concept%20paper_benefit%20sharing.pdf>.
[359] Ibid 2.

Zero Dilemma, which occurs when the volume of a resource is exhaustible and is limited.[360] In this context, a reapportionment of water suggests that what is acquired by one riparian is met with a diminution in equal measure by other riparian States.[361] The countries suffering a dissipation in water quantities in such circumstances are usually unwilling to conclude an agreement, for patent reasons.[362] This can be overcome by concurrent allocations in time, in the context of all the riparians sharing a transboundary water resource.[363] Thus, benefit-sharing is a crucial component of the principle of equitable and reasonable utilization.

However, McIntyre is of the opinion that it would be an exaggeration to contend that 'benefit sharing' is a recognised rule of transboundary water law.[364] Other commentators view 'benefit sharing' as a moral imperative and they are of the view that a mutual and equitable sharing of benefits must inform the sustainable utilization of the environment.[365] Some stakeholders regard 'benefit sharing' more as a pragmatic mechanism by implementing accepted tools to ensure investments in hydropower, and in other sectors.[366] There is also a view that nowadays, the more orthodox forms of benefit-sharing will suffice.[367] In this regard, McIntyre asserts that there is no duty in customary international law to enter into such arrangements.[368] Any attempt to assert such rights would be an affront on State sovereignty.[369] Regardless, for purposes of this paper, it is accepted that the right to equitable 'benefit sharing' is rule of international law as it is recognised by the UN Watercourses Convention and the Revised Protocol, which collectively bind the LHWP.

To this end, the LHWP provides that the project "consider" the "equitable sharing of the water resources in the Orange River" for both South Africa and Lesotho and "recognises" the benefits of "mutual water resources" for economic development and social upliftment.[370] This is merely an aspiration rather than a binding obligation in the LHWP and it is unclear what

[360] Ibid.
[361] Ibid.
[362] Ibid 3.
[363] Ibid. Southern African Vision For Water, Life and Environment In the 21st Century 20 <https://www.sadc.int/documents-publications/show/Southern%20African%20Vision%20For%20Water%20Life%20and%20Environment%20In%20the%2021st%20Century>.
[364] McIntyre (note 341 above) 58.
[365] MRC Knowledge Base on Benefit Sharing (2012) 11 <http://www.mrcmekong.org/assets/Publications/Manuals-and-Toolkits/knowledge-base-benefit-sharing-vol1-of-5-Jan-2012.pdf>.
[366] Ibid.
[367] Ibid.
[368] McIntyre (note 341 above) 58.
[369] Ibid.
[370] LHWP Preamble.

"considering" means. At best, "considering" connotes that equitable benefit sharing will be borne in mind in the utilization of the Orange River. In the same vein, the Phase II Agreement provides that Lesotho must not be "disadvantaged" in terms of the benefits arising out of the royalty payments.[371] This provision is interesting in that it provides that Lesotho could have a valid claim against South Africa in instances whereby the royalties are not producing benefits for Lesotho. The Phase II Agreement also ensures the "most advantageous options for the long-term energy security of Lesotho without diminishing the benefits derived from the water delivery system" must be achieved.[372] This ensures that Lesotho must derive equitable benefits from the LHWP.[373] Thirdly, the Phase II Agreement provides for compensation for the loss of benefits from the hydropower facility, either in kind or in monetary value.[374] Overall, this can be construed to mean that the LHWP requires the signatories to this agreement to mutually and equitable share benefits arising out of the project.[375]

In respect of benefit-sharing, the World Bank has submitted that South Africa covered the project expenses, including a huge proportion of the ecological and social mitigation costs and paid royalties to Lesotho, acquired the consumer and indirect benefits.[376] On the other hand, Lesotho suffered the ecological and social problems, did not get the benefits of water but acquired the royalties and electricity generated from the project.[377] Thus, the World Bank is of the view that the project has been beneficial to both parties.[378]

However, the World Bank does note that the additional benefits such as rural amenities in Lesotho, tourism, problems like social disruption and resettlement, that occurred due to the LHWP project, were actually evenly allocated between the signatories although the project failed to integrate the investments in infrastructure into existing amenities.[379] It has also been submitted that even though royalties were paid to Lesotho, the funds generated from the project

[371] Phase II Agreement art 7.2(d).
[372] Phase II Agreement art 7.2(b).
[373] Phase II Agreement Preamble.
[374] Phase II Agreement art 7.2(c).
[375] See LHWP Preamble.
[376] World Bank Report no. 46456 Africa Region Water Resources Unit Working Paper 1: Benefit Sharing in International Rivers: Findings from the Senegal River Basin, the Columbia River Basin, and the Lesotho Highlands Water Project WB Benefit sharing (2008) 55 <http://documents.worldbank.org/curated/en/159191468193140438/pdf/464560NWP0P1121g0AFTWR0YU301PUBLIC1.pdf>.
[377] Ibid.
[378] Ibid.
[379] Ibid; World Bank 'Involuntary resettlement sourcebook - planning and implementation in development projects (English)' (2004) 325 <http://documents.worldbank.org/curated/en/206671468782373680/Involuntary-resettlement-sourcebook-planning-and-implementation-in-development-projects>.

did not specifically reach the communities affected by the project.[380] Furthermore, while contributing to the creation of joint institutions, data sharing and multilevel relationships in the LHWP, South Africa has also limited the process of dialogue and strategic planning at the basin-wide level.[381] This is in contravention of the mandate to ensure not only 'equitable participation', but also equitable sharing of benefits from the LHWP as required by the UN Watercourses Convention, Revised Protocol and the LHWP itself.

In addition, the economy of Lesotho has seen a fundamental change over the last fifteen years.[382] This is partly due to a surge in foreign direct investment largely from South Africa through the LHWP and this invigorated economic growth and produced reliable export income for the country.[383]

The LHWP also had a Mountain Horticulture and Field Crops Programme to increase productivity on arable land and provide possibilities for income generation.[384] The LHWP has also assisted farmers in affected communities to plant high yield crops to reduce poverty and this was done by introducing farmers to cash crop farming.[385]

However, despite the LHWP's substantial impact on economic development, the effect on poverty reduction has been minimal.[386] Rural areas, where poverty is abundant, received ephemeral benefits from the LHWP and the clothing sector growth.[387] The evaluation of the effect of the project on the welfare of affected households has proven difficult to quantify and ameliorate, but the impact on welfare has been negligible.[388] This is in contravention of the LHWP, which seeks to ensure that benefits from the project must be equitably shared. This is also in violation of the Revised Protocol, which provides that riparian States must ensure the requisite balance between utilization of a natural resource for a higher standard of living for

[380] M Daoudy 'Transboundary water Management principles and practice: Getting beyond the environment – conflict trap' in A Earle (ed) *Transboundary Water Management Principles and Practice* (2010) 43, 51.
[381] Ibid.
[382] World Bank Report no. 46456 (note 376 above) 57.
[383] Ibid.
[384] LHDA Annual Report 2000/01 14-16 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Annual_Reports/Annual_Report_2000_01.pdf>.
[385] Ibid 14.
[386] World Bank Report no. 46456 (note 376 above) 60; L Ramaili 'Impact of the Lesotho Highlands Water Project in Poverty Alleviation in Lesotho'. Thesis presented for the degree of Master of Arts in Public and Development Management at the University of Stellenbosch (2006) 101-103.
[387] World Bank Report no. 46456 (note 376 above) 60.
[388] World Bank 'Project Performance Assessment Report: Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)' (2010) 29 <http://documents.worldbank.org/curated/en/529741468054547515/Lesotho-Phase-1B-of-the-Highlands-Water-Project-and-Community-Development-Support-Project>; R Hitchcock 'The Lesotho Highlands Water Project: Dams, Development, and the World Bank' (2015) 3 *Sociology and Anthropology* 526, 535.

their people and conservation and improvement of the environment to facilitate sustainable development.[389] Thus, the project has failed to achieve one of the overall objectives of the Revised Protocol – which is to achieve poverty alleviation that was "ignored" in Phase IB of the project.[390]

Furthermore, the LHWP has thus far failed to translate economic progress into poverty reduction.[391] The revenue fund in the LHWP has encountered problems due to various factors, including poor and politicised implementation, failure of communities to supervise massive construction ventures, poor government support, projects that lack an economic basis, and lack of a monitoring strategy.[392] The LHWP also failed to meet its disbursement target per year between 1991 and 2002.[393] In addition, the LHWP was unsuccessful in addressing the needs of the people that were negatively impacted by the ecological changes in the lower riparian areas of the Matsoko weir and the Katse and Mohale dams.[394] It can then be argued from the foregoing, that the administration and implementation challenges and the political meddling in the distribution of benefits to the Basotho citizens constitutes a violation of the principle of equitable participation and benefit-sharing imperatives.

In addition, the construction work of the LHWP required a high level of skill, and these workers initially came from South Africa, but that changed with more local economic opportunities being availed to the people of Lesotho.[395] The significant posts that were held by immigrants at the inception of the project have now been assumed by Basotho citizens.[396] In Phase 1B, the LHWP contributed nearly seven per cent to Lesotho's GDP.[397] Also, via contracting, the Basotho acquired about M98 million for approximately 1,700 person-years of work.[398] Both the skilled and unskilled people acquired benefits from the work.[399]

---

[389] Revised Protocol art 3.4.
[390] Revised Protocol art 2; See World Bank 'Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)' (note 388 above) 15.
[391] World Bank Report no. 46456 (note 376 above) 61.
[392] Ibid. World Bank 'Lesotho - Phase 1B of the Highlands Water Project (English)' (2007) 10 <http://documents.worldbank.org/curated/en/556021468054665427/Lesotho-Phase-1B-of-the-Highlands-Water-Project>.
[393] J Skinner, J Krauss & P Newborne 'Redistribution of revenues from hydropower dams Review of benefit-sharing mechanisms and local control' (2014) 25 <https://pubs.iied.org/pdfs/G03770.pdf>.
[394] D Egre 'United Nations Environment Programme Dams and Development Project Compendium on Relevant Practices- 2nd Stage: Revised Final Report Benefit Sharing Issue' (2007) 92 <file:///C:/Users/vintic/Downloads/Egre_2007_UNEPCompendiumBS.pdf>.
[395] World Bank Report no. 46456 (note 376 above) 60.
[396] Ibid.
[397] Ibid footnote 34.
[398] Ibid.
[399] Ibid.

Approximately 50 per cent of the supervisory consultants emanated from Basotho.[400] However, wage-paying jobs in the LHWP and clothing industry were inadequate to reduce unemployment rates and most people in rural areas still do not have jobs.[401] Thus, the LHWP has not reduced unemployment in Lesotho.

Another issue that has hindered the equitable sharing of the benefits produced out of the project is the administration of the royalties. Royalties from the water in the LHWP commenced in 1996 and a major part of this income was preliminarily allocated in the Lesotho Highlands Revenue Fund (hereafter, LHRF).[402] Despite preliminary progress in initiating a poverty-driven public works program, the Fund was plagued by a myriad of problems.[403] The choice of certain investments was opaque and weaknesses were found in financial management.[404] The Fund was halted in 1997.[405] Linked to Phase 1B, as a condition for World Bank support, a new reconfigured fund, the Lesotho Fund for Community Development (hereafter, LFCD), was set up which sought to facilitate community-oriented development, job creation, and poverty alleviation.[406] However, various aspects of the LFCD have been lambasted for failing to administer the reforms and transparency geared instruments recommended as a result of its forerunner, the LHRF, such as innovative budgeting processes and annual audits.[407] In its assessment of Phase 1B and the Community Development Support Project, the World Bank lamented the LFCD's susceptibility to "political capture".[408] Second, instead of technical experts, the LFCD's Board included more politicians than what was required, and the royalties received eventually funded politically driven investments that lack public participation.[409] This is not in line with the principle of 'equitable participation'.

Similarly, the LFCD Board did not install the two required community members and it is argued that it hindered the LFCD management's capacity to work as a vehicle for community

[400] Ibid.
[401] Ibid 61.
[402] Ibid.
[403] Ibid.
[404] Ibid.
[405] Ibid.
[406] Ibid.
[407] Skinner, Krauss & Newborne (note 393 above) 24; LJ Haas, L Mazzei & D O'Leary 'Lesotho Highlands Water Project : communication practices for governance and sustainability improvement (English)' World Bank workingpaper no. 200 (2010) 13-14 <http://documents.worldbank.org/curated/en/672401468056329045/Lesotho-Highlands-Water-Project-communication-practices-for-governance-and-sustainability-improvement>.
[408] Skinner, Krauss & Newborne (note 393 above) 24-25; World Bank 'Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)' (note 388 above) 24.
[409] Skinner, Krauss & Newborne (note 393 above) 25.

development by prohibiting internal audits, the building of capacity, and specialist departments.[410] Thus, the poor administration of royalties in the LHWP has hindered the 'equitable participation' imperative and compromised the benefit-sharing mandate.

The World Bank also found that providing finance to the LFCD from royalties increased susceptibility to corruption with funds being considered as a gratuity by affected people and politicians.[411] The distribution of money through the government's budgetary instruments would have been appropriate, although some contend that most income already allocated to the normal budget instead of either of the two LHWP project funds.[412] The LHWP also illustrated the significance of organisational expertise in addressing environmental and social issues, with beneficiaries facing poor institutional procedures and communication hurdles.[413] Significantly, in the transboundary domain, the project is regarded as having developmental lessons for other projects implying that transboundary benefit-sharing between countries was more properly supervised than initiatives for community development.[414] This adds to the notion that the project has mostly failed to equitably share the benefits arising from the LHWP. Thus, the institutions tasked with distributing benefits have impeded the equitable sharing of benefits.

A further conundrum in fulfilling the LHDA's goal was the elimination of District Development Councils and Village Development Councils.[415] These institutions were required to provide technical expertise and occupy a fundamental role in approaches that are geared toward community development.[416] The inadequate human resources and the change in the institutional apparatus affected the consultation mandate of the LHWP.[417] In this regard, the World Bank's assessment of Phase 1B found that directing funds through the budget of the national government would have been the more appropriate avenue in light of the challenges encountered with the appointed fund.[418] In a way, this controverts other instances in which it is actually the provision of funds through national fiscus that raises concerns from local

[410] Ibid.
[411] Ibid. *See Mochebelele v Director of Public Prosecutions, Gauteng & others* (377/2018) [2019] ZASCA 82 (31 May 2019) para 2; World Bank 'Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)' (note 388 above) 7.
[412] Skinner, Krauss & Newborne (note 393 above) 25.
[413] Ibid 26.
[414] Ibid.
[415] Ibid 25.
[416] Ibid.
[417] Ibid.
[418] Ibid 59; World Bank 'Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)' (note 388 above) xi.

communities affected by a project in respect of openness and accountability in the management of the fund.[419] On the contrary, in the LHWP, the decision-making has been steered away from its mandate due to the over-concentration of politicians on the Board without civil society representatives.[420] It must be noted that in respect of benefit-sharing, the LHWP fails to expressly state how the fruits of cooperation would be distributed to the affected communities.[421] Thus, the benefits of the LHWP have not been equitably shared, thereby hindering equitable participation.

Moreover, according to the Lesotho Country Economic Memorandum, the electricity generation costs are more due to problems in acquiring financing, and in fact, it would be cheaper to import electricity from South Africa.[422] Annual energy production is needed to satisfy domestic and export needs.[423] This is a fundamental violation of the Phase II Agreement in that it requires that the 'Operating Rule' for the project must guarantee the best options for the long-term energy security of Lesotho without reducing the advantages derived from the water supply system.[424] Therefore, the LHWP has not provided a boon to Lesotho if Basotho citizens must spend more money to get electricity yet this is this was the very object and benefit that was supposed to be derived from the LHWP.

Recently, a solar panel electrification project, the Barefoot College Solar Project has been implemented and it has been well received with the beneficiaries submitting that the solar system has had a huge impact on their livelihoods and lighting was among many of the benefits identified.[425] In the interim, the main benefit reported was the savings relating to no longer having to purchase candles, or illuminating paraffin or having to pay for cell phone charging.[426] This initiative has the potential to restore livelihood, but lighting alone is insufficient to improve livelihoods except perhaps through improved education in the long term.[427] It is unlikely that handicraft or other projects being facilitated by lighting will succeed on a huge scale without training and access to markets.[428] Also, while the electrification is a benefit to households, there is little proof that the project in its current form has the potential for

[419] Skinner, Krauss & Newborne (note 393 above) 59.
[420] Ibid 26.
[421] World Bank Report no. 46456 (note 376 above) 62.
[422] Ibid 57; Skinner, Krauss & Newborne (note 393 above) 26.
[423] Skinner, Krauss & Newborne (note 393 above) 25.
[424] Phase II Agreement art 7.2(b).
[425] Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2016) (note 308 above) 16.
[426] Ibid.
[427] Ibid.
[428] Ibid.

livelihood restoration or social development.[429] This is in contravention of the LHWP, which provides that the project must ensure a standard of living higher than occurring at the time of the first disturbance.[430] In addition, although the economy developed due to the LHWP and garment exports have significantly increased, poverty remained largely unchanged.[431] This is because the rural areas where most poverty is prevalent, benefited marginally from the LHWP.[432]

Overall, the World Bank has also submitted that the main environmental and social effects related with the civil aspects of LHWP were found to be effectively reduced under Phase 1B; all relevant project locations were positively attended to, household standards of living sustained, full compensation was provided, and downstream effects addressed.[433] The bigger conundrum were those related to the broader development issues, which were a fundamental goal of the LHWP.[434] Unfortunately, during the LHWP's most successful era, the record high growth in Gross Domestic Product did not result in adequate creation of employment opportunities or a growth in household income for the rural indigent.[435] However, this needs to be read with prudence as it is assumed that without the LHWP, with poor patterns of payments and the changes in the domestic economy, poverty could have been exacerbated.[436] The 56/44 split employed in the LHWP, instead of the simple 50/50 split, probably illustrates the dire economic status of Lesotho in comparison to South Africa.[437] The significant challenge is establishing instruments that can adequately and in an opportune way, convert these novel benefits of cooperation into economic development and poverty alleviation.[438]

In the same vein, the LHWP has found that the beneficiaries of the compensation given to affected communities have no knowledge of how to use or invest these funds and that the LHDA employees are not equipped to advise these indigent people.[439] It has also been found that resettled people heavily rely on compensation for their basic needs, which makes it difficult

[429] Ibid.
[430] LHWP art 7.18 and Preamble.
[431] World Bank Report no. 46456 (note 376 above) 60.
[432] Ibid.
[433] Ibid 62.
[434] Ibid.
[435] Ibid 63.
[436] Ibid.
[437] Ibid.
[438] Ibid.
[439] Lesotho Highlands Water Project Report of the Panel of Environmental Experts (2016) (note 308 above) 12.

for them to reconfigure their lives and become self-reliant.[440] This invariably hinders their ability to re-establish their livelihoods.[441] The goal of sustainable food security has not been achieved.[442] Thus, the benefits of the compensation lump sum are lost and ephemeral. It follows that since the LHDA has adversely affected the livelihoods of the affected communities, that it must also effectively find methods to assist these affected communities to utilize these compensation funds in a manner that restores their livelihoods rather than make their livelihoods worse than before the project was implemented. This would then bring the project into line with the purpose of the Phase II Compensation Policy, which is to ensure that the livelihoods of the affected people are not inferior to that occurring at the time of the first displacement by the Project.[443]

A further submission is that project income has partially not been employed for clear objectives and identified for poverty alleviation as it has not reached the affected people with other people disputing the rationale of simply implementing a fund and striving for proper management without engaging with civil society.[444] The LHWP has also been criticised for the significant environmental impacts and non-participation of riparian communities and stakeholders as well as the effects on those lower riparian communities with the lack of government motivation to develop, not only resuscitate livelihoods.[445] The World Bank's evaluation of Phase 1B was that it was 'moderately satisfactory' and the community development support project 'unsatisfactory', stipulating that royalties were not assisting poverty alleviation as originally planned.[446]

It can then be seen that even though the LHWP has poured income into the coffers of the Lesotho economy, this capital injection did not translate into improved livelihoods and income for the Basotho citizens. The benefits of the LHWP have not been shared equitably because of poor administration and distribution of the benefits and the failure of the Lesotho government to ensure that the affected communities translate the compensation into tangible benefits. The LHWP has failed to ensure that the jobs created in the project benefit the Basotho

[440] World Bank 'Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)' (note 388 above) 32.
[441] Ibid.
[442] Ibid 1.
[443] Phase II Compensation Policy (note 299 above) 2; LHWP art 7.18.
[444] Skinner, Krauss & Newborne (note 393 above) 25; World Bank 'Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)' (note 388 above) 11.
[445] Skinner, Krauss & Newborne (note 393 above) 26.
[446] World Bank 'Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English) (note 388 above) 8.

citizens particularly those most affected by the project. Thus, the project has had little or no impact on the poverty and unemployment suffered by the indigent communities that were displaced by the LHWP. To date, the project has failed in its "desire" to improve the standard of life the people of Lesotho as it stipulated in its Preamble to the LHWP. There is no doubt then, that the LHWP has not benefitted South Africa and Lesotho mutually and equitably. This means that the LHWP contravenes the principle of ''equitable and reasonable utilization'. This further entrenches the notion that South Africa has virtually acquired control of Lesotho's water resources.

In respect of 'benefit sharing', the ZAMCOM Agreement provides that the Member States must seek to achieve equitable and reasonable utilization with the object of acquiring benefits in accordance with adequate conservation of the environment.[447] In this way, the ZAMCOM agreement is in line with the UN Watercourses Convention and the Revised Protocol, which require consideration of the protection of the environment.

Benefit-sharing in the ZAMCOM Agreement is managed under the Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin that provides that it is essential for the ZAMCOM countries to develop infrastructure that facilitates the sharing of benefits.[448] Furthermore, the ZAMCOM has followed the approach of Southern African countries on benefit sharing. Southern Africa has made several initiatives to develop benefit-sharing mechanisms and this has been addressed through two primary instruments: firstly, through context-specific agreements for the maintenance and use of infrastructure developed specifically for economic benefits, and secondly, through the more holistic and wider strategic approach IWRM.[449] In terms of the first mechanism, the Zambezi River Authority Act concluded between Zambia and Zimbabwe within the ambit of the ZAMCOM Agreement, is tailored to the two countries and spells out the shared benefits of transboundary cooperation around water.[450] This led to the Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River, which seeks to ensure the following: that Zimbabwe and Zambia have a benefit-sharing agreement in respect

[447] ZAMCOM Agreement art 14.1.
[448] <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/Zambezi%20River_Basin_IWRM_Strategy_ZAMSTRAT.pdf>.
[449] The South African Institute of International Affairs 'Cooperative Water Governance for Climate Resilience: Are Institutional Arrangements in Southern Africa Fit for Purpose?' Occasional Paper 268 (2017) 11 <https://saiia.org.za/research/cooperative-water-governance-for-climate-resilience-are-institutional-arrangements-in-southern-africa-fit-for-purpose/>.
[450] Ibid.

of the Zambezi River; to achieve for the socio-economic development of the riparian countries, the best possible advantage from the natural bounty bestowed by the waters for the Zambezi River and to increase the use of the waters for power generation and for any other objective to the benefit of both countries.[451] On the whole, both countries agree to share all the available water from the Kariba Dam equally in line with the prescribed procedures.[452] The contracting States also agree to share all accessible water from dams that may be built on the Zambezi River in quantities to be established by the signatories to this agreement, with due consideration of their allotted responsibilities in the relevant construction costs to share these costs equitably.[453] To acquire the most benefit for the two signatories, the Kariba power generating projects must, as much as is rationally possible, be implemented together with the other power generating projects.[454] This is commendable because it negates a conflict of uses between the two neighbouring States.[455] Thus, the ZAMCOM Agreement evinces equitable benefit sharing with a clear framework on how to share the benefits from the Zambezi River.

However, riparian countries in Southern Africa often view benefit sharing with the need for a better approach to measuring and allocating the costs and benefits created by specific investment activities undertaken in shared basins.[456] One example is the perception of cost-sharing for the Kariba Dam Rehabilitation Project that is currently jointly managed by Zambia and Zimbabwe.[457] The two countries have secured funding to assist the Zambezi River Authority Act in improving the safety and reliability of the dam, which, among other important functions, ensures flood management for the downstream country of Mozambique.[458] Based on the indirect benefit enjoyed by Mozambique, both Zambia and Zimbabwe believe that Mozambique should also share the cost of the project.[459] It has been submitted that multilateral agreements such as the ZAMCOM Agreement do not provide for a substantive instrument through which benefit sharing can be applied to water utilization at a basin-wide level.[460]

[451] Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River Preamble.
[452] Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River art 23.1.
[453] Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River art 23.2.
[454] Annexure I (Article 23) Working Arrangement for the Sharing of Water from Kariba Dam (adopted 28 July 1987) para 7 read with art 23 of the main agreement.
[455] The South African Institute of International Affairs (note 449 above) 13.
[456] Ibid.
[457] Ibid.
[458] Ibid 14.
[459] Ibid.
[460] Ibid.

However, they make provision for a dialogue on compensation in the case of a loss of benefits by one member State arising from activities by other States in the basin.[461]

In terms of the second mechanism, the internationally acclaimed IWRM approach is hailed as the primary tool through which benefit-sharing principles could be understood and implemented.[462] IWRM is the guiding principle finding a balance between the differing social, economic and environmental aspects of water utilization to realise the goal of mutual benefits for the riparian States.[463] In this regard, a World Commission on Dams study noted that the Kariba Dam project did not have benefit sharing with the multitude of people who were displaced by the dam.[464] It is submitted that while the Kariba Dam is crucial for regional electricity supply and has achieved many economic benefits, the displaced communities lack access to electricity or running water.[465] In 1996, the Zambezi River Authority accepted the contention that reparations must be paid as part of the objective of benefit-sharing with the communities that were moved away by the Kariba Dam.[466] There was no assessment of the ecological impacts of the Kariba and therefore, baseline studies on any of the environmental parameters are unavailable.[467] Despite the initial failure to estimate the population of people to be resettled, the actual expenditure on this activity did not change.[468] Compensation was not provided or was grossly insufficient.[469] The settlers were not regarded as potential beneficiaries of the scheme, treated "like animals" and were not included in the project design.[470] The Tongas of Zimbabwe, who were the displaced community, were never availed an opportunity to benefit from the electricity from the Kariba Dam.[471] The Zambezi River Authority did not accept liability for the forced relocation, but it acknowledged that the resettlement did not consider the concerns of the displaced communities.[472] The people who benefitted were millions of electricity consumers, the copper mines and other industries, who benefitted from

[461] Ibid.
[462] Ibid 11.
[463] ZAMCOM Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin (2008) 3 <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/Zambezi%20River_Basin_IWRM_Strategy_ZAMSTRAT.pdf>.
[464] C Mafuta 'Benefit sharing in the Zambezi River Basin – myth or reality?' (2006) 7(2) *The Zambezi* 3.
[465] Ibid.
[466] Ibid.
[467] Word Commission on Dams WCD Case Study Kariba Dam Zambia and Zimbabwe - Final Report: (2000) 64 and 76 <www.dams.org>.
[468] Ibid 15.
[469] Ibid 46.
[470] Ibid.
[471] Ibid.
[472] Mafuta (note 464 above) 3.

low electricity prices and employees of the national parks and tourism created as a result of Kariba.[473] There was also improved access to road networks.[474] Thus, most of the benefits went to people from outside the dam basin, but the affected communities, especially those displaced by the dam generally, could not acquire these economic benefits due to lack of finance or education.[475]

On the strength of its evaluation pertaining to the lack of benefit-sharing in the Kariba Dam project, the Zambezi River Authority set up the Zambezi Valley Development Fund in 2000 and issued proposals for the implementation of development projects to address basic needs in the area.[476] The fund was created by the Zambezi River Authority in 1997 to provide funds for the institution of sustainable schemes that seek to reduce the effect of the displacement of the affected people in Zambia and Zimbabwe.[477] It seeks to raise finance for sustainable schemes to reduce the effect of the displacement of people caused by the Kariba Dam project and is currently involved with affixing grinding mills; building boreholes, schools and houses, and rehabilitation of irrigation schemes and the supply of medical equipment.[478] The Fund has serviced 19 projects at a total cost of approximately US$ 600 000.00 since 1997.[479]

What more, the effects of flow changes by major dams like the Kariba, Cahora Bassa, Itezhi-Tezhi and Kafue Gorge include flood reduction, the upsurge in annual low flows, and variations in the quality of water.[480] This has impacted people and wildlife.[481] This has benefitted urban populations through an electricity supply and agricultural projects which need improved river management to ensure a decent water supply.[482] Regional economic development requires core infrastructure that allows benefit sharing.[483] However, access to safe

[473] Word Commission on Dams (note 496 above) xiv and 47.
[474] Ibid xiv.
[475] Ibid.
[476] Mafuta (note 464 above) 3.
[477] Zambezi Valley Development Fund (ZVDF) (1997) <http://www.zaraho.org.zm/corporate-social-responsibility/zambezi-valley-development-fund-zvdf>.
[478] Ibid.
[479] Nkandabbwe Irrigation Scheme Sinazongwe – Zambia Zambezi Valley Development Fund Projects <http://www.zaraho.org.zm/sites/default/files/Nkandabbwe%20Brochure-min.pdf>.
[480] ZAMCOM Integrated Water Resources Management Strategy and Implementation for the Zambezi River Basin (note 463 above) 14.
[481] Ibid.
[482] Ibid.
[483] Ibid 18.

potable water supply and proper ablution amenities is still poor in most of the riparian States despite the fact that there has been some progress over the last five years.[484]

In addition, the Southern African Power Pool (SAPP) electricity generation expansion plan over the period up to 2025 contemplates the development of virtually all electricity generation plants in the Zambezi River basin.[485] These power plants were identified to allow a coordinated generation and transmission development plan proffering the maximum benefits of electricity generation.[486] All these processes have been combined with the ZAMCOM Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin, which provides that the strategic objective under the Challenge of Integrated and Coordinated Water Resources Development and Management is to "develop and manage water resources so as to serve social and economic development in the Basin".[487]

In respect of the Batoka Gorge Hydro-Electric Scheme, there has been an attempt at selecting a location that acquires the highest benefit for the people.[488] Benefits connected with the mooted Batoka project include job creation, buying of domestic goods and services, and socio-economic development.[489] These could be improved by additional schemes in the area, which must create jobs for local communities and improve procurement as much as possible.[490] The Hwange Rural District Council in Zimbabwe and Chief Mukuni's chiefdom in Zambia are formulating proposals to increase and improve the economic benefits of local if possible.[491] Consequently, there is a concerted effort to comply with the principle of equitable benefit-sharing in the ZAMCOM and projects launched under its banner, such as the Zambezi Authority Act. Overall, it can be argued that the ZAMCOM Agreement has substantially complied with the benefit-sharing imperative.

2.7 'Reasonable utilization' and the LHWP

'Reasonableness' seeks to prevent 'unsustainable' utilization of water.[492] Unsustainable water utilization is 'unreasonable' given the present understanding of the symbiotic relationship

[484] Ibid.
[485] Ibid 25.
[486] Ibid.
[487] Ibid 29.
[488] Development of the Batoka Gorge Hydro – Electric Scheme Project Overview Document (note 231 above) 29.
[489] Ibid 49.
[490] Ibid.
[491] Ibid.
[492] Wouters (note 67 above) 37.

between environment and development.[493] The International Law Commission (hereafter, ILC) submits that there is a difference in the terms 'reasonable utilization' and 'equitable utilization'.[494] 'Reasonable utilization' is employed in the assessment of the nature of the use, whereas 'equitable utilization' requires the integration of the different uses between riparian States when there are conflicting uses of water.[495] The 'reasonable man' test can be used to create a neutral threshold to evaluate conduct.[496] Through the use of this test, it can be seen then, that the 'reasonableness' requirement does not require the most effective use available nor the use of the best technology.[497] 'Reasonableness' is different from the principles of 'beneficial' or 'best possible' utilization.[498] It embodies the notion of 'rationality' and it incorporates the stages of economic development of a country.[499] However, even 'reasonable utilization' of a transboundary watercourse might still be impugned when pitted against other uses through the principle of 'equity'.[500] This means that what may be regarded as 'reasonable' by one riparian State, can be deemed 'inequitable' when evaluated holistically considering the needs of all riparian States.[501] Thus, 'reasonable' uses must also give effect to the principle of equitable utilization.[502] Consequently, 'reasonable utilization' is concerned with the nature of use and thus complements the right to 'equitable utilization', which propagates access to the shared watercourse.

The Helsinki Rules provide that a riparian State should not be denied the 'present reasonable use' of the waters of a shared watercourse to allocate for a riparian State a future use of these waters.[503] This means that the Helsinki Rules imply that the predetermined water quantity provisions in Annexure II of the LHWP would be trumped by the current 'reasonable uses' of the water if a conflict of uses occurs.[504] This rule accords with logic and is pragmatic. However, this rule is subject to the proviso that the current 'reasonable' use may persist unless the elements justifying its continuation are superseded by other elements leading to the finding that it be changed or eliminated to cater to a conflicting use.[505] Thus, it has been opined that

[493] Ibid.
[494] User's Guide (note 19 above) 107.
[495] Ibid.
[496] Ibid 108.
[497] Ibid.
[498] Ibid.
[499] Ibid.
[500] Ibid.
[501] Ibid.
[502] Ibid.
[503] Helsinki Rules art VII.
[504] See LHWP: Annexure II: Minimum Quantities for Water Delivery.
[505] Helsinki Rules art VIII.1.

'reasonableness' as employed in the Helsinki Rules is an articulation of both fairness and a restriction on use.[506] In this respect, the Berlin Rules provide that riparian States have the right to participate in the utilization of a shared watercourse in an equitable, 'reasonable', and sustainable manner.[507] Basin States must also in their jurisdictions, manage the waters of a shared watercourse in an equitable and 'reasonable' manner while according due consideration for the duty not to cause material harm to other basin States.[508] In this regard, the Revised Protocol advocates for 'reasonable utilization' of a shared watercourse.[509] Similarly, the UN Watercourses Convention calls for 'reasonable utilization' of shared watercourses.[510] The Convention on the Protection and Use of Transboundary Watercourses and International Lakes also requires State parties to use transboundary waters in a reasonable manner.[511] However, it can be argued that there is insufficient jurisprudence on the constituent elements and actual meaning of the principle of 'reasonable utilization' of water. It is accepted in this study, that 'reasonable utilization' connotes the quality of use of a shared watercourse.

On this score, the Phase II Agreement creates an 'Operating Rule' for the Phase II that seeks to ensure "optimal water security" for South Africa and the best options for the "long term energy security" of Lesotho without reducing the benefits obtained from the water supply system and providing for reparations for the "loss of benefits" from the hydropower projects, either in cash or kind; and ensuring that Lesotho is not disadvantaged with regard to benefits ensuring from the requirements of the LHWP in respect of royalty payments.[512] This provision is fundamental in a number of respects; first, Article 7 of the Phase II Agreement ensures that adequate water is supplied to South Africa and second, that it provides for the long-term energy security of Lesotho. However, these two obligations must not result in the diminution of the benefits acquired from the water supply system. In this way, Article 7 of the Phase II Agreement mimics the import of Article 4.2 of the LHWP, which provides that 'domestic water use,' i.e. water for personal and household needs and the energy generation and supply to Lesotho is an "ancillary development" which must never detract from the supply of water to

[506] M Vick 'The Law of International Waters: Reasonable Utilization' (2012) 12 *Chicago-Kent Journal of International and Comparative Law* 141,155.
[507] Berlin Rules art 10.1.
[508] Berlin Rules art 12.1.
[509] Revised Protocol art 2(b) and art 3.7(a).
[510] UN Watercourses Convention art 5.1.
[511] Convention on the Protection and Use of Transboundary Watercourses and International Lakes (adopted 17 March 1992, entered into force 6 October 1996) art 2(c).
[512] Phase II Agreement art 7.2.

South Africa. However, these current 'reasonable' uses of water in the LHWP in a conflict of uses would have to be weighed against Lesotho's domestic water law.

It is my view that the LHWP and Lesotho's domestic water legislation are patently incompatible. This is because section 5 and 6 of the LWA prioritise the provision of water for the 'domestic water uses' of Lesotho residents in a conflict of uses. This patently contradicts the LHWP and Phase II Agreement that regard Lesotho's 'domestic water uses' or its 'potable water uses, irrigation and other uses', as "ancillary developments" that must never detract from the supply of water to South Africa. Based on the reasonable man's test, the current water allocation regime of the LHWP compromises the quality of use for Lesotho in a conflict of uses. However, the paucity of jurisprudence in this regard does not permit a proper and comprehensive evaluation of the 'reasonability' of the water uses in the LHWP. Neither does it precisely and adequately address the question of the constituent elements of the principle of 'reasonable utilization'. Since 'reasonable utilization' hinges on 'sustainable' use of a shared watercourse, this means that notion of whether there is 'reasonable utilization' of the LHWP will be assessed in Chapter 3 under the principle of 'sustainable utilization', which is a sub-principle of the principle of 'sustainable development'.

2.8 Conclusion and recommendations

An inescapable conclusion from this discussion of the principle of 'equitable and reasonable utilization' is that 'equitable utilization' demands fair, proportional, flexible and just sharing of transboundary water resources that denies preferential treatment and endorses the "perfect equality" of all riparian States. This must be informed by a "reasonable accommodation" of the interests of all riparian States. This approach is also emboldened by the recognition of 'equity' as a component of the right of access to water. In this regard, the current water allocation provisions of the LHWP and the Phase II Agreement are unfair, unjust, and inequitable, and they prevent access to the water in the LHWP to Basotho residents. This also contravenes the right to "adequate" water of Basotho citizens. The brazen disregard for the "perfect equality" of both riparian States as well as the subtle creation of a preferential regime in the LHWP regime, contravenes the principle of 'equitable utilization'. In fact, the failure to infuse and substantively apply this superordinate norm implies the lack of an 'equitable participation' of Lesotho in the drafting and the negotiation of the water allocation paradigm of the LHWP. The rationale for the absence of the principle of 'equitable and reasonable utilization' is brought to bear by the unfair and inequitable provisions of the LHWP regime. In

this way, the LHWP contravenes the principles of ‘equitable utilization’ and ‘equitable participation’. This encapsulates the ‘hydrocolonisation’ of Lesotho.

Consequently, in a conflict of uses, Lesotho would be compelled to choose between its domestic water obligations and its obligations under the LHWP. This conundrum can be resolved by resort to the concept of ‘vital human needs’ as espoused by Article 10.2 of the UN Watercourses Convention. In essence, ‘vital human needs’ refers to water for potable water uses, personal hygiene and food preparation as well as preserving an ecosystem. According to Article 10.2 of the UN Watercourses Convention, vital human needs trump all other competing water uses. This means that Lesotho would be able to argue that the ‘domestic water uses’ contemplated under sections 5(2) and 6 of the LWA, i.e. in a ‘conflict of uses’, trump the water allocation provisions of the LHWP and the Phase II Agreement.

In this regard, it is my view that the ZAMCOM Agreement recognises and complies with the principle of ‘equitable utilization’ and ‘equitable participation’. The Zambezi River Authority Act and the projects that have been launched under the banner of the ZAMCOM Agreement such as the Kariba Dam project, give effect to these principles of ‘equitable utilization’ and ‘equitable participation’.

A further jurisprudential contribution of this chapter is that without ‘equitable participation’, the determination of the ‘equitability’ and ‘reasonability’ of a water use becomes a speculatory process. This means that in the absence of the concomitant duties to share information and cooperate, ‘equitable utilization’ and ‘reasonable utilization’ would be impossible to achieve. In fact, the duties to cooperate and share information are inherent requirements for the fulfilment of all the sub-principles of the principle of ‘equitable and reasonable utilization’. These same considerations apply to the achievement of the principles of ‘sustainable development’ in Chapter 3, which also hinges on the correlative duties of cooperation and information sharing.

However, cooperation need not occur through the orthodox treaty platform as seen in the Mekong River basin. This is because cooperation can still occur without a riparian State signing or acceding to a treaty as evinced by the Lancang-Mekong Cooperation Mechanism (hereafter, LMC). The LMC seeks to improve cooperation between China and the riparian States that are signatories to the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (hereafter, MRA) to promote regional

development.[513] China is not a signatory to the MRA. Thus, the LMC is a significant cooperation and information sharing mechanism in that it ensures the cooperation and consequently, the 'equitable participation' of all the relevant riparian States in the Mekong River basin. This whole process has culminated in the Agreement on the Provision of Hydrological Information of the Lancang/Mekong River in Flood Season by the People's Republic of China to the Mekong River Commission, which ensures the equitable participation and utilization of the Mekong River by the River riparian States together with China.[514] This finding then means that the failure to conclude a water-sharing agreement between riparian States to ensure cooperation so as to achieve 'equitable and reasonable utilization', is not fatal to achieving 'equitable utilization' of a shared watercourse. Thus, the refusal of a party to sign or accede to a treaty regulating a shared watercourse can still be remedied through cooperation outside of the orthodox treaty annuls.[515] This then reinforces the notion that cooperation is the *sine qua non* of the principle of 'equitable and reasonable utilization'.

On the issue of benefit-sharing, the LHWP has developed a comprehensive framework premised on 'equitable sharing' of benefits. However, despite this obligation, it has been found that the benefits of the LHWP have not been 'equitably' shared between South Africa and Lesotho. This is because while South Africa enjoys virtually uninterrupted water supply from Lesotho, the LHWP has made no impact on poverty reduction and unemployment in Lesotho. The administration of the payment of compensation has been hampered by corruption and political interference, hence the LWHP Anti-Corruption Policy was recently promulgated.[516] The experience of Lesotho in the LHWP shows that there is a need to ensure the proper appointment of the administrators and management of the benefits that arise out of a shared

[513] Lancang-Mekong Cooperation Mechanism (10 August 2017) <http://www.lmcchina.org/eng/>; See Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (adopted and entered into force 5 April 1995).

[514] Agreement on the Provision of Hydrological Information of the Lancang/Mekong River in Flood Season by the People's Republic of China to the MRC (adopted 29 August 2008).

[515] This has happened in the Mekong with China not signing the Mekong River Agreement but concluding the Lancang-Mekong Cooperation Mechanism on 10 August 2017 <http://www.lmcchina.org/eng/>; See Agreement on the Provision of Hydrological Information of the Lancang/Mekong River in Flood Season by the People's Republic of China to the MRC; Lancang-Mekong Environmental Cooperation Strategy 2018-2022 (adopted 14 March 2019) <http://www.chinaaseanenv.org/lmecc/strategy_and_mechanism/environmental_cooperation_strategy/201711/W020190412545577768077.pdf> ; Five-Year Plan of Action on Lancang-Mekong Cooperation (2018-2022) (adopted 10 January 2018) para 2 <http://www.lmcchina.org/eng/hzdt_1/t1525364.htm>;Sanya Declaration of the First Lancang-Mekong Cooperation (LMC) Leaders' Meeting--For a Community of Shared Future of Peace and Prosperity among Lancang-Mekong Countries (adopted 23 March 2016) para 4 <http://www.china.org.cn/china/Off_the_Wire/2016-03/23/content_38096975.htm>; Phnom Penh Declaration of the Second Mekong –Lancang cooperation leaders Meeting 'Our River of peace and Sustainable Development' (2018) para 11 <http://pressocm.gov.kh/en/archives/21699>.

[516] LHWP Anti- Corruption Policy – 2019 <http://www.lhda.org.ls/lhdaweb/Uploads/Documents/Governance/LHWP_Anti-Corruption_Policy_January_2019.pdf>; See also, Phase II Agreement art 16.

watercourse. Thus, it is not enough that an agreement is reached on how to share the benefits that arise out of a shared watercourse; benefit-sharing also requires that the affected communities are given the necessary knowledge and training to be able to properly use the benefits acquired from a project.

In respect of benefit-sharing, the ZAMCOM provides for the sharing of benefits.[517] The approach to benefit sharing in the ZAMCOM is regulated under the Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin. It is clear that the ZAMCOM Agreement evinces equitable benefit sharing as evinced by the Zambezi River Authority Act.

On this issue of 'reasonable utilization', this study finds that despite the paucity of jurisprudence in this regard, it is my view that the inquiry into 'reasonableness' is an inquiry into the 'rationality' and 'sustainability' of a water use. This inquiry then mirrors the principle of 'sustainable utilization', which is an inherent component of the principle of 'sustainable development'. In light of this finding, an assessment of 'reasonable' uses would be superfluous because the next juncture of the inquiry is an assessment of the LHWP's compliance with the principle of 'sustainable development'.

In the final analysis, a water allocation regime in the LHWP that is equitable would cater to the needs of both Lesotho and South Africa. The accommodation of the water needs of both countries would promote the community of interests that is at the heart of the principle of equitable and reasonable utilization. This community of interests, coupled with equitable participation of Lesotho as well as equitable benefit sharing, would not only promote fairness and justice in the LHWP but also prevent a conflict of uses from occurring in the LHWP and the Orange River basin. In other words, the approach to the equitable and reasonable utilization of the water in the LHWP could inform water allocation in the Orange River in respect of all the riparian States. The value of the principle of equitable and reasonable utilization is in that it can function to prevent a conflict of uses. If a conflict of uses occurs in the LHWP, then it must be resolved according to the concept of 'vital human needs' as an incidence of the principle of equitable and reasonable utilization.

[517] ZAMCOM Agreement art 14.1.

Chapter 3: In what ways does the LHWP comply with the principle of ‘sustainable development’ as an inherent component of the principle of ‘equitable and reasonable utilization’?

Chapter 3: In what ways does the LHWP comply with the principle of 'sustainable development' as an inherent component of the principle of 'equitable and reasonable utilization'?

3.1 Introduction

The main object of this study is to assess whether the Treaty on the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (hereafter, LHWP) complies with the key underlying principles of transboundary freshwater law that address the projected conflict of uses situation. I have argued that despite efforts to promote benefit sharing, the LHWP is 'inequitable' and does not evince 'equitable participation' of Lesotho, and it thus, falls foul of the basic tenets of the principle of 'equitable and reasonable utilization'. However, an inquiry into the LHWP's compliance with the principle of 'equitable and reasonable utilization' would not be complete without evaluating the agreement's compliance with the principle of 'sustainable development'. This is because the principle of 'sustainable development' is an intrinsic component of the principle 'equitable and reasonable utilization'.[1] A transboundary water project could be 'equitable' between two riparians while not being in accordance with the principle of 'sustainable development'.[2] The United Nations Convention on the Law of the Non-navigational Uses of International Watercourses (UN Watercourses Convention) goes as far as to stipulate that the achievement of 'sustainable utilization' is the ultimate objective of the principle of 'equitable and reasonable utilization' of a shared watercourse.[3] It is thus required that the LHWP must comply with the principle of 'sustainable development'.

The courts in Lesotho have not adjudicated on the principle of 'sustainable development'. Fortunately, there is ample jurisprudence in South Africa that climaxed in the Constitutional Court decision in *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment,*

[1] *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay),* Judgment, I.C.J. Reports 2010, p. 14 (hereafter, *Pulp Mills*) para 177; International Law Association New Delhi Declaration of Principles of International Law Relating to Sustainable Development (adopted 6 April 2002) art 2.1.
[2] Birnie, Boyle &Redgwell *International law and the Environment* 3 ed (2009) 561.
[3] United Nations Convention on the Law of the Non-navigational Uses of International Watercourses (adopted 21 May 1997, entered into force 17 August 2014) art 5.1.

Mpumalanga Province (hereafter, *Fuel Retailers*).[4] In this study, I accept the "recurring" or "evolving" elements of 'sustainable development' as identified by the court in *Fuel Retailers*. This approach is prompted by the fact that the LHWP is regulated by the domestic law of both South Africa and Lesotho, and international law. The courts of Lesotho also make routine reference to South African precedents on novel questions of law. With this approach in mind, this chapter comprises two parts: the first part outlines the conceptual and jurisprudential foundation for the principle of 'sustainable development' and the second part substantively explains and juxtaposes the constitutive elements (or sub-principles) of the principle of 'sustainable development' as stipulated in the *Fuel Retailers* judgment with the LHWP. The findings in this regard are then extrapolated onto the Agreement on the Establishment of the Zambezi Watercourse Commission (hereafter, ZAMCOM Agreement) as a transboundary water agreement that illustrates the inequity of the LHWP.

3.2 The principle of 'sustainable development' and the LHWP

'Sustainable development' denotes development that satisfies the needs of the existing generation without hindering the capacity of future generations to satisfy their own requirements.[5] It does not connote a rigid consensus but rather, a dynamic paradigm in which the utilization of resources, economic development, and institutional reform are made with due consideration of the future and present needs.[6] 'Sustainable development' creates a platform for the integration of ecological considerations and development policies.[7] In essence, 'sustainable development' seeks to balance three factors: environmental protection; economic development, and social upliftment, which are the "pillars" of 'sustainable development'.[8]

Furthermore, 'sustainable development' does not require that economic growth must be halted, but rather, it accepts that the difficulties posed by poverty and underdevelopment cannot be addressed if a new wave of growth does not occur in which developing countries occupy a

[4] (CCT67/06) 2007 (6) SA 4 (CC) (7 June 2007).
[5] Report of the World Commission on Environment and Development: Our Common Future (1987): Our Common Future, Chapter 2: Towards Sustainable Development para 27 <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>.
[6] Ibid para 30.
[7] Ibid para 48; D Tladi 'Strong sustainable development, weak sustainable development and the earth charter: towards a more nuanced framework of analysis' (2004) 11 *South African Journal of Environmental Law and Policy* 17, 19; L Feris 'Sustainable development in practice: *Fuel Retailers Association of Southern Africa v Director-General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province*' (2008)1 *Constitutional Court Review* 235-253.
[8] J Glazewski *Environmental Law in South Africa* Loose Leaf (2018) para 1.4.2.1; T Field 'Sustainable development versus environmentalism: Competing paradigms for the South African EIA regime' (2006) 123 *South African Law Journal* 409,414.

greater role and benefit immensely.[9] It is sound that economic development always poses a threat of environmental harm, as it exerts stress on natural resources.[10] However, it is the duty of governments informed by the principle of 'sustainable development', to guarantee that development is strongly linked to the protection of the environment to enhance growth in the long-term.[11] Environmental protection is an inalienable characteristic of 'sustainable develop ment.[12] Therefore, 'sustainable development' pursues a balance between environmental protection, social upliftment and economic development.

'Sustainable development' emanates from the period before the Stockholm Declaration on the United Nations Conference on the Human Environment.[13] State practice indicates that the concept of 'sustainability' has been a characteristic of environmental law since 1893 when the United States of America advocated for its right to ensure the lawful exploitation of seals and to conserve them to the advantage of humanity and protect them from wilful damage.[14] In 1971, the United Nations General Assembly Resolution 2849 called for "rational management" of the environment that seeks to integrate development and environmental protection.[15] Resolution 2849 also requires the pursuit of an optimal balance between development projects and environmental protection.[16] Resolution 2849 also implores countries to improve international co-operation in environmental law, "rational utilization" of the environment and preservation of adequate ecological harmony.[17] "Rational utilization" implies 'sustainable use' of the environment, which is one of the constitutive elements of the principle of 'sustainable development'. Secondly, the consideration of a balance between 'development' and 'sound ecology' is in line with the current conceptualisation of the principle of 'integration', which is a universally accepted sub-principle of the principle of 'sustainable development'. In this way, Resolution 2849 implicitly recognised the principle of 'sustainable development'.

[9] Report of the World Commission on Environment and Development: Our Common Future (note 5 above) para 49.
[10] Ibid para 50.
[11] Ibid.
[12] Ibid.
[13] See United Nations Conference on the Conservation and Utilization of Resources 1949; United Nations General Assembly Resolution 2849(XXVI) (1971).
[14] P Sands *Principles of International Environmental* Law 2 ed (2003) 253; See also *Award between the United States and the United Kingdom relating to the rights of jurisdiction of United States in the Bering's sea and the preservation of fur seals* :15 August 1893 Report of International Arbitral Awards Volume XXVIII (hereafter, *Pacific Fur Seals Arbitration*) pp. 263-276.
[15] United Nations General Assembly Resolution 2849 (XXVI) (1971) Preamble.
[16] Ibid.
[17] Ibid para 1.

Tladi submits that the principle of 'sustainable development' emanates from the Stockholm Declaration on the United Nations Conference on the Human Environment (hereafter, Stockholm Declaration).[18] The Stockholm Declaration provides that environmental protection is cardinal to the development imperative and must not be evaluated separately from it.[19] In this way, it is contended that the Stockholm Declaration articulated 'sustainable development' as its primary principle.[20]

Thereafter, the Fourth ACP-EC Convention of Lomé (hereafter, Lome Convention) provided how certain aspects of the principle of 'sustainable development' can be reconciled in a treaty.[21] Article 33 of the Lome Convention provided that the protection, "rational exploitation" and the "enhancement" of the environment ensures the "safeguarding" of natural resources for the benefit of future generations. The identification of the imperative to "safeguard" the environment and natural resources for "future generations" encapsulates the definition of 'sustainable development'. Furthermore, this provision confirmed the three accepted pillars of 'sustainable development': social upliftment, protection of the environment and economic development. Thus, it has been opined that without specifically mentioning 'sustainable development', this provision provided an exposition of how to incorporate the elements of 'sustainable development 'into a legislative framework.[22] The Lome Convention was replaced by the Cotonou Agreement, which recognises the link between sustainable development and climate change as well as the protection of the environment.[23] Notably, the Cotonou Agreement makes explicit recognition of natural resources and the environment as separate elements in Article 32. While this may seem incongruous as the former is part of the latter, it shows the emphasis on the protection of the rate of utilization of natural resources. It

[18] D Tladi *Sustainable Development in International Law: An analysis of key enviro-economic instruments* (2007) 19-20 <http://www.pulp.up.ac.za/monographs/sustainable-development-in-international-law-an-analysis-of-key-enviro-economic-instruments>; See Stockholm Declaration on the United Nations Conference on the Human Environment (adopted 16 June 1972) principle 8 and principle 11.

[19] Stockholm Declaration principle 13. This is a soft law instrument, which also include amongst others, the Stockholm Declaration on the United Nations Conference on the Human Environment (adopted 16 June 1972) and the Rio Declaration on Environment and Development (adopted June 1992) and International Law Association's New Delhi Declaration of Principles of International Law Relating to Sustainable Development (adopted 6 April 2002).

[20] International Law Association Commentary on the Berlin Rules on Water (2004) 15 <https://www.unece.org/fileadmin/DAM/env/water/meetings/legal_board/2010/annexes_groundwater_paper/Annex_IV_Berlin_Rules_on_Water_Resources_ILA.pdf>.

[21] P Sands & J Peel *et al Principles of International Environmental Law* 4 ed (2018) 219; Fourth ACP-EC Convention of Lomé (1989).

[22] Sands & Peel *et al* (note 21 above) 219.

[23] Cotonou Agreement (adopted 23 June 2000, entered into force April 2003) arts 1, 10 and 32A.

can then be seen that the idea of integrating environmental protection with economic development was gaining acceptance in international law.

Subsequently, the principle of 'sustainable development was incorporated into the Rio Declaration on the Environment and Development (hereafter, Rio Declaration).[24] According to the Rio Declaration, the right to development must be realised to equitably cater to the developmental and environmental requirements of existing and future generations.[25] It has been argued that the tactful genesis of 'sustainable development' in the Brundtland Report did not suggest a diminution on national sovereignty.[26] Furthermore, environmental protection must become a vital facet of economic development and cannot be evaluated separately from it.[27] The Rio Declaration implores all States to co-operate in the imperative of elimination of poverty as an "indispensable" aspect of sustainable development, to reduce the discrepancies in standards of living and augment the needs of humankind.[28] In this regard, the Rio Declaration added a new perspective to the principle of 'sustainable development'. First, the Rio Declaration provides that the elimination of poverty is an "indispensable" part of 'sustainable development'. Presumably, the eradication of poverty falls within the social upliftment pillar of 'sustainable development'. This is a novel approach that has not been replicated often in international law agreements that endorse the principle of 'sustainable development'. Second, the Rio Declaration provides that one of the objects of 'sustainable development' should be to reduce the differences in the standards of living. This builds on the Lome Convention, which called for instant improvement of living conditions.[29] In this way, the Rio Declaration is regarded as a standard to evaluate proposed development projects, and provides the starting point for articulating 'sustainable development'.[30]

The Rio Declaration attempts to achieve a palatable compromise between environment and development.[31] However, principle 1 of the Rio Declaration stipulates that human beings are the primary focus of sustainable development and they have the right to a healthy and fruitful life that is compatible with the environment. It is argued that principle 1 of the Rio Declaration is emblematic of a move towards a human-focused approach to environmental and

[24] Rio Declaration on the Environment and Development (adopted June 1992) principle 3 read with principle 4.
[25] Rio Declaration principle 3.
[26] Birnie, Boyle & Redgwell (note 2 above) 53.
[27] Rio Declaration principle 4.
[28] Rio Declaration principle 5.
[29] Fourth ACP-EC Convention of Lomé art 33.
[30] Sands & Peel *et al* (note 21 above) 223-224.
[31] Ibid 224.

developmental matters elevating human beings to be the primary beneficiaries of sustainable development.[32] Thus, the Rio Declaration is anthropocentric in nature.

It is submitted that the duty to balance environmental protection and economic development serves as the rationale for mandating the infusion of 'green conditionality' in treaties.[33] The insertion of the words "'and developmental'" in the Rio Declaration which was approved by consensus by 176 States, epitomises an immediate shift of the international law rule that is regarded as embodied in principle 21.[34] It is contended that the incorporation of these two words in its unequivocal recognition of 'development', disturbs the intricate balance achieved in the Stockholm Declaration between the right to sovereign utilization of natural resources and the mandate to protect the environment.[35] In fact, these words can be construed to mean that States have the right to follow their development policies.[36] These words could increase the reach of the duty to prevent environmental harm to be incorporated into national development and environment initiatives.[37] In practice, the moderate amendment has not been seen as being employed by States.[38] Thus, 'sustainable development' is regarded as the new international rule that informs environmental law generally.[39]

'Sustainable development' is also given effect to by Agenda 21. Agenda 21 is a by-product of the Rio Conference and like the Stockholm and Rio Declarations, constitutes a non-obligatory foundation and implementation plan for international cooperation for sustainable development.[40] It was hatched as a programme of implementation for the whole world, in order to harmonise environmental protection and development concerns.[41] Agenda 21 evinces a universal shift towards the implementation of national instruments to be augmented and supplemented by international co-operation.[42] According to Agenda 21, the overall objective in terms of water is to meet the freshwater demands of all nations for their sustainable development.[43] Agenda 21 calls for planning for sustainable utilization based on the needs of

[32] Ibid 41.
[33] Ibid 227.
[34] Ibid 42.
[35] Ibid.
[36] Ibid.
[37] Sands (note 14 above) 55.
[38] Ibid 56.
[39] Glazewski (note 8 above) para 1.4.2.1; Birnie, Boyle & Redgwell (note 2 above) 53.
[40] Sands & Peel *et al* (note 21 above) 43.
[41] Ibid.
[42] Ibid 44.
[43] Agenda 21 (adopted June 1992) para 18.7
<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>.

people and priorities within the parameters of national economic policy.[44] Furthermore, Agenda 21 also calls for integrated management of water resources, which must involve environmental, economic and social factors based on the concept of 'sustainability'.[45] Thus, Agenda 21 explicitly identifies the "pillars" of 'sustainable development'. Agenda 21's contribution to environmental law has been considerable.[46] As a "consensus" seeking accord formulated by the international community, it provides the only accepted global instrument for the growth of international law.[47] Secondly, some parts of Agenda 21 might be seen as constituting principles that are immediately part of customary law.[48] Thirdly, it embodied universal acceptance of principles that may assist in the formulation of new norms of international law.[49] Thus, the Rio Declaration and Agenda 21 collectively firmly established the roots of the principle of 'sustainable development'.

In the water context, the UN Watercourses Convention also recognises 'sustainable utilization' as a general principle and as an inherent component of 'equitable and reasonable utilization'.[50] In its Preamble, the UN Watercourses Convention recognises the "conviction" to pursue the facilitation of sustainable utilization of international watercourses for the benefit of existing and future generations. This iteration is in line with the Rio Declaration. In fact, the UN Watercourses Convention provides that 'optimal and sustainable utilization' is the overall objective of the principle of equitable and reasonable utilization.[51] Since the central principle of the UN Watercourses Convention is the principle of 'equitable and reasonable utilization', it follows then that sustainable utilization is the primary objective of the UN Watercourses Convention. It has been argued that the UN Watercourses Convention expressly provides that 'sustainability' restricts the principle of 'equitable utilization'.[52] As shown earlier in the discussion, Article 5.1 of the UN Watercourses Convention subtly seeks to integrate environmental protection and the socio-economic development initiatives of riparian States in a shared watercourse.

The Revised Protocol on Shared Watercourses in the Southern African Development Community (hereafter, the Revised Protocol) followed suit and provides that the primary goal

[44] Agenda 21 para 18.9(b).
[45] Agenda 21 para 18.16.
[46] Sands & Peel *et al* (note 21 above) 44.
[47] Ibid.
[48] Ibid.
[49] Ibid. Birnie, Boyle & Redgwell (note 2 above) 38.
[50] UN Watercourses Convention Preamble read with art 5.1.
[51] UN Watercourses Convention art 5.1.
[52] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 15.

of this agreement is to cultivate stronger cooperation for 'sustainable development' of shared watercourses.[53] The Revised Protocol like the UN Watercourses Convention, provides that the overall purport of the principle of 'equitable and reasonable utilization' is to achieve 'optimal and sustainable utilization' of a shared watercourse "consistent" with the proper preservation of the watercourse for the benefit of present and future generations.[54] This means that the Revised Protocol confirms the link between the principles of 'equitable and reasonable utilization' and 'sustainable development'. By employing the term "consistent", the Revised Protocol seeks to find the intricate harmony between development and environmental protection. This approach mimics the UN Watercourses Convention.[55] In this way, the Revised Protocol identifies the principles of 'sustainable utilization', 'integration' and 'intergenerational equity' as sub-principles of the principle of 'sustainable development. Thus, the UN Watercourses Convention and the Protocol establish the principle of 'sustainable development' for shared watercourses.

Furthermore, the Revised Protocol provides that States must integrate the development of natural resources to improve the standard of living and preservation of the environment to achieve 'sustainable development'.[56] This is the 'integration' principle that operationalises the principle of 'sustainable development'. This provision is significant in that it requires the development of water resources to be aimed at enhancing the standard of living. Thus, the Revised Protocol mimics the Rio Declaration, which sought to eradicate poverty and achieve an improved standard of living as a result of the principle of 'sustainable development'. It has already been established in the discussion on the principle of 'equitable and reasonable utilization' under Chapter 2, that the LHWP has not enhanced the standard of living of the Basotho people, in particular the displaced mountain communities.

The Revised Protocol also provides that State Parties must comply with "existing" rules of international law pertaining to the utilization of the environment to promote 'sustainable development'.[57] This provision is significant in that it implicitly makes 'sustainable development' and 'equitable and reasonable utilization' the primary objects of the Revised Protocol. Even more important, the Revised Protocol entrenches the place of current rules of

[53] Revised Protocol (adopted 7 August 2000, entered into force 22 September 2003) art 2 read with art 3.1 and art 3.7(a); See also, SADC Regional Water Policy (2005) 4 <http://www.sadc.int/files/1913/5292/8376/Regional_Water_Policy.pdf>.
[54] Revised Protocol art 3.7(a).
[55] See UN Watercourses Convention art 5.1.
[56] Revised Protocol art 3.4.
[57] Revised Protocol art 3.3.

customary international law for the signatories to this agreement. This means that the State parties to the Revised Protocol are implicitly bound to existing principles of customary international law. This reinforces the notion that freshwater treaties must comply with the principles of 'equitable and reasonable utilization', 'sustainable development' and 'permanent sovereignty over natural resources' as they are the "existing" rules of customary international law.

In the same vein, the Convention on the Protection and Use of Transboundary Waters courses and International Lakes provides that the signatories to this agreement must formulate and implement as far as possible, relevant legislative instruments to guarantee, *inter alia*, sustainable management of transboundary waters.[58] Similarly, Article 7 of the International Law Association's Berlin Rules on Water Resources (hereafter, Berlin Rules) provides that a State must take all required measures to manage water 'sustainably'. According to the International Law Association, Article 7 of the Berlin Rules espouses the cardinal rule, now an element of customary international law - that States must seek to ensure the sustainable use of water.[59] This was prompted by the imperative of sustainable development that emanates from the Stockholm Declaration, which asserts that environmental problems are caused by under-development.[60] It can be seen that the new watercourse agreements recognise the significance of sustainable utilization of water as a goal.[61] Overall, it has been established that the major water conventions and soft law instruments endorse the principle of 'sustainable development'.

'Sustainable development' has also been affirmed by the United Nations Framework Convention on Climate Change (hereafter, UNFCCC) as a right and fundamental aspect of managing climate change.[62] The Johannesburg Declaration on Sustainable Development also affirms the joint responsibility of States to strengthen the interlinked and symbiotic relationship of the principles of sustainable development, socio-economic development and protection of the environment.[63] The Johannesburg Declaration submitted that the world environment

[58] Convention on the Protection and Use of Transboundary Watercourses and International Lakes (adopted 17 March 1992, entered into force 6 October 1996) art 3.1 (i).
[59] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 15.
[60] Ibid.
[61] Birnie, Boyle & Redgwell (note 2 above) 562; Revised Protocol arts 2(b), 3.1, 3.4 and 3.7(a); Convention on the Protection and Use of Transboundary Watercourses and International Lakes Preamble and art 3.1(i).
[62] United Nations Framework Convention on Climate Change (adopted 4 June 1992, entered into force 21 March 1994) art 3.4. It must be noted that South Africa has ratified the UNFCCC as per *Earthlife Africa Johannesburg v Minister of Environmental Affairs* [2017] 2 All SA 519 (GP) (8 March 2017) para 35.
[63] Johannesburg Declaration on Sustainable Development A/CONF.199/20 (adopted 4 September 2002) (Johannesburg Declaration) para 5.

continues to be damaged, but proposed no particular actions above a universal acceptance of sustainable development.[64] The Johannesburg Declaration also reaffirmed the State parties' fidelity to the Rio Declaration.[65] However, Sands opines that the Johannesburg Declaration is placid and is hampered by a few specific binding commitments.[66] Thereafter, the Paris Agreement located the response to climate change within the prescripts of sustainable development.[67]

In this regard, the International Law Association New Delhi Declaration of Principles of International Law Relating to Sustainable Development (hereafter, New Delhi Principles) provide that 'sustainable development' is viewed as a universal obligation and that the principle has received worldwide recognition.[68] It also emphasised that 'sustainable development' is a universal mandate and this requires that it should be integrated into all relevant law to fulfil the objects of environmental protection, development, and protection of human rights.[69]

Recently, the United Nations General Assembly Resolution: Transforming our world: the 2030 Agenda in its Preamble, affirms the three pillars of 'sustainable development'.[70] Furthermore, this Resolution provides that eradicating all aspects of poverty is the primary global conundrum and an inalienable ingredient of sustainable development.[71] This is particularly significant in that it makes poverty eradication a primary object of 'sustainable development'. The Resolution also explicitly requires that the use of water in rivers, lakes, and aquifers must be sustainable.[72] As part of this Resolution, the United Nations Sustainable Development Goals demand that accessibility and sustainable development of water and ablution amenities for all must be achieved and they serve together with Agenda 21 as a 'blueprint' for policy implementation on water.[73] It is my argument then, that the United

[64] Sands & Peel *et al* (note 21 above) 48; See Johannesburg Declaration on Sustainable Development A/CONF.199/20 para 1. .
[65] Johannesburg Declaration on Sustainable Development para 8.
[66] Sands & Peel *et al* (note 21 above) 48.
[67] Paris Agreement (adopted 22 April 2016, entered into force 4 November 2016) art 2.1. South Africa acceded to the Paris Agreement as per *Earthlife Africa Johannesburg v Minister of Environmental Affairs* (note 62 above) para 35.
[68] New Delhi Principles Preamble.
[69] Ibid.
[70] See also United Nations General Assembly Resolution: Transforming our world: the 2030 Agenda for Sustainable Development A/RES/70/1 (2015) para 5.
[71] Ibid para 2.
[72] Ibid para 9.
[73] Ibid. Goal 6 of Sustainable Development Goals <https://www.undp.org/content/dam/undp/library/corporate/brochure/SDGs_Booklet_Web_En.pdf>; M Ladan 'SDGs Framework as the blueprint for climate change action and sustainable development in Africa: role of Law and Parliaments' (2016) 22 *South African Journal of Environmental Law and Policy* 159, 160.

Nations representing more than 90 per cent of the countries in the world, has accepted the principle of 'sustainable development'.

The principle of 'sustainable development' has also been affirmed outside of the environmental law context. For instance, the World Trade Organization Appellate Body has held that the Preamble to the Marrakesh Agreement Establishing the World Trade Organization reflects that the signatories to that Agreement explicitly accepted the principle 'sustainable development', which is universally acknowledged as reflecting an equilibrium between economic, social development and environmental factors.[74] The Marrakesh Agreement Establishing the World Trade Organization was adopted by the Parliament of South Africa in 1995 and is, therefore, obligatory on South Africa in international law, but it is yet to be promulgated into domestic law.[75]

The principle of 'sustainable development' has also received judicial approval. First, in the *Case Concerning Gabcikovo-Nagymaros*, the International Court of Justice (hereafter, ICJ) held that the need to harmonise economic development and environmental protection is encapsulated in the principle of 'sustainable development'.[76] It can then be said that by citing the principle of 'sustainable development', the ICJ contends that the principle has a 'substantive' and 'procedural' facet, in requiring the parties to reconsider the environmental impact of development and the obligation to ensure sustainable utilization of natural resources.[77] McIntyre opines that the ICJ was prepared to consider the principle of 'sustainable development' to establish and implement the environmental duties borne out of the principle of equitable and reasonable utilization of a shared watercourse as stipulated by Article 5 of the UN Watercourses Convention.[78] Significantly, the court in *Gabcikovo-Nagymaros Project (Hungary/Slovakia)* held that it is immaterial that a treaty that was concluded in the past does not provide for the principle of 'sustainable development'; a treaty's interpretation is not rigid and must be adapted to new rules of international law.[79] This means that it is immaterial that the LHWP does not specifically provide for the principles of sustainable development,

[74] WTO Appellate Body Report, *Import Prohibition of Certain Shrimp and Shrimp Products* WT/DS58/AB/R (*Shrimp Turtles*), adopted on 6 November 1998, paras 129 and 153 read with footnote 107; See Preamble to Marrakesh Agreement Establishing the World Trade Organization (adopted 15 April 1994).
[75] *Progress Office Machines v SARS* [2007] SCA 118 (RSA) para 6.
[76] *Gabcikovo-Nagymaros Project (Hungary/Slovakia)*, Judgment, 1.C.J. Reports 1997, p. 7. para 140.
[77] Sands & Peel *et al* (note 21 above) 220.
[78] O McIntyre 'The Role of Customary Rules and Principles of International Environmental Law in the Protection of Shared International Freshwater Resources' (2006) 46 *Natural Resources Journal* 157, 197.
[79] *Gabcikovo-Nagymaros Project (Hungary/Slovakia)* (note 76 above) para 112.

equitable and reasonable utilization and permanent sovereignty over natural resources, which are now part of customary international law.

'Sustainable development' was also confirmed in the *Pulp Mills* case. In this case, the ICJ held that 'sustainable development' encapsulates the link between equitable and reasonable utilization of a shared watercourse and the integration of economic development with environmental protection.[80] The ICJ further held that such utilization must allow for 'sustainable development and this requires the continued preservation of water and the right to the economic development of shared watercourses States.[81] This confirms the notion that the principle of 'equitable and reasonable utilization' ensures the implementation of the principle of 'sustainable development' within the framework of shared freshwater resources.[82] Consequently, it has been held that the principle of 'sustainable development' is now a rule of international customary law.[83] Thus, the principle of 'sustainable development' has been broadly accepted by many international agreements and is now the superordinate norm of the majority of international environmental law agreements.[84] In any event, the validity of the principle of 'sustainable development' does not depend on treaty provisions.[85] It is fundamental for human survival.[86]

It is against this backdrop that the Lesotho legislative framework on 'sustainable development' was established. In this regard, the Constitution of Lesotho stipulates that the environment must be preserved for the benefit of existing and future generations.[87] Building

[80] *Pulp Mills* (note 1 above) paras 75 and 177; See also O McIntyre 'The World Court's Ongoing Contribution to International Water Law: The Pulp Mills Case Between Argentina and Uruguay' (2011) 4 *Water Alternatives* 124-144.
[81] *Pulp Mills* (note 1 above) para 75 and 177.
[82] McIntyre (note 80 above) 138-139.
[83] Dissenting Opinion of Judge Weeramantry : *Gabcikovo Nagymaros Project (Hungary/Slovakia)* (note 76 above) 504; Sands & Peel *et al* (note 21 above) 219; See further, T Murombo 'From Crude Environmentalism to Sustainable Development: Fuel Retailers South' (2008) 3 *South African Law Journal* 481,494-499; L Kotze 'Improving Unsustainable Environmental Governance in South Africa: The case for Holistic Governance' (2006) 9 *PER/PELJ* 75,76; L Kotze 'The Constitutional Court's contribution to sustainable development in South Africa' (2003) 6 *PER/PELJ* 81,93; T van Reenen 'Rudiments of a Jurisprudential Methodology of Sustainable Development: the Judgment of Ngcobo in *Fuel Retailers Association of Southern Africa Pty Ltd v Director General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga and* 2007 (6) SA 4 CC' (2008) 15 *South African Journal of Environmental Law and Policy* 169, 180; W Scholtz 'The anthropocentric approach to sustainable development in the National Environmental Management Act and the Constitution of South Africa' (2005) 1 *Journal of South African Law* 69,77; M Kidd *Environmental Law* 2 ed (2011) 225.
[84] See Chap 1 note 245.
[85] *Gabcikovo Nagymaros Project (Hungary/Slovakia)*: Dissenting Opinion of Judge Weeramantry (note 76 above) 504.
[86] Ibid.
[87] Section 36 of the Constitution of Lesotho 1993 <https://lesotholii.org/ls/legislation/num-act/1993/1>.

on this approach, the Lesotho Environment Act defines 'sustainable development' as "development that meets the needs of the present generation without compromising the ability of future generations to meet their needs by maintaining the carrying capacity of the supporting ecosystems".[88] This denotes the definition of sustainable development as provided in the Rio Declaration. However, this conception of 'sustainable development' prioritises environmental protection as the central pillar of 'sustainable development' by advocating for the protection of the environment through the injunction of "maintaining the carrying capacity of the supporting ecosystems". This is similar to the approach of "ecologically sustainable development" as is provided in section 24 of the Constitution of South Africa, which will be discussed later in this chapter. Thus, it can be said that the model of sustainable development is ecocentric.

The Lesotho Environment Act identifies several principles of environmental management. First, the Act seeks to ensure that 'sustainable development' is attained through the "sound management" of natural resources.[89] The Act then requires that the natural resources of Lesotho must be utilized for the benefit of both the existing and future generations, taking due consideration of the extent of population growth and the yield of available natural resources.[90] To this end, the Lesotho Environment Act provides that courts must during adjudication, be informed by the following sub-principles of sustainable development-

(a) the polluter pays principle;

(b) the precautionary principle;

(c) the principle of eco-system integrity;

(d) the principle of public participation in the development policies, plans and processes for the management of the environment; and

(e) the principle of inter-generational and intra-generational equity.[91]

In the same breath, the Lesotho Environment Act calls for sustainable use of rivers and lakes.[92] The Lesotho Environment Act further elaborates that the achievement of 'sustainable development' must consider the degree of population growth and the yield of available resources.[93] This approach is reiterated by the Lesotho Water Act (hereafter, LWA) that

[88] Section 2 of the Lesotho Environment Act 10 of 2008 <https://lesotholii.org/ls/legislation/num-act/2008/10>.
[89] Section 3(2)(b) of the Lesotho Environment Act.
[90] Section 3(2)(c) of the Lesotho Environment Act.
[91] Section 4(4) of the Lesotho Environment Act.
[92] Section 62(3) of the Lesotho Environment Act.
[93] Section 3(2)(c) of the Lesotho Environment Act.

provides for the principles of intergenerational equity, equitable utilization, integration and sustainable utilization of water, which are the sub-principles of the principle of sustainable development.[94] Therefore, the principle of sustainable development is part of Lesotho law. The constitutive aspects of 'sustainable development' under Lesotho law are: intergenerational equity, intragenerational equity, sustainable use, polluter pays principle, precautionary principle, ecosystem integrity, public participation, and the principle of integration.

However, since there is no case law that proffers a sufficient elaboration of the principle 'sustainable development', it is prudent to seek guidance from South African case law, which also regulates the LHWP. In any event, it is inconceivable that the management of a country's own national natural resources is not an international issue outside of any transboundary impacts.[95] This is particularly the case in the LHWP.

In South African law, the principle of 'sustainable development' is premised on two fundamental principles – equity in the existing and future generations, and integrating economic development, social upliftment and environmental protection.[96] South Africa's conceptualisation of 'sustainable development' is driven by the universally established conceptualisation of the Brundtland Commission, which is mirrored by the Constitution of South Africa.[97] To this end, the Constitution of South Africa provides that everyone has the right to "ecologically sustainable development and use of natural resources while promoting justifiable economic and social development".[98] Sustainable development was authoritatively endorsed by the Constitutional Court in *Fuel Retailers*. As stated earlier in this discussion, I accept the definition of the court in *Fuel Retailers*, which held that 'sustainable development' includes the following principles: the principle of intergenerational equity, the principle of sustainable use, the principle of equitable use, or intragenerational equity, the principle of integration, the right to development and the duty to construe and implement rules of international law in a harmonised manner.[99] This dictum reiterated the approach of the High Court in *BP Southern Africa*.[100]

---

[94] Section 3 of the Lesotho Water Act 15 of 2008 <https://www.water.org.ls/download/lesotho-water-act-no-15-of-2008/>.
[95] Birnie, Boyle & Redgwell (note 2 above) 128.
[96] A National Framework for Sustainable Development in South Africa: People, Planet, Prosperity (2008) 14 <https://www.environment.gov.za/documents/strategicdocuments/nfsd>.
[97] Ibid.
[98] Section 24 (b)(iii) of the Constitution of South Africa.
[99] *Fuel Retailers* (note 4 above) para 51. Sands & Peel *et al* (note 21 above) 218-219.
[100] *BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment & Land Affairs (*03/16337) [2004] ZAGPHC 18 (31 March 2004) (hereafter, *BP Southern Africa*) 219.

For purposes of this study, the LHWP will only be evaluated against the principle of 'integration', the principle of 'sustainable utilization', the principle of 'intergenerational equity' and the principle of 'intragenerational equity'. This chapter will also proffer an embedded exposition of the 'precautionary principle', which incidentally, is also a sub-principle of 'sustainable development'. These findings will then be extrapolated onto the ZAMCOM Agreement as a proximate transboundary agreement to illustrate the inequity of the LHWP. Even though the court in *Fuel Retailers* identified the harmonious interpretation of rules of international law as part of the constitutive elements of sustainable development, it does not fall within the scope of this study. As stated earlier in the thesis, the right to development is more directly embedded into the discussion of the right to the exploitation of natural resources in Chapter 4.

3.2.1 The 'integration' principle

The foundation of the principle of 'sustainable development' is the 'integration' principle that seeks to balance environmental protection and socio-economic development.[101] International law demands the 'integration' of the relevant environmental aspects in the formulation and management of economic development initiatives.[102] In 1971, through Resolution 2849, the United Nations General Assembly had provided that it agreed with the belief that development must be balanced with ecological considerations.[103] Thus, the 'integration' of the environment and development concerns commenced before the Stockholm Conference in 1972.[104]

In this regard, the Stockholm Declaration provides that the optimal management of resources requires that States must promulgate an integrated and coherent plan for their economic planning to guarantee that development is balanced with the need for protection of the environment.[105] In the same breath, principle 4 of the Rio Declaration provides that to realise the goal of 'sustainable development', environmental protection must be a fundamental aspect of the development initiative and must be evaluated separately. Whilst principle 4 of the Rio Declaration avoids defining the term "development", it has been submitted that integration

[101] *Fuel Retailers* (note 4 above) para 50.
[102] *Award in the Arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway between the Kingdom of Belgium and the Kingdom of the Netherlands*, decision of 24 May 2005 para 59.
[103] United Nations General Assembly Resolution 2849: Development and environment of 20 December 1971 Preamble.
[104] Sands & Peel *et al* (note 21 above) 227.
[105] Rio Declaration principle 13.

transcends the economic and ecological pillars of sustainable development to incorporate social and cultural factors.[106]

In tandem, with the Rio Declaration, Agenda 21 provides that the 'integration' of ecological and development elements will improve standards of living.[107] Agenda 21 also states that experience has proven that the 'integration' of environmental aspects into decision-making in government is central to the achievement of the 'sustainable development' imperative.[108] Furthermore, integrated water resources management is premised on the view that water is a fundamental aspect of the ecosystem.[109] Thus, Agenda 21 requires that water resources development must be implemented in an 'integrated' manner.[110]

By the same token, the Dublin Statement on Water and Sustainable Development provides that freshwater is an exhaustible and endangered resource that is required for socio-economic development and the protection of the environment.[111] In the same breath, the Berlin Rules require that States must ensure the 'integration' of water management together with the utilization of other resources.[112] Similarly, the New Delhi Principles provide that the principle of 'integration' depicts the link between "social, economic, financial, environmental and human rights" principles of international law pertaining to sustainable development as well as of the interconnectedness of the requirements of existing and future generations of humankind.[113] This approach contemplates integrated management as an objective for which basin States should seek in the long-term.[114] The New Delhi Principles also provide that States are under an obligation to 'integrate' social, economic, financial and environmental considerations in the management of water.[115] Thus, it is argued that integrated management is crucial for achieving the sustainable use of water.[116] Consequently, it is opined that it is impossible to establish whether a specific use is 'equitable and reasonable' without assessing the use in an integrated framework.[117] This shows that the achievement of 'equitable and

[106] L Feris 'The role of good environmental governance in the sustainable development of South Africa' (2010) 13 *PER/PELJ* 73, 82; IL Owosuyi 'The pursuit of sustainable development through cultural law and governance frameworks: A South African perspective' (2015) 18 *PER/PELJ* 2012, 2022-2031.
[107] Agenda 21 paras 21.1 and 21.2.
[108] Agenda 21 para 21.6.
[109] Ibid para 18.8.
[110] Ibid para 18.16.
[111] Dublin Statement on Water and Sustainable Development (1992) principle 1.
[112] Berlin Rules (adopted 17 August 2004) art 6.
[113] New Delhi Principles art 7.1.
[114] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 14.
[115] New Delhi Principles Preamble.
[116] Ibid.
[117] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 14.

reasonable utilization' requires the integration of the environment protection, social upliftment and economic development.

The UN Watercourses Convention does not expressly refer to the principle of 'integration'. Nevertheless, the UN Watercourses Convention requires a balance or use of the shared watercourse in a manner that is "consistent" with the interests of riparian States and the environmental protection.[118] This "balance" implicitly refers to the principle of 'integration', which is an inherent aspect of sustainable development.[119] In the same vein, one of the goals of the Revised Protocol is to facilitate coherent and integrated management of shared watercourses.[120] More specifically, the Revised Protocol provides for the principle of integration by providing that State Parties must maintain a "proper balance" between economic development, social upliftment and protection of the environment to promote sustainable development.[121] Consequently, the major water conventions regulating shared watercourses recognise the principle of 'integration'.

The principle of 'integration' has also received judicial approval. Firstly, the court in *Gabcikovo-Nagymaros Project (Hungary/Slovakia)* confirmed the principle of 'integration' by asserting that a treaty must be implemented in a "joint and integrated way".[122] The same can be gleaned from the ICJ in *Pulp Mills* when it recognised the need to find a "balance" between the utilization and protection of watercourses in conformity with the goal of 'sustainable development'.[123] The *Iron Rhine* case then affirmed the 'integration' principle as provided in Article 4 of the Stockholm Declaration.[124] The *Iron Rhine* reiterated the reasoning of the International Court of Justice in the *Gabčíkovo-Nagymaros* case, which established the need to harmonise economic development and protection of the environment.[125] Similarly, sustainable development was given credence in the *SERAC* case.[126] Therefore, the principle of integration is confirmed by international law. This necessitates an investigation of the place of the principle of integration in Lesotho law.

---

[118] See UN Watercourses Convention art 5.1.
[119] See UN Watercourses Convention Preamble and art 5.1 read with art 6.
[120] Revised Protocol art 2(c).
[121] See Revised Protocol art 3.4.
[122] *Gabcikovo-Nagymaros Project (Hungary/Slovakia)* (note 76 above) para 141.
[123] *Pulp Mills* (note 1 above) paras 175 and 177.
[124] *Award in the Arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway between the Kingdom of Belgium and the Kingdom of the Netherlands*, decision of 24 May 2005 para 59.
[125] *Gabčíkovo-Nagymaros (Hungary/Slovakia)* (note 76 above) para 140.
[126] 155/96: *Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) / Nigeria* case paras 51-52.

In this regard, the LWA provides that 'integrated water resource management' is a principle of water management.[127] This demands the 'integration' of environmental and social factors into water management.[128] Section 36 of the Constitution of Lesotho provides that natural resources must be conserved and utilized for the benefit of current and future generations. In the same vein, the Lesotho Environment Act calls on the water management institutions to facilitate the 'integration' of environmental factors in all facets of socio-economic forecasting.[129] By the same token, the Lesotho Water and Sanitation Policy seeks to develop water resources in an 'integrated' manner to guarantee access to this resource in sufficient quantities and quality for the benefit of present and future needs.[130] This means that in Lesotho law, the model of integration of the "pillars" of sustainable development prioritises environmental protection over other "pillars". This means that both South Africa and Lesotho have an ecocentric-based model of integration. In other words, development can only occur after the environment is guaranteed. However, due to the paucity of substantive jurisprudence in Lesotho law on the principle of 'integration', a peek at South African law is required. This approach is also necessitated by the fact that the LHWP is also regulated by South African law as a co-signatory to the LHWP.

To this end, the National Environmental Management Act 17 of 1998 (hereafter, NEMA) requires that the management of the environment should be 'integrated'; taking into cognisance that all aspects of the environment are connected and it must duly consider the impacts of decisions on natural resources and the human beings in the environment.[131] More specific to water, the National Water Act 36 of 1998 (hereafter, NWA) like the LWA, provides for 'integrated water management'.[132] The National Water Resource Strategy: Water for an Equitable and Sustainable Future 2013 (hereafter NWRS), which gives effect to the NWA, is based on the principles of integrated water resources management (IWRM).[133] Recently, the Water Tribunal emphasised that the Constitution of South Africa, NEMA, and the NWA, require that the three pillars of social upliftment, economic development and environmental

[127] Sections 3(c) and 3(h) of the Lesotho Water Act.
[128] Section 3(h) Lesotho Water Act.
[129] Sections 8(e) and 10(1)(d) of the Lesotho Environment Act.
[130] Lesotho Long-Term Water and Sanitation Strategy (2014) 29 <https://www.water.org.ls/download/lesotho-long-term-water-and-sanitation-strategy/>.
[131] Section 2(4)(b) of the National Environmental Management Act 107 of 1998.
[132] Section 6(1)(l) read with the Preamble to the NWA.
[133] National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) para 3.4.1 <http://www.dwa.gov.za>.

protection must be integrated to achieve the sustainable development of water resources.[134] Consequently, it can then be said that the principle of 'integration' is part of the corpus of Lesotho and South African law.

On this score, the principle of 'integration' is evident in the phrasing of Article 15 of the LHWP. Article 15 of the LHWP provides for the protection of the "existing quality 'of the environment and the welfare of persons". The Phase II Agreement 'Operating Rule', which seeks to ensure economic development and social upliftment for Lesotho and South Africa, takes the same approach, but it does not incorporate environmental protection in this nexus.[135] Thus even though the LHWP attempts to comply with the principle of 'integration', the blatant ignoring of the environmental protection pillar in the Phase II Agreement means that the legislative scheme of the LHWP is fundamentally flawed and consequently, in contravention of the principle of 'sustainable development'.

However, the Lesotho Highlands Development Authority (hereafter, LHDA) accepts the definition of 'sustainable development' as is provided in the *Fuel Retailers* case and thus invariably, the conceptualisation adopted by the Brundtland Commission. This is because the LHDA defines 'sustainable development' as development that satisfies the needs of the existing generation without hindering the ability of future generations to satisfy their requirements.[136] It is development that delivers environmental, social and economic benefits to enhance the standard of living without compromising the environment.[137] The LHDA further provides that 'sustainable development' can be conceived as a house underpinned by three pillars: economy, society and environment.[138] These are then called the 'Triple Bottom Line'.[139] This is in conformance with the pillars of 'sustainable development' as identified by international law and established by the court in *Fuel Retailers*.

Furthermore, the LHDA has also promulgated the Requirements for Aquaculture Development within the Orange River and these specifically require the conclusion of an Environmental Impact Assessment (hereafter, EIA) prior to an aquaculture development as

[134] *Endangered Wildlife Trust v Director General of the Department of Water and Sanitation* WT 03/17/MP paras 151 and 160.5; See Also, A du Plessis & R Alberts 'Cooperative environmental governance: At the coalface of sustainable infrastructure development in South Africa' (2014) 29 *SA Public Law* 441, 446.
[135] See Phase II Agreement (adopted, entered into force 11 August 2011) art 7.2.
[136] LHDA 'Sustainable development: Lesotho Highlands Water Project' 7 <http://www.lhda.org.ls/phase2/environmentalimpactcomponents.php>.
[137] Ibid.
[138] Ibid.
[139] Ibid.

provided by the Environment Act of Lesotho.[140] These regulations do not define the term 'aquaculture'. I accept that 'aquaculture' refers to the "farming of aquatic organisms" in precise "aquatic environments" as provided by section 1 of the Aquaculture Development Bill of 2018 of South Africa. The Requirements for Aquaculture Development within the Orange River also require integration in that they demand that the aquaculture project in the LHWP must prove that the selected site will provide for the environmental needs of the affected species.[141] In tandem with this approach, it is also required that the proposed aquaculture project take into consideration the needs of competing users of the natural resource to integrate economic development concerns with social upliftment.[142] The aquaculture project must also not undermine the environmental integrity of the environment.[143] To bolster the need to balance economic development with social upliftment, it is required that the aquaculture project must demonstrate how it complies or will comply with the policy of National Economic Empowerment promulgated by the Lesotho Ministry of Trade and Industry, Co-operatives and Marketing.[144] In line with the benefit-sharing imperative required by the principle of equitable and reasonable utilization and the social upliftment pillar of sustainable development, an aquaculture project must ensure job creation and provide precise details on how local communities surrounding the proposed aquaculture operations will benefit.[145] In this way, the Requirements for Aquaculture Application must be commended for their specific integration of environmental, economic and social upliftment paradigms. This legislation has provided a blueprint for integration and, more broadly, sustainable development in the LHWP.

In the same vein, a Flow, Water Quality and Geomorphology and IFR Baseline Study has been conducted with the object of establishing every aspect of water flows that must continue in the downstream river after the Polihali Dam is constructed.[146] In addition, the LHWP has conducted a Biological and Archaeological (including Heritage) Baseline, which sought to determine possible impacts on the environment and archaeological effects caused by Phase II

[140] LHDA Requirements of Aquaculture Applications within the LHWP Dams Schedule 1: Regulation 11(2) para 6 <http://www.lhda.org.ls/lhda/documents/Requirements%20for%20Aquaculture%20Application.pdf>; See A Paterson 'Fuelling the sustainable development debate in South Africa' (2006) 123 *South African Law Journal* 53,62, who asserts that EIA provides for the practical manifestation of sustainable development.
[141] LHDA Requirements of Aquaculture Applications within the LHWP Dams Schedule 1: Regulation 11(2) para 7.1.
[142] Ibid para 8.1.1.
[143] Ibid para 8.1.2.
[144] Ibid para 10.
[145] Ibid para 12.
[146] LHWP Phase II 'Environmental Impact' <http://www.lhda.org.ls/phase2/environmentalimpactcomponents.php>.

and to avail proper management tools, as well as a monitoring strategy.[147] The LHWP has also conducted a Socio-Economic Baseline Study, which sought to comprehend the livelihoods and quality of life of the community in question.[148] Significantly, the Water and Sanitation (WATSAN) Programme in Phases IA and IB of the Lesotho Highlands Water Project has also been in operation that seeks to reduce the negative effects caused by the LHWP.[149] The programme provides water supply and sanitation implements to communities impacted by the LHWP.[150] Thus, there has been a concerted effort by the LHWP to integrate environmental, economic and social upliftment paradigms.

Overall, the LHWP has thus far failed in complying with the principle of 'integration'. This is because the project has not fulfilled its "desire" to advance the standard of living of Basotho people as required by the Preamble to the LHWP. It was argued in Chapter 2 of this thesis, that the LHWP's impact on job creation and poverty has been negligible. Furthermore, the LHWP has failed to maintain the "welfare of persons" affected by the project as required by Article 15 of the LHWP. Thus, the LHWP has been unable to achieve the 'integration' of the three pillars of sustainable development because it has not achieved 'social upliftment'. On this ground, the LHWP contravenes the principle of 'sustainable development'.

In this regard, the ZAMCOM Agreement also provides for 'sustainable development' and thus, by implication, the principle of 'integration'.[151] There have been significant strides to achieve an integrated approach in the ZAMCOM. In this regard, the ZAMCOM has promulgated the Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin, which seeks to develop water resources to promote socio-economic development in the Basin.[152] The Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin also calls for improvement in the early warning systems to address droughts.[153] This has been addressed through a coordinated approach that has promulgated the Rules and Procedures for sharing of data pertaining to the

[147] Ibid.
[148] Ibid. See also, The Lesotho Biodiversity Trust launched in 2004.
[149] LHDA 'Water and Sanitation (WATSAN) Programme in Phases IA and IB of the Lesotho Highlands Water Project' <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Social_Impact/Water_and_Sanitation.pdf>.
[150] Ibid.
[151] Agreement on the Establishment of the Zambezi Water Commission (2004) (adopted 13 July 2004, entered into force 19 June 2011) (hereafter, ZAMCOM Agreement) art 12.1(a).
[152] ZAMCOM Integrated Water Resources Management Strategy and Implementation plan or the Zambezi River Basin: At a Glance (2016) 29 <http://www.zambezicommission.org/publication/integrated-water-resources-management-strategy-and-implementation-plan-zambezi-river-0>.
[153] Ibid 57.

utilization of the Zambezi Watercourse, which require the dissemination of hydrological information and they work in conjunction with the ZAMCOM Procedures for Notification of Planned Measures. These two instruments work in tandem to create a duty to notify other basin States of possible harm that may affect a basin State or of development that may cause problems in water management to other basin States.[154] This means that the ZAMCOM has created a platform for an 'integrated' method of sustainable development in the ZAMCOM basin.

3.2.2 The principle of 'sustainable utilization'

At the outset, it must be noted that I argued in Chapter 2, that a discussion of the concept of 'reasonable utilization' is unnecessary because this principle denotes 'sustainable use' of water. Thus any finding on the 'sustainability' of the water uses in the LHWP and the ZAMCOM basins, applies equally to the 'reasonability' of the water uses in the said basins. In other words, if the water uses in both basins are 'unsustainable', then they contravene the principle of 'reasonable utilization'.

The term 'sustainable' does not have a universal definition.[155] 'Sustainability' has always been part of water law.[156] Ascertaining 'sustainability' is an empirical and scientific evaluation of a certain resource in specific circumstances.[157] 'Sustainable utilization' is at the very least, an "evolving element" of transboundary water law, and a fundamental element of the goals of 'sustainable development' and rules of international law.[158] The acceptance of 'sustainability' as an aspect of international water law is crucial to ensure the implementation of 'sustainable development'.[159] To this end, 'sustainable use' refers to standards that regulate the "rate of use or exploitation of specific natural resources rather than on their preservation for future generations".[160] In this regard, international legal apparatus has sought to have conservation measures that are "'rational', 'wise', 'sound', and 'appropriate'", or an amalgamation of these terms.[161] The terms are frequently used as synonyms and without elaboration and thus, the interpretation of each term will hinge on its implementation in each legal instrument.[162]

[154] ZAMCOM Procedures for Notification of Planned Measures (2017) 7-8 <http://www.zambezicommission.org/publication/zamcom-procedures-notification-planned-measures-2017>.
[155] Sands & Peel *et al* (note 21 above) 224.
[156] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 15.
[157] Ibid 16.
[158] Birnie, Boyle & Redgwell (note 2 above) 564.
[159] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 15.
[160] Sands & Peel *et al* (note 21 above) 222.
[161] Ibid 224.
[162] Ibid.

In certain instruments, the primary goal is the 'conservation' of the environment.[163] The term 'conservation' inherently incorporates elements emblematic of 'sustainable development'.[164] For purposes of this discussion, the term 'sustainable utilization' and 'sustainable use' will be used interchangeably.

In this regard, the Stockholm Declaration provides that exhaustible natural resources must be utilized in a manner that is cognisant of the risk "of their future exhaustion".[165] It is opined that this represents the Stockholm Declaration's acknowledgment of the principle of 'sustainable use'.[166] In this respect, the Rio Declaration requires that to attain sustainable development, States must prevent unsustainable exploitation of natural resources.[167] Building on this approach, Agenda 21 calls for States to plan for the 'sustainable' and rational utilization of water resources predicated on community initiatives and imperatives within the ambit of national economic development frameworks.[168] Agenda 21 thus makes the connection between 'sustainable use' and community needs, which is the 'social upliftment' pillar of sustainable development.

To this end, 'sustainability' has always been part of water law.[169] The right to utilize water and to acquire the yield of that use does not include the right to squander, destroy, or exhaust the resource.[170] There are also instances when development exceeds the natural or artificial recharge of the waters, but it remains sustainable.[7] In this regard, the Dublin Statement on Water and Sustainable Development provides that water requires "effective management", which demands a comprehensive approach, connecting socio-economic development with conservation of the environment.[171] The concept of "effective management" connotes 'sustainable utilization' of the water.

By the same token, Article 7 of the Berlin Rules provides that States must take all proper measures to ensure 'sustainable utilization' of water.[172] In consonance with this approach, the Convention on the Protection and Use of Transboundary Watercourses and International Lakes

[163] Ibid.
[164] Ibid.
[165] Stockholm Declaration principle 5.
[166] Sands & Peel *et al* (note 21 above) 223.
[167] Rio Declaration principle 8.
[168] Agenda 21 Chapter 18. 9(b).
[169] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 15.
[170] Ibid.
[171] Dublin Statement on Water and Sustainable Development (adopted 31 January 1992) principle 1.
[172] Berlin Rules art 7.

advocates for 'sustainable' utilization of water.[173] In the same vein, the UN Watercourses Convention provides that 'sustainable utilization' is one of the overall objectives of the principle of 'equitable and reasonable utilization'.[174] Similarly, the Revised Protocol calls for 'sustainable' use of shared watercourses.[175] The overall goal of the Revised Protocol is to facilitate the 'sustainable' utilization of shared watercourses.[176] In tandem with this approach, the Southern African Development Community Regional Water Policy provides that shared watercourses that traverse political jurisdictions can cause conflict unless managed in a manner that promotes integration and equitable utilization.[177] The Southern African Development Community Southern African Vision for Water, Life and Environment in the 21st Century affirms the Integrated Water Resource Development and Management approach, which must lead to "efficient utilization, equitable access and sharing of the region's water resources to ensure sustainable social, environmental and economic benefits for all".[178] The New Delhi Principles also reiterate the duty of States to develop and utilize the environment in a sustainable manner to achieve economic development.[179] Therefore, 'sustainability' is the primary objective of water management in all spheres.[180] Consequently, a universal consensus has developed that 'sustainable use' is the correct metric for assessing the utilization of resources and environmental protection.[181]

The achievement of 'sustainable utilization' depends on the duty to cooperate and the information-sharing requirements. In this regard, the Helsinki Rules on the Uses of the Waters of International Rivers (hereafter, the Helsinki Rules) require that each riparian State must provide pertinent and accessible information to the other basin States relating to a transboundary water resource within its territory and its utilization, and projects regarding this water.[182] In the same vein, the UN Watercourses Convention stipulates that the duty to

[173] Convention on the Protection and Use of Transboundary Watercourses and International Lakes Preamble read with art 3.1(i).
[174] UN Watercourses Convention Preamble read with art 5.1.
[175] Revised Protocol Preamble.
[176] Revised Protocol art 2 and art 3.7(a).
[177] SADC Regional Water Policy (2007) paras 1.3.1 and 2.3 <https://www.sadc.int/files/1913/5292/8376/Regional_Water_Policy.pdf>.
[178] SADC Southern African Vision for water, life and Environment in the 21st Century (2009) 9 <https://www.sadc.int/documents-publications/show/Southern%20African%20Vision%20For%20Water%20Life%20and%20Environment%20In%20the%2021st%20Century>.
[179] New Delhi Principles art 1.2.
[180] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 15.
[181] Ibid.
[182] Helsinki Rules on the Uses of the Waters of International Rivers (adopted August 1966) art 29.1. Berlin Rules art 11 and art 56.1.

cooperate and share information.[183] Similarly, the Revised Protocol also demands cooperation and imposes a duty to share information.[184] As has already been argued earlier in Chapter 2 of this study, the achievement of an 'equitable and reasonable utilization' of a transboundary water resource depends on ascertaining the nature of the use. This is an empirical process hence the duties to cooperate and share relevant information. It follows that the achievement of the principles of 'equitable and reasonable utilization' and 'sustainable development' hinges on the duty to cooperate and share information between riparian States. Thus, these correlative duties are vital to the realisation of the principles of equitable utilization, benefit sharing and reasonable utilization as was found in Chapter 2 of this study.

The domestic law of Lesotho and South Africa has also endorsed 'sustainable utilization'. The LWA provides for the principle of 'sustainable utilization' of water resources.[185] To give effect to the LWA, the Lesotho Environment Act provides that water must be used 'sustainably'.[186] 'Sustainable use' denotes that the current utilization of natural resources protects the essence of the environment without undermining the needs of future generations.[187] Thus, sustainable use ensures intergenerational equity. The Lesotho Water and Sanitation Strategy, a binding and regulatory instrument of the LWA, provides that it seeks to ensure sustainable access to potable water for all Basotho.[188] It is also an objective to utilize water resources in an integrated and 'sustainable' manner to guarantee access to this resource in sufficient quantities and quality to the advantage of existing and future generations.[189] This connotes that equitable use of water requires sustainable utilization. Therefore, 'sustainable use' is an established principle of sustainable development in Lesotho law.

In South Africa, 'sustainable use' is a core component of the principle of 'sustainable development' as provided by section 24(b)(iii) of the Constitution of South Africa and endorsed by the court in *Fuel Retailers* as one of the "recurring elements" of the principle of 'sustainable development'. Sustainable utilization of water in the public interest is one of the purposes of the NWA.[190] The State as public custodian of South Africa's water has the explicit duty to

[183] UN Watercourses Convention art 8 read with art 9 and art 11.
[184] Revised Protocol art 4.1 read with art 2(c) and art 3.5.
[185] Section 3(a) of the Lesotho Water Act.
[186] Sections 3(2)(b), 3(2)(d) and 62(3) of the Lesotho Environment Act.
[187] Section 1 of the Lesotho Environment Act.
[188] Lesotho Long-Term Water and Sanitation Strategy (2014) (note 130 above) Policy Statement 2; See ss 10-12 of the LWA.
[189] Lesotho Long-Term Water and Sanitation Strategy (2014) (note 130 above) 1.
[190] Section 2 (d) of the NWA.

sustainably manage the nation's waters.[191] In tandem with the NWA, the NWRS is premised on 'sustainable' utilization of water resources.[192] In addition, sustainable use is one of the principal objects of part of the vision of the NWRS.[193] Pertinently, it must also be noted here that climate change represents a fundamental risk to the mandate of sustainable development in South Africa.[194] In particular, climate change can exacerbate water scarcity.[195] This means climate change can lead to unsustainable water utilization in the LHWP. Thus, the principle of 'sustainable use' enjoys legislative and judicial support and is the basis of water utilization in South African law. The discussion to follow will then assess whether the LHWP is in line with the principle of 'sustainable use'.

As a point of departure, Article 15 of the LHWP provides that the signatories to this agreement must take all rational measures to ensure that the project is consistent with the protection of the "existing quality of the environment" and more specifically, must pay particular due regard to the "maintenance of the welfare of persons and communities immediately affected by the project". This provision speaks to 'sustainable use' in asking for utilization that is "compatible" with the environment. To this end, there are concerns about whether the water uses of the Orange River are 'sustainable'.

Firstly, the Vaal catchment is reported to be excessively polluted, which should affect access to water resources and transboundary projects.[196] Even though the quality of the water in the Upper and Lower Orange is regarded as acceptable; there is inadequate data for certain types of contaminants to make any definitive findings although it has been found that the pollution in the Malibamatso catchment area is compromising the quality of water supplied to South Africa.[197] This certainly would have an impact on the 'sustainable use' of the LHWP. There are also concerns along all the rivers in the LHWP pertaining to localised pollution from sewage entering the rivers and chlorophyll.[198] The transboundary impacts of pollution are

[191] Section 3(1) of the NWA.
[192] South Africa National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) 13 <http://www.dwa.gov.za/documents/Other/Strategic%20Plan/NWRS2-Final-email-version.pdf>.
[193] Ibid para 1.1.
[194] *Earthlife Africa Johannesburg v Minister of Environmental Affairs* (note 62 above) para 82.
[195] Ibid. Appeal Decision of the Water Tribunal *groundWork vs Acting DG Water and ACWA Khanyisa Power* WT02/18/ MP (21 July 2020) para 81.
[196] Orange Senqu River Basin preliminary transboundary diagnostic analysis (2008) 172 <http://www.orasecom.org/_system/writable/DMSStorage/651orange-senqu-river-basin-preliminary-transboundary-diagnostic-analysis.pdf>.
[197] Ibid. LHDA Annual Report 2016/17 22 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Annual_Reports/Annual_Report_2016_17.pdf>.
[198] United Nations Development Programme 'Development and adoption of a Strategic Action Programme for balancing water uses and sustainable natural resource management in the Orange-Senqu River trans-boundary

unclear due to the inadequacy of monitoring data and paucity of research, but there is a reasonable apprehension of transboundary transfer of these pollutants, and there has been a decline of water quality in the basin in the past 30 years.[199] For purposes of this discussion, 'protection' of shared watercourses denotes the safeguarding of the quality of water in the pursuit of the ecologically sustainable use as informed by section 1 of both the NWA and LWA.

Secondly, eutrophication is also a massive conundrum in the Vaal catchment and in other segments of the Basin.[200] However, despite the concerns pertaining to the quality of aquifers and their conservation, there is inadequate data to make any definitive findings in this respect.[201] Furthermore, the four signatories to the Agreement between the governments of the Republic of Botswana, Kingdom of Lesotho, Republic of Namibia and the Republic of South Africa on the establishment of the Orange-Senqu River Commission Agreement (hereafter, ORASECOM Agreement) are devoid of institutional capability to properly manage water quality in their jurisdictions.[202] In Lesotho and Namibia, the water quality surveillance mechanisms are inadequately developed.[203] South Africa has a more elaborate and broad surveillance system, but there are still various inadequacies in the information that has been gathered, particularly along the Lower Orange and in the sub-catchments of the Vaal River.[204] This means it is unknown how much water is affected but what has been established is that the quality and quantity of the water will diminish. It goes without saying that dissipation in the quality and quantity of water affects the sustainability of water uses.

The Lesotho highlands are also susceptible to land degradation, which fundamentally affects run-off and sediment loadings.[205] In the Lower Orange, land degradation caused by overgrazing and overstocking is prevalent, but its financial effect on the quality and quantity of water has not been ascertained.[206] Loss of trees can disturb the hydrological cycle, but it is unknown as to what extent this is occurring in the Orange-Senqu River Basin because there is

basin'(PIMS:3243)' (2010) para 58 <https://info.undp.org/docs/pdc/Documents/ZAF/ORASECOM%20prodoc%204June2009.doc>.

[199] Orange Senqu River Basin preliminary transboundary diagnostic analysis (note 196 above) 173.

[200] Ibid.

[201] Ibid.

[202] Ibid. Agreement between the governments of the Republic of Botswana, Kingdom of Lesotho, Republic of Namibia and the Republic of South Africa on the establishment of the Orange-Senqu River Commission Agreement (adopted, entered into force 3 November 2000).

[203] Orange Senqu River Basin preliminary transboundary diagnostic analysis (note 196 above) 173.

[204] Ibid.

[205] Ibid 174.

[206] Ibid.

no basin-wide information in this regard.[207] This is particularly problematic in that it is unknown how this will affect the 'sustainability of water use in the LHWP. This brings to the fore the fallacy of the predetermined water quantities to South Africa in the LHWP because it is unknown how much water is actually available in the LHWP.[208]

Furthermore, dire land-utilization policies and historical tenure instruments have compounded the land degradation and siltation conundrum, which the LHDA views as a "threat" to the water in the LHWP.[209] The proliferation of alien invasive species in the LHWP is increasing the environmental degradation of water ecosystems in the Orange River Basin.[210] It has been found that the upper catchments of the basin within Lesotho and South Africa, indicate a massive spread of alien species, which compound degradation of riparian ecosystems.[211] This means they are reducing the available water resources. The arid middle to lower segments of the Orange River Basin are plagued by substantial river yield losses.[212] The mitigation programmes are ineffective.[213] It can be argued then, that the water uses in the LHWP are 'unsustainable'.

In respect of conservation and rehabilitation at Katse, Mohale and Muela, the Panel of Experts Report of 2014 found that the LHDA erosion control structures must continue despite there not being a permanent solution with several strategic interventions required.[214] Land capability in the Highlands is unsuitable for current uses.[215] It was also found that there is ample proof that the degradation of incoming water quality will negatively impact the LHWP.[216] Furthermore, a March 2014 survey report says that the sedimentation rate in Muela has dropped from 0.3 per cent to 0.2 per cent per year.[217] This is encouraging, but there are several problems.[218] The accuracy of the information is questionable.[219] On the figures given,

---

[207] Ibid.
[208] Treaty on the Lesotho Highlands Water Project Agreement Between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa Annexure II: Minimum Quantities for Water Delivery to the LHWP (adopted, entered into force on 24 October 1986).
[209] Orange Senqu River Basin preliminary transboundary diagnostic analysis (note 196 above) 173; Lesotho Highlands Development Authority Annual Report 2016/17 20 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Annual_Reports/Annual_Report_2016_17.pdf>.
[210] Orange Senqu River Basin preliminary transboundary diagnostic analysis (note 196 above) 173-174.
[211] Ibid 175.
[212] Ibid.
[213] Ibid.
[214] LHWP Report of the Panel of Environmental Experts Report 69 (2014) 3 <http://www.lhda.org.ls/lhda/reports/poes/PoE%20Report%2069%20-%20rev2.pdf>.
[215] Ibid.
[216] Ibid.
[217] Ibid 4.
[218] Ibid.
[219] Ibid.

a Panel of Experts calculated that the sedimentation rate is 2 per cent, not 0.2 per cent, per year.[220] This implies that the Muela reservoir will saturate with sediment in 50 years.[221] This mirrors the "eye-balled" analysis of sedimentation.[222] This issue of sedimentation may have implications on the water allocation and utilization regime of the LHWP.

The building of dams has also reduced the amount of fish in the Orange River.[223] The LHWP has sought to address this problem by providing training for fishermen in the area.[224] The fishermen are also receiving training on sustainable harvesting.[225] The LHWP has also had a negative impact on the timber available to the mountain communities, but there have been efforts to replace the trees that were lost.[226] A community forestry programme was implemented in Phase 1A of the LHWP as compensation for tree losses.[227] The LHWP also has a Range Management Programme, which has the dual function of making livestock incomes higher and of protecting the environment of the LHWP Catchment areas from overgrazing, degradation, and soil erosion.[228] This programme has assisted in integrating the displaced communities in new communities, although it met with challenges on improving the quality of livestock and hostile competition for grazing land.[229]

Furthermore, poor livelihood options and access to financial resources could propagate unsustainable environmental management practices.[230] Coincidentally, there is a lack of robust institutional instruments at the local community level for the management of natural resources.[231] To this end, mountain horticulture and crop production have helped the displaced communities generate income who had lost the source of their livelihoods.[232] Artisans from the affected communities have also been trained to build new houses and resettled communities

[220] Ibid.
[221] Ibid.
[222] Ibid.
[223] Ibid 25.
[224] Orange Senqu river basin preliminary transboundary diagnostic analysis (note 196 above) 35.
[225] LHDA Final Report Summary of Main Findings for Phase 1 Development Report No. LHDA 678-F-001 (2002) 63.
[226] Ibid 64.
[227] Ibid.
[228] L Ramaili & F Cloete 'The Role of the Lesotho Highlands Water Project in Poverty Alleviation in Lesotho' (2008) 37 *Africa Insight* 117, 121; L Ramaili 'Impact of the Lesotho Highlands Water Project in Poverty Alleviation in Lesotho'. Thesis presented for the degree of Master of Arts in Public and Development Management at the University of Stellenbosch (2006) 74-75>.
[229] Ramaili & Cloete (note 228 above) 121.
[230] Orange Senqu river basin preliminary transboundary diagnostic analysis (note 196 above) 173.
[231] Ibid 153.
[232] Ramaili & Cloete (note 228 above) 122.

are apparently developing new communal identities.[233] This could alleviate the problem of unsustainable uses of the Orange River.

Finally, whereas all countries comply with international obligations in the LHWP, it has not been established what these obligations are.[234] This is one of the issues that prompted this thesis. This could be seen in the water allocation regime between riparian States.[235] The national governments need to comply with their international obligations and outline resource allocations to the lower riparians States, including ecological water requirements and they must incorporate these allocations in their natural resources development strategies.[236] However, the amount of water needed to sustain the environment has not been accurately established, nor is there a holistic agreement on the quantity of water resources needed by each riparian State and the LHWP is struggling to adapt to the increasing water usage in the basin and this is compounded by the weak water management bodies in this basin and failure to consider the impact of climate change on water allocation.[237] This means that the approach of the LHWP of predetermined water quantities could be propagating 'unsustainable use' in the face of uncertainty over actual water allocation, use and availability in the Orange River basin. To utilize the natural resources of the Orange River in an 'equitable and reasonable' manner, there is a need to ascertain the "equitable" allocation of each country in the basin.[238] Only once that is complete and the relevant authorities are able to accurately determine international obligations, will they be able to do their planning and thus be in conformity with international law.[239] This means that the LHWP contravenes the principle of 'sustainable use' because there is no clarity on current water uses. The 'unsustainability' of current water uses is compounded by the uncertain effects of sedimentation, pollution, deforestation and land degradation, which are reducing available water and its quality in the Orange River. It has already been established that climate change means that water supply to the LHWP is 'unsustainable'. It follows then that the LHWP is not in conformity with the principle of 'sustainable utilization' of shared watercourses.

---

[233] Ibid 124.
[234] Orange Senqu River Basin preliminary transboundary diagnostic analysis (note 196 above) 175.
[235] Ibid.
[236] Ibid.
[237] Ibid. United Nations Development Programme 'Development and adoption of a Strategic Action Programme for balancing water uses and sustainable natural resource management in the Orange-Senqu River trans-boundary basin (PIMS: 3243)' (note 198 above) paras 48 and 77 <https://info.undp.org/docs/pdc/Documents/ZAF/ORASECOM%20prodoc%204June2009.doc>.
[238] Orange Senqu River Basin preliminary transboundary diagnostic analysis (note 196 above) 175.
[239] Ibid.

The lack of clarity on current water uses and the uncertain effects of pollution, land degradation and sedimentation in the LHWP demands an assessment of whether the LHWP is in line with the 'precautionary principle', which is also a sub-principle of sustainable development.

3.2.2.1 The 'precautionary principle'

The 'precautionary principle' provides that scientific uncertainty should not preclude taking action to avert irreparable damage to the environment.[240] It is argued that this principle or approach is illustrative of the weak form of anthropocentrism, which is a vital part of 'sustainable development'.[241] In the water context, the 'precautionary principle' enjoys significant international support.[242] Some commentators even go as far as to say that the principle could be used to override the conventional burden of proof.[243] To this end, NEMA recognises that the 'precautionary principle' is fundamental to 'sustainable development'.[244] This link between the 'precautionary principle' and 'sustainable development' has been affirmed by the Constitutional court in the *Fuel Retailers* judgment when it held that NEMA requires "a risk-averse and cautious approach" to be undertaken by the regulatory authorities.[245] This approach involves the due consideration of the current evidence about the effects of a project that affects the environment.[246] This precautionary approach is crucial within the context of section 24(7)(b) of NEMA, which mandates that the growing effects of development on the ecological and socio-economic factors must be monitored and resolved.[247] Thus, the 'precautionary principle' requires one not to deny intervention on the basis that the relevant scientific data is inadequate.[248] This endorses the notion that the 'precautionary principle' is a sub-principle of 'sustainable development'.[249] In addition, it shows that the

[240] RV Chaudry 'The Precautionary Principle, Public Health, and Public Health' (2008) 25 *Nursing' Public Health Nursing* 261, 262.
[241] Scholtz (note 83 above) 73.
[242] Convention on the Protection and Use of Transboundary Watercourses and International Lakes art 2.5(a); Berlin Rules art 23.1 and art 23.2; New Delhi Principles art 4.2.
[243] Glazewski (note 8 above) para 1.4.7.
[244] Section 2(4)(a)(vii) of the NEMA; J Glazewski & L Plit 'Towards the Application of the Precautionary Principle in South African Law' (2015) 26 *Stellenbosch Law Review* 190,216.
[245] *Fuel Retailers* (note 4 above) para 81. Glazewski and Plit (note 244 above) 216.
[246] *Fuel Retailers* (note 4 above) para 81.
[247] Ibid.
[248] Glazewski and Plit (note 244 above) 194; *Pulp Mills* (note 1 above) para 164; W Scholtz 'The Precautionary principle in international trade: Conflict or reconciliation?' (2002) 9 *South African Journal of Environmental Law and Policy* 163, 163; E Couzens 'Filling Station Jurisprudence: Environmental law in South African courts and the judgment in *Fuel Retailers Association of Southern Africa v Director General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and others*' (2008) 15 *South African Journal of Environmental Law and Policy* 23, 43 and 50.
[249] Glazewski and Plit (note 244 above) 216.

precautionary principle is relevant to all environmental legislation including the NWA, which does not mention the precautionary principle.[250]

Vinti asserts that regardless of its postulation, the precautionary principle requires that regulatory authorities must prevent the occurrence of environmental degradation, even where the evidence is inadequate when the decision is made.[251] Thus, he opines that the 'risk-averse and cautious approach' is the conceptualisation of the 'precautionary principle' in South African law.[252] This is the underlying ethos of the decision in *Fuel Retailers*.[253] Thus, it is accepted in South African law, that the 'risk-averse and cautious approach' is the embodiment of the 'precautionary principle'.[254]

Recently, the Water Tribunal confirmed that the risk-averse and cautious approach of the NEMA denotes the precautionary principle.[255] The tribunal then held that this principle is employed where two prerequisites are complied with, namely that the planned measure presents a danger of material or irreparable environmental harm and lack of scientific certainty as to the ecological harm.[256] If these requirements are complied with, the principle is triggered and there is a "'shifting of an evidentiary burden of showing that this threat does not, in fact, exist or is negligible'".[257] However, some latitude for mistakes should be kept until all effects of the measure are established.[258] Ultimately, possible errors are construed to the benefit of environmental protection, the goal is to provide the flexibility to protect the environment.[259] This approach is in line with the Rio Declaration.[260] On the contrary, other authors contend that the court in *Fuel Retailers* should have been circumspect about the notion that the risk-

[250] Ibid.
[251] C Vinti 'The power to declare a prohibition or restriction on prospecting or mining to protect the environment: a critical assessment of section 49 of the Mineral and Petroleum Resources Development Act 28 of 2002 and section 24(2A) of the National Environmental Management Act 107 of 1998' (2018) 36 *Journal of Energy & Natural Resources* 1, 13.
[252] Ibid.
[253] Ibid. *Fuel Retailers* (note 4 above) para 81; Section 2(4)(a)(vii) of NEMA.
[254] Vinti (note 251 above) 13; See also, White Paper: 'A Mineral and Mining Policy for South Africa' (October 1998) para 4.4 <www.dmr.gov.za/publications/summary/125-white-papers/335-white-paper-minerals-and-mining-policy-for-sa-1998.html>.
[255] *WWF South Africa v Minister of Agriculture, Forestry and Fisheries* 2019 (2) SA 403 (WCC) (26 September 2018) para 100.
[256] Ibid para 104; See *Telstra Corporation Limited v Hornsby Shire Council* [2006] NSWLEC 133 para 128.
[257] *WWF South Africa v Minister of Agriculture, Forestry and Fisheries* (note 255 above) para 104; *Telstra Corporation Limited v Hornsby Shire Council* (note 258 above) para 150.
[258] *WWF South Africa v Minister of Agriculture, Forestry and Fisheries* (note 255 above) para 104.
[259] Ibid.
[260] Vinti (note 251 above) 13.

averse approach in the NEMA denotes the 'precautionary principle'.[261] Couzens submits that the unpopularity of the 'precautionary principle' stems from the apprehension that it could become justiciable before States are able to embrace it.[262]

In this regard, the Lesotho Environment Act provides that 'precautionary principle' denotes that where there is risk of harm to the environment, whether severe or irreparable, the absence of sound empirical proof will not be used as grounds for avoiding affordable action to prevent environmental harm and that the courts must be guided by it.[263] The LWA expressly provides that the 'precautionary principle' is part of the principles that will be used for the protection of the environment.[264] Thus, it can be said that the 'precautionary principle' is a crucial principle of water management in South Africa and Lesotho. Since the 'precautionary principle' is regarded as part of the principle of 'sustainable development' as recognised by the NEMA[265] in South Africa, the Lesotho Water Act[266] and the Environment Act,[267] it means that it must be complied with in the LHWP. On this basis of uncertainty on the current water uses and the impact of sedimentation, pollution and land degradation on water quality and availability in the LHWP, the regulatory authorities of the LHWP must proceed in a "cautionary" manner that regards the LHWP water uses as 'unsustainable'. Regardless, it has already been established that current water uses in the LHWP are unsustainable. Lesotho's latitude to ensure the sustainability of water in the LHWP would be strengthened if it had control over its water resources.

In the regional context, the ZAMCOM Agreement recognises the principle of 'sustainable utilization'.[268] This is augmented by the principles of "cooperation" and "assessment of transfrontier impacts", which are crucial for the ascertainment of whether the water uses are 'sustainable'.[269] This cooperation occurs through the requirement to share relevant information and to notify the ZAMCOM of any proposed projects on the Zambezi River.[270] This is also evinced by the Agreement on the Action Plan for the environmentally sound management of

[261] Couzens (note 248 above) 50-51; For a contrary view on the precautionary principle, see Chaudry (note 240 above) 262-263.
[262] Couzens (note 248 above) 43 and 50- 51.
[263] Section 1 read with s 4(4)(b) of the Lesotho Environment Act.
[264] Section 3(f) of the Lesotho Water Act.
[265] Section 2 (4)(a)(vii) of the NEMA.
[266] Section 3(f) of Lesotho Water Act.
[267] Section 4(4)(b) of the Lesotho Environment Act.
[268] ZAMCOM Agreement Preamble read with art 12.1(b).
[269] ZAMCOM Agreement art 12.1(g) and art 12.1(f).
[270] ZAMCOM Agreement art 15 read with art 16.

the Common Zambezi River 1987, which is guided by the principle of 'sustainable use' of the water in the Zambezi River.[271]

The ZAMCOM Members have also developed the Rules and Procedures for Sharing of information and Data Related to the Management and Development of the Zambezi Watercourse (Rules and Procedures), which ensure that information pertaining to the 'sustainable development' of the Zambezi Watercourse is shared.[272] The overall purpose of these Rules and Procedures is to ensure that the relevant and proper data is shared timeously between the Member States to guarantee that the ZAMCOM Member States will be able to make sound decisions in relation to joint development and utilization of the shared water resources in the Zambezi watercourse.[273] These measures ensure an integrated approach is taken by the ZAMCOM Members who will be able to have a complete picture before they make a decision on the 'sustainability' of a water use in the ZAMCOM. Overall, the ZAMCOM Agreement establishes the principle of 'sustainable utilization' as the operative mechanism for water management in the basin.

However, despite the rules on 'sustainable use 'of the Zambezi River, recent studies have found 'unsustainable' uses of the Zambezi River. First, there is wetland degradation in the Zambezi River Basin, which includes: over-fishing, siltation and wetland pollution.[274] To preserve wetlands, farmers have formulated sustainable interventions that permit the community to use the nearby *dambos* and *vleis* without eviscerating the fruitful ecosystems.[275] However, due to economic development in the Zambezi riparian States as well as growing populations and urbanisation, the contamination of surface and groundwater is on the rise, which requires expensive interventions. [276] Mining activities are also surging, with toxic wastes contaminating the ground and surface waters.[277] This impacts the sources of local water supply as the water decontamination costs increase, causing water to become more expensive

[271] Agreement on the Action Plan for the environmentally sound management of the Common Zambezi River (adopted 28 May 1987) Preamble.
[272] ZAMCOM Rules and Procedures for Sharing of information and Data Related to the Management and Development of the Zambezi Watercourse (adopted 25 February 2016, entered into force 26 March 2016) art 2 <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/16.07.28-Rules_ProceduresForDataSharing_Adopted-by-Council_FinalEditing_Ver10_FINAL.pdf>.
[273]ZAMCOM Rules and Procedures for Sharing of information and Data Related to the Management and Development of the Zambezi Watercourse art 3.
[274] ZAMCOM Zambezi Environment Outlook (2015) 46-47 <http://www.zambezicommission.org/publication/zambezi-environment-outlook-2015>.
[275] Ibid 47.
[276] Ibid 51.
[277] Ibid 51-52.

to the consumers.[278] Inadequately treated wastes from large communities also pose a risk to water resources integrity.[279] In addition, the lack of clarity on the interpretation of the principle of 'sustainable development' and the failure to include precise guidelines on its implementation in these agreements could have devastating consequences for riparian States.[280] Thus, the ZAMCOM basin reveals 'unsustainable' uses of the water despite endorsing the principle of sustainable development.

On the whole, it has been established that despite endorsing the principle of 'sustainable use', the LHWP and ZAMCOM basins reveal 'unsustainable' water uses. This means that enforcement must be employed together with a legislative framework to ensure compliance with the underlying transboundary water law principles. The key finding in this regard is that it is impossible to achieve 'sustainable use' of a shared watercourse in the absence of 'integration' of the three 'pillars' of 'sustainable development'. This 'integration' is dependent on the duties to cooperate and share information as has been established in the ZAMCOM. 'Integration' would be a speculatory process without the duties to cooperate and share information in a shared watercourse. This would invariably mean that it would be difficult to decipher which water uses of a shared watercourse are 'sustainable'.

As I argued in Chapter 2 of this thesis, an inquiry into the 'reasonable utilization' of a shared watercourse as a facet of the principle of 'equitable and reasonable utilization', invariably constitutes an evaluation of the 'sustainability' of water uses under the principle of 'sustainable development', which is explored in this chapter of the thesis. Since it has been found that the LHWP and ZAMCOM basin water uses are 'unsustainable', it follows then that the water uses in these two agreements contravene the principle of 'reasonable utilization'.

3.2.3 The principles of 'intergenerational equity' and 'intragenerational equity'

'Equitable utilization' is inherently linked to the principles of 'intergenerational equity' and 'intragenerational equity'. While the principle of 'equitable utilization' speaks to fair, just and non-preferential treatment in the utilization of shared watercourses, the principles of 'intergenerational equity' and 'intragenerational equity' not only embody 'equitable utilization' but also, expressly require the use of the shared watercourse for the benefit of

[278] Ibid 52.
[279] Ibid.
[280] Ibid.

existing and future generations. Thus, 'equitable utilization' is primarily focused on fair sharing of a shared watercourse whereas 'intergenerational' and 'intragenerational' equity are principles based on time, and are, therefore, concerned with equitable utilization in the present and the future.[281] Consequently, it is possible that a use may be 'equitable' but still contravene the principle of 'intergenerational equity'.

The principle of 'intergenerational equity' elaborates on the "optimum basis for the relationship between one generation and the next".[282] Intergenerational equity demands that each generation must utilize the environment in such a way that it can be provided to future generations in essentially the same state as it was provided.[283] The focal point of this principle is the requirement to reserve alternatives for the prospective use of resources.[284] On the other hand, 'intragenerational equity' refers to the use of the environment to the advantage of people in the 'current generation' as opposed to future generations. Sands' submission that the principle of 'intragenerational equity' denotes the principle of 'equitable utilization' of natural resources was accepted by the court in *Fuel Retailers*.[285] Since the issue of 'equitable utilization' was addressed in Chapter 2 of this study, it follows that an inquiry into the principle of intragenerational equity is superfluous. Therefore, on the basis that the LHWP contravenes the principle of 'equitable utilization', then it contravenes the principle of intragenerational equity. Consequently, this part of the discussion will evaluate the LHWP's compliance with the principle of intergenerational equity. This inquiry will invariably proffer an exposition on the principle of intragenerational equity since it is frequently invoked in the same breath with its corollary, intergenerational equity.

The notion that the present generation must exploit the environment to the benefit of future generations is trite in international law since the arbitration decision in *Pacific Fur Seals*.[286] The principle of 'intergenerational equity' was accepted expressly or impliedly in early environmental law treaties.[287] In 1971, in *King v Dykes*, the court held that the notion that one can use their property to the detriment of their neighbours had been superseded by the notion

[281] Scholtz (note 83 above) 77.
[282] Birnie, Boyle & Redgwell (note 2 above) 119.
[283] Ibid.
[284] Ibid. *WWF South Africa v Minister of Agriculture, Forestry and Fisheries* (note 255 above) para 92.
[285] Sands & Peel *et al* (note 21 above) 219; *Fuel Retailers* (note 4 above) para 51.
[286] Sands & Peel *et al* (note 21 above) 221.
[287] Ibid; See International Convention for the Regulation of Whaling (adopted 2 December 1946, entered into force 10 November 1948) Preamble; African Convention on the Conservation of Natural Resources Preamble and World Heritage Convention (adopted 16 November 1972, entered into force 17 December 1975) Preamble and art 4.

that the environment is being conserved for the benefit of future generations.[288] This finding epitomises the principle of 'intergenerational equity'.

In this regard, the Stockholm Declaration provides that human beings have the duty to protect and enhance the environment for the benefit of existing and future generations through "careful management". [289] The notion of "careful management" speaks to 'sustainable use' and implies that the achievement of 'intergenerational equity' requires 'sustainable use'. The Stockholm Declaration also calls for the prevention of "future exhaustion" of natural resources to ensure that everyone enjoys its fruits.[290] Building on the approach, principle 3 of the Rio Declaration stipulates that the right to development should be attained to equitably satisfy the developmental and environmental requirements of existing and future generations.

Water conventions have also endorsed the principles of 'intergenerational equity' and 'intragenerational equity'. To this end, the UN Watercourses Convention is premised on the requirement that water must be utilized in a manner that facilitates sustainable utilization for the benefit of existing and future generations.[291] The UN Watercourses Convention includes one aspect that was not explicitly acknowledged in the original Helsinki Rules: the demand for water for future uses in the riparian States.[292] The requirement to take into consideration future water uses was tacitly implied in the original Helsinki Rules.[293] In this regard, the Revised Protocol provides that watercourse States must seek to promote intergenerational equity in the utilization of water resources.[294] It can then be argued that a water use cannot be 'unsustainable' and comply with the principles of 'intergenerational equity' and 'intragenerational equity'. Finally, it can then be said that the principle of 'intergenerational equity' enjoy significant support in shared watercourse treaties.

The principle of 'intergenerational equity' has also received judicial approval. In its *Advisory Opinion on The Legality of the Threat or Use of Nuclear Weapons*, the ICJ confirmed that the environment is not an idea but denotes a concrete paradigm that influences the life and

[288] 1971 (3) SA 540 (RA), MacDonald ACJ said at 545G–H; *BP Southern Africa* (note 100 above) 219.
[289] Stockholm Declaration principles 1 and 2.
[290] Stockholm Declaration principle 5. See also, Agenda 21 Chapter 21.7.
[291] UN Watercourses Convention Preamble.
[292] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 21; See Helsinki Rules art VII.
[293] International Law Association Commentary on the Berlin Rules on Water (note 20 above) 21.
[294] Revised Protocol art 3.7(a); Berlin Rules art 3.19. Convention on the Protection and Use of Transboundary Watercourses and International Lakes art 2.5(c); New Delhi Principles Preamble read with art 1.2 and art 2.2 and art 2.3; Johannesburg Declaration on Sustainable Development para 3.

well-being of human beings, including "generations unborn".[295] The reference of the "generations unborn" denotes 'intergenerational equity'. The purpose of the ICJ's dependence on the principle is not instantly clear, and it has been alleged that the obligations to the benefit of future generations have minimal pragmatic legal ramifications.[296] They are regarded as being linked to the mutual imperatives of environmental protection and protection of human rights.[297] In this respect, it is contended that the rights of future generations might be employed to improve the *locus standi* of members of the existing generation to litigate in cases based on fundamental rules of environmental covenants where uncertainty pertains as to whether a specific treaty affords entitlements on persons.[298] 'Equity' will play a vital role in transboundary natural resources, as highlighted by the decision of the ICJ in *Pulp Mills.*[299] Significantly, the ICJ in *Gabcikovo-Nagymaros Project (Hungary/Slovakia)* held that unsustainable development poses a risk for existing and future generations. [300] Thus, the principle of 'intergenerational equity' has been endorsed by the ICJ.

In this regard, the Constitution of Lesotho provides that Lesotho must promulgate legislation and policies which seek to conserve and enrich the natural resources of Lesotho for the benefit of current and future generations.[301] In the same vein, the Lesotho Environment Act provides that one of the principles of environmental management is the duty to utilize the environment of the Basotho Nation to the benefit of current and future generations.[302] The Lesotho Environment Act also requires one must implement measures to conserve the traditions of the Basotho Nation for the benefit of current and future generations.[303] In the same vein, the LWA requires that water management must give effect to the principle of intergenerational equity.[304] Thus, the principles of intergenerational equity and intragenerational equity are essential principles of water management in Lesotho law.

In this respect, the Constitution of South Africa provides that everyone has the right to have the environment conserved for the benefit of current and future generations.[305] In this

[295] *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, 1. C.J. Reports 1996, p. 226. para 35; Sands & Peel *et al* (note 21 above) 222.
[296] Sands & Peel *et al* (note 21 above) 222.
[297] Ibid.
[298] Ibid.
[299] Ibid 226.
[300] *Gabcikovo-Nagymaros Project (Hungary/Slovakia) (Hungary/Slovakia)* (note 76 above) para 140.
[301] Section 36 of the Constitution of Lesotho.
[302] Section 3(2)(c) of the Lesotho Environment Act.
[303] Section 3(2)(j) of the Lesotho Environment Act
[304] Section 3(b) of the Lesotho Water Act.
[305] Section 24(b) of the Constitution of South Africa.

way, the Constitution of South Africa provides for intergenerational equity as part of the environmental right.[306] To substantiate this right, NEMA provides that the object of sustainable development is to guarantee that development meets the needs of present and future generations.[307] This principle is recognised by the NWA, which provides that one of the purposes of the Act is to guarantee that the country's water is utilized in a way that takes into consideration the human needs of current and future generations.[308] Furthermore, the principle of intergenerational equity demands due consideration of the impact of climate change.[309] In this way, climate change must be a consideration prior to the commencement of any development project, and it can be argued that there is a 'duty of care' to mitigate water loss that may be caused by climate change.[310] Thus, the principles of intergenerational equity and intragenerational equity enjoy significant legislative support in South African law.

Intergenerational equity and intragenerational equity have also received judicial approval in South Africa. First, in *BP Southern Africa*, the court accepted Sands' formulation of sustainable development as including intergenerational equity.[311] Second, it was held in *Phambili* that it would be unsound to suggest that natural resources must be squandered in a manner that compromises the needs of both existing and future generations.[312] Third, the court in *Fuel Retailers* expressly affirmed that the duty to conserve natural resources for the benefit of current and future generations as provided in section 24(b) of the Constitution of South Africa, encapsulates the symbiotic principles of 'intergenerational equity' and 'intragenerational equity'.[313] Overall, it can then be said that the principles of intergenerational equity and intragenerational equity have received unequivocal legislative and judicial endorsement both in the domestic laws of South Africa and Lesotho and are part of customary international law.

---

[306] Glazewski (note 8 above) para 1.4.5.
[307] Section 1 read with section 2(4)(o) of NEMA; *WWF South Africa v Minister of Agriculture, Forestry and Fisheries* (note 255 above) para 90.
[308] Section 2(a) of the NWA.
[309] *Earthlife Africa Johannesburg v Minister of Environmental Affairs* (note 62 above) para 82.
[310] Ibid para 91; *Urgenda Foundation v The State of the Netherlands (Ministry of Infrastructure and the Environment)* C/09/456689 / HA ZA 13-1396 paras 4.54-4.83; *Thompson v The Minister for Climate Change Issues, High Court of New Zealand, Wellington Registry* [2017] NZHC 733 para 131; Appeal Decision of the Water Tribunal *groundWork vs Acting DG Water and ACWA Khanyisa Power* WT02/18/ MP (21 July 2020); See s 28 of the NEMA.
[311] *BP Southern Africa* (note 100 above) 219; See Sands & Peel *et al* (note 21 above) 219.
[312] *Minister of Environmental Affairs and Tourism v Phambili Fisheries (Pty) Ltd* [2003] 2 All SA 616 (SCA) (16 May 2003) para 28.
[313] Ibid para 51. *Company Secretary of Arcelormittal South Africa v Vaal Environmental Justice Alliance* 2015 (1) SA 515 (SCA) para 84.

In this regard, Tladi submits that the emergence of the principle of 'intergenerational equity' is premised on a realisation that development activities erode the natural resources base faster than the resources can renew themselves.[314] Intragenerational and intergenerational equity convey the need to conserve natural resources for the benefit of future generations, equitable utilization, and environmental justice.[315] However, the challenge with intra-and intergenerational equity is that it is difficult to ascertain how these resources will be allocated between two generations.[316] Regardless, the precautionary principle advocates for one to err on the side of caution. Consequently, mankind has a duty to future generations.[317]

However, Tladi contends that from an ecocentric view, 'intergenerational equity' as a human-centred approach, is morally compromised and cannot achieve environmental protection.[318] It is argued that attacking 'intergenerational equity' on this basis invariably impugns sustainable development.[319] Tladi proffers that ecocentrists assume that 'intergenerational equity' as a human-centred methodology to environmental protection, will promote the harmful utilization of natural resources that lack utility for human beings.[320] He asserts that the principle of 'intergenerational equity' requires the existing generation must protect the natural resources for the benefit of future generations.[321] Thus, he opines that intergenerational equity does not facilitate the pillaging of resources that are deemed to lack value.[322] The principle of 'intergenerational equity', in the manner contemplated by the Brundtland definition, is an acceptance of the latitude of future generations to establish on their own needs.[323] Those who believe that 'intergenerational equity' encapsulates a call to damage the environment, fail to understand the issue.[324] 'Intergenerational equity' connotes the duty to protect the environment and not the right to plunder.[325] Thus, intergenerational equity is an established sub-principle of sustainable development.

---

[314] D Tladi 'Of Course for Humans: A Contextual Defence of Intergenerational Equity' (2002) 9 *South African Journal of Environmental Law and Policy* 177, 181.
[315] Field (note 8 above) 415; See also, O Fuo 'The Transformative potential of the constitutional environmental right overlooked in *Grootboom*' (2013) 34 *Obiter* 77, 88.
[316] Birnie, Boyle & Redgwell (note 2 above) 122.
[317] Sands & Peel *et al* (note 21) 221.
[318] Tladi (note 314 above) 182.
[319] Ibid.
[320] Ibid 183.
[321] Ibid 184.
[322] Ibid.
[323] Ibid.
[324] Ibid.
[325] Ibid.

To this end, it can be argued that Article 15 of the LHWP incorporates the principle of 'sustainable development' in that it provides that the signatories must implement all rational measures to guarantee that the "operation, implementation and maintenance of the Project" is in accordance with the mandate to protect the "existing quality of the environment". The reference to "existing quality" connotes that this is a continuous duty that pertains to the present, and the future. Preserving the "existing quality" of the environment denotes 'sustainable use'. 'Sustainable use' of water in the LHWP ensures that it is preserved for the benefit of the current generation and future generations. This is the encapsulation of the principles of 'intergenerational equity' and 'intragenerational equity'. It can then be argued that the LHWP implicitly provides for the principle of intergenerational equity.

It is my view that it is doubtful that the water in the LHWP is being used for the benefit of current and future Basotho generations. I have argued that the current uses of water in the LHWP are 'unsustainable'. If current water uses of the LHWP are 'unsustainable', it is my view that they would be insufficient water to provide for the needs of current and future Basotho generations. Thus, if a water use is 'unsustainable', it invariably means that it would contravene the principles of 'intergenerational equity' and 'intragenerational equity'. This is because it is not possible to use water 'unsustainably' and at the same time, secure it for current and future generations. This is buttressed by the finding that since the LHWP is inequitable, then it violates the principle of intragenerational equity.

In this regard, the ZAMCOM members have made a commitment to intergenerational equity and intragenerational equity.[326] In light of the finding that water uses in the ZAMCOM are 'unsustainable', it follows that this agreement violates the principles of intergenerational equity and intragenerational equity.

3.3 Conclusion

In this chapter, the LHWP was evaluated against the principles of integration, sustainable use, intergenerational equity, and intragenerational equity, as the sub-principles of the principle of sustainable development. In respect of the principle of 'integration', it is found that this principle is implicit in the phrasing of Article 15 of the LHWP. Article 15 of the LHWP provides for the protection of the "existing quality" of the environment and the welfare of persons'. However, the Phase II Agreement 'Operating Rule' fails in this regard. This is

[326] ZAMCOM Agreement art 12.1(e) read with art 14.3(a).

because the ‘Operating Rule’ seeks to ensure economic development and social upliftment for Lesotho and South Africa, but it ignores the pillar of environmental protection in contravention of the principle of integration. This contradictory regulatory framework is compounded by the fact that the LHWP has had virtually no impact on poverty and unemployment. This means that the LHWP has failed to achieve social upliftment and economic development for Lesotho. This then means that the LHWP is not in line with the principle of ‘integration’ as postulated in *Fuel Retailers* as it failed to achieve the balance between the three pillars of sustainable development.

Secondly, despite Article 15 of the LHWP providing a legal basis for ‘sustainable use of the water in the LHWP, it is found that the current water uses in the LHWP are ‘unsustainable’. There is also uncertainty about current water allocation and the impact of pollution, land degradation, and sedimentation on the availability and quality of water in the LHWP. In this regard, the ‘precautionary principle’ demands that regulatory authorities must assume that the water uses are unsustainable. This situation is exacerbated by the lack of an ‘integrated’ approach in the LHWP.

Thirdly, by implicitly providing for the principle of ‘sustainable use’ in Article 15 of the LHWP as well as protecting the “existing quality” of the environment, it is my view that this agreement tacitly recognises the principles of ‘intergenerational equity’ and ‘intragenerational equity’. However, this approach is hobbled by the ‘unsustainable’ water uses in the LHWP. It is inconceivable that water uses could be ‘unsustainable’ and yet at the same time, provide for ‘intergenerational equity’ and ‘intragenerational equity’. This finding is buttressed by the finding in Chapter 2 of this study, that the LHWP is inequitable, which means that on the formulation of Sands and *Fuel Retailers*, it also contravenes the principle of intragenerational equity. Consequently, the LHWP fails to comply with the principles of ‘integration’, ‘sustainable use’, ‘intergenerational equity’ and ‘intragenerational equity’ in contravention of the decision in *Fuel Retailers*. In short, the LHWP contravenes the principle of ‘sustainable development’.

In respect of the ZAMCOM Agreement, it can be seen that it explicitly provides for the principles of integration, sustainable use, and intergenerational equity, and intragenerational equity. Unfortunately, this approach has not been translated into practice. Several studies in the ZAMCOM reveal ‘unsustainable’ water uses, which automatically means that the water uses in a basin would contravene the principles of ‘intergenerational equity’ and ‘intragenerational

equity'. Therefore, since the water uses in the LHWP and ZAMCOM are 'unsustainable', this means that they also contravene the principle of 'reasonable utilization', which is a sub-principle of the principle of 'equitable and reasonable utilization'. Thus, this study has established that the LHWP and the ZAMCOM are on the whole, not in conformance with the principle of 'sustainable development' and the principle of 'equitable and reasonable utilization'.

In the final analysis, the jurisprudential contribution of this chapter is that the 'sustainability' of water uses in a transboundary/shared watercourse hinges on an 'integrated' approach that finds a balance between the three pillars of sustainable development. Failure to adhere to the principle of 'integration' is fatal to the 'sustainability' of water uses in a shared watercourse. If a water use is 'unsustainable', this means that it contravenes the principles of 'intergenerational equity' and 'intragenerational equity' as well as 'reasonable utilization'. It is impossible to use water 'unsustainably' and preserve it to the advantage of the existing and future generations.[327] Article 7.1 of the New Delhi Principles aptly captures this symbiosis by providing that the principle of integration reveals the interconnectedness between socio-economic, ecological and human rights facets of international law pertaining to sustainable development and the link between the needs of existing and future generations. On the whole, an agreement that contravenes the principle of 'equitable and reasonable utilization' invariably falls foul of the principle of 'sustainable development'.

Furthermore, the 'sustainable utilization' and the 'equitable and reasonable utilization' of water depends on the duties to cooperate and to share information between riparian States. This can be impacted by climate change which can exacerbate water scarcity and trigger unsustainable utilization of water.

In this way, a water-sharing regime in the LHWP that integrates the three "pillars" of sustainable development and that ensures sustainable utilization of water will be able to address the projected conflict of uses in the LHWP to the benefit of existing and future generations. In this way, the principle of sustainable development can adequately prevent and address a conflict of uses in the LHWP.

Finally, the constitutive elements of the principle of sustainable development as stipulated by Sands and the court in *Fuel Retailers* may have significant implications for the principle of

[327] See New Delhi Principles art 1.2.

equitable and reasonable utilization. In Chapter 2 of this study, I argued that three of the sub-principles of the principle of equitable and reasonable utilization are the principles of equitable utilization, equitable participation, and reasonable utilization. In this regard, it was found in Chapter 2 that 'reasonable utilization' connotes 'sustainable utilization'. By the same token, it was confirmed in Chapter 3 that 'equitable utilization' denotes 'intragenerational equity'. Similarly, 'equitable participation' invariably connotes public participation, which is a fundamental sub-principle of sustainable development. In fact, under the South African conceptualisation of sustainable development, the concept of 'environmental justice' encapsulates equitable benefit sharing.[328] This means that the principle of 'sustainable development' has, in part, subsumed the principle of 'equitable and reasonable utilization'.

However, it is argued that sustainable development is incompatible with shared watercourses because its application would be imprecise, and it demands cooperation between countries with complex legal systems.[329] On the contrary, I concur with the view that the efficacy of the principle of sustainable development can be found in its ambiguity, which lends it the flexibility that is required to reconcile divergent views on economic development pitted against environmental protection without detracting from the original premise.[330] In this way, riparian States can find mutual ground in a conflict of uses without contravening the principle.

McIntyre asserts that these principles are complementary in that equitable and reasonable utilization gives effect to the principle of sustainable development, particularly in transboundary watercourses as identified by the court in the *Case Concerning Gancikovo-Ngamaros*.[331] As stated earlier in this chapter, this view is endorsed by the major transboundary water agreements like the UN Watercourses Convention and Revised Protocol, which view sustainable utilization as the overall object of equitable and reasonable utilization.

---

[328] Section 2(4)(o) of NEMA; Glazewski (note 8 above) para 1.4.3.

[329] M Fitzmaurice 'The Relationship between the law of international watercourses and sustainable development' in M Fitzmaurice, D Ong & P Merkouris (eds) in *Research Handbook on International Environmental law* (2010) 605, 609-611; T Murombo 'Law, Regulation, and the Promotion of Renewable Energy in South Africa'. Thesis presented for the degree of PHD at the University of Witwatersrand (2016) 28-29.

[330] P Malanczuk 'Sustainable development: some critical thoughts in the light of the Rio Conference' in K Ginther, E Denters & PJIM de Waart (eds) *Sustainable Development and Good Governance* (Martinus Nijhoff Publishers, Dordrecht: 1995) 23,26. At this juncture, I hasten to add that this discussion is not dispositive of this issue since it is a broad and complex issue that would require a thesis of its own. This part of the discussion merely sought to highlight how these principles are inextricably connected.

[331] McIntyre (note 80 above) 139; *Gabcikovo-Nagymaros Project (Hungary/Slovakia)* (note 76 above) para 177; P Wouters & A Rieu-Clarke 'The Role of International Water Law in Promoting Sustainable Development' (2001) 3 https://www.researchgate.net/publication/43920099_The_role_of_international_water_law_in_promoting_sustainable_development.

By the same token, equitable and reasonable utilization provides the effective mechanism of vital human needs, which decisively resolves a conflict of uses in a shared watercourse. Thus, equitable and reasonable utilization and sustainable development are separate but related and complementary principles. Therefore, the pursuit of ‘equity’ and ‘sustainability’ hinges on compliance with both the principles of sustainable development and equitable and reasonable utilization.

However, the pursuit of the goals of ‘equitable and reasonable utilization’ and ‘sustainable development’ in a transboundary water resource has significant implications for the principle of ‘permanent sovereignty over natural resources’. This is because compliance with the principles of ‘equitable and reasonable utilization’ and ‘sustainable development’ may sometimes require that riparian States cede their permanent sovereignty over their natural resources, and instead, seek the concurrence of other States in the utilization of a shared watercourse. This necessities an examination of the veracity of this notion and its implications in Chapter 4 of this thesis.

Chapter 4: To what extent does the LHWP comply with the principle of ‘permanent sovereignty over natural resources’?

Chapter 4: To what extent does the LHWP comply with the principle of 'permanent sovereignty over natural resources'?

4.1 Introduction

The principal question in this study is the compatibility of the Treaty on the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (hereafter, LHWP) with the key underlying international freshwater law principles that address a conflict of uses. There are three principles in this regard: 'equitable and reasonable utilization', 'sustainable development' and 'permanent sovereignty over natural resources'. I have argued in this thesis that the LHWP is 'inequitable' in that it contravenes the basic tenets of the principles 'equitable and reasonable utilization' and 'sustainable development'. This chapter assesses the LHWP's compliance with the principle of 'permanent sovereignty over natural resources' to augment the central argument of this study.

At the outset, it is imperative to reiterate that this study is concerned with the application of the principle of permanent sovereignty on the Orange River as a 'transboundary' or 'shared' or 'international' watercourse. In this thesis, I accept that the terms 'international/shared/trans boundary watercourse' refer to rivers, lakes, or aquifers, which traverse two or more countries.[1] These watercourses will either "form or straddle an international boundary, or in the case of rivers, they may flow through a succession of States".[2] Consequently, the Orange River is referred to as either a shared or transboundary or an international watercourse.

According to Gümplová, permanent sovereignty over natural resources transmits the sub-principles of the principle of sovereignty, i.e. "independence, autonomy, non-intervention, and self-determination", into the economic domain.[3] It is an economic articulation of State sovereignty.[4] This sovereign right to use natural resources encompasses the right to be free from "external influence" over their utilization.[5] It is then argued that 'equitable utilization' of natural resources hinges on the notion of 'shared sovereignty'.[6] 'Shared sovereignty' requires

[1] P Birnie, A Boyle & C Redgwell *International Law and the Environment* 3 ed (2009) 536.
[2] Ibid.
[3] P Gümplová 'Restraining permanent sovereignty over natural resources' (2014) 53 *Enrahonar. Quaderns de Filosofia* 93,102.
[4] Ibid. J Dugard & M Du Plessis *et al Dugard's International Law: A South African Perspective* 5 ed (2018) 210.
[5] P Sands & J Peel *et al Principles of International Environmental law* 4 ed (2018) 203.
[6] Birnie, Boyle & Redgwell (note 1 above) 542.

a consideration of the rights of each State and thus, connotes equitable utilization.[7] This means that the achievement of 'equitable utilization' may require that States have to waive aspects of their permanent sovereignty over their natural resources. Since 'equitable utilization' is a fundamental aspect of the principle of 'sustainable development' - this invariably means that the attainment of 'sustainable development' may require a limited form of 'permanent sovereignty over natural resources'.[8] The problem with the waiver of aspects of a State's sovereignty may mean that a State may have to forego some of its economic development and social upliftment projects to 'equitably' share and 'sustainably' use the natural resources in a shared/transboundary watercourse. These underlying financial losses may prompt States, particularly upstream States, to litigate for an absolute form of 'permanent sovereignty over shared natural resources' to the exclusion of the interests of the other basin States in a shared watercourse.[9]

However, absolute 'permanent sovereignty over natural resources' could sometimes hinder the 'equitable and reasonable utilization' and 'sustainable development' of the shared/transboundary watercourse. Sands is of the view that it is unknown whether a limited form of sovereignty will result in better protection of the environment.[10] This posits the question as to whether the principles of equitable and reasonable utilization and sustainable development can be in concert with the principle of permanent sovereignty over natural resources.[11] Schrijver suggests that these resource-controlling principles can work together.[12] Thus, Schrijver asserts that permanent sovereignty over natural resources can operate as the foundation for sustainable development.[13] This, by implication, means sovereignty can buttress the principle of equitable and reasonable utilization as the forerunner to the principle of sustainable development. In this study, it is my view that these principles not only govern resource allocation but also function as tools to prevent and address a conflict of uses over shared natural resources. It is against this backdrop that the object of this chapter is to ascertain whether the LHWP complies with Lesotho's right to permanent sovereignty over the water in

[7] Ibid.
[8] N Schrijver 'Sovereignty over natural resources: balancing rights and duties in an interdependent world'. Thesis presented for the degree of PhD at the University of Groningen (1995) 376.
[9] P Sands *Principles of International Environmental Law* 2 ed (2003) 191; A Rieu-Clarke & C Spray 'Ecosystem services and international water law: towards a more effective determination and implementation of Equity' (2013) 16 *PER/PELJ* 12, 18.
[10] Sands (note 9 above) 12.
[11] Schrijver (note 8 above) 234-235.
[12] Ibid 235.
[13] Ibid 376; Field TL 'Sustainable development versus environmentalism: competing paradigms for the South African EIA regime.' (2006)123 *South African Law Journal* 409, 416.

the Orange River. This inquiry is especially significant, bearing in mind that the Lesotho Highlands Development Authority Strategic Plan 2008/09-2012/13 claims that the LHWP "entrenches" Lesotho's sovereignty.[14] In the final analysis, this chapter proffers an embedded extrapolation of the findings in this regard, onto the Agreement on the Establishment of the Zambezi Watercourse Commission (hereafter, ZAMCOM Agreement) as a proximate transboundary freshwater agreement to illustrate the inequity of the LHWP.

To this end, this chapter consists of two parts: the first part of the chapter elaborates on the contours of the right to permanent sovereignty over freshwater resources. The second part of the chapter juxtaposes the LHWP with Lesotho's right to permanent sovereignty over the water in the Orange River through a critical analysis of relevant case law, legislation, soft law and treaties.

4.2 The principles of water allocation

International law has tacitly controlled the utilization of natural resources by establishing how rights are apportioned to each State.[15] The legal entitlements that attach to natural resources hinge on whether the resource falls within the sovereignty of one country, a transboundary resource, or held in common benefit for all.[16] These demarcations indicate how a country can exploit a specific resource, and they influence the interpretation of the relevant legislation.[17] It is within this sphere that natural resources are seen as controlled through either the principles of common heritage or common property, shared natural resources, and permanent sovereignty over natural resources.

'Common heritage' is used to refer to either all the resources of nature or the global ecosystem, but for legal purposes, it is restricted to the definition given in the Agreement Governing the Activities of States on the Moon and other Celestial Bodies (1979) (hereafter, the Moon Agreement) and the 1982 United Nations Convention on the Law of the Sea (hereafter, UNCLOS).[18] The Moon Agreement defines 'common heritage' as an object residing within the "province" of all humankind that benefits all people, whereas the UNCLOS describes it as the exploration and exploitation of natural resources to the advantage of mankind

[14] Lesotho Highlands Development Authority Strategic Plan 2008/09-2012/13 2 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Strategic_Plan/Strategic_plan_2008-2013.pdf>.
[15] Birnie, Boyle & Redgwell (note 1 above) 190.
[16] Ibid.
[17] Ibid.
[18] Ibid 197.

as a whole.[19] As employed by these two conventions, the principle of 'common heritage' refers to resources of these areas that must be protected and exploited to the advantage of all States.[20] 'Common property', on the other hand, refers to natural resources that occur beyond national jurisdictions such as the high seas.[21] The concept of 'shared natural resources' represents an "intermediate category", which means that the resources are not completely within the complete jurisdiction of one State, but they also are not the common property of all countries.[22] Thus, this principle represents a restricted iteration of the 'community of interests' principle.[23] At the other end of the spectrum, 'permanent sovereignty over natural resources' provides that a co-riparian State may, without any limitation, use natural resources within its territory.[24] This means that a co-basin State will disregard the rights of other riparian States.[25] It is then submitted that the conceptual approaches to sovereignty by States will likely determine the legal principles that regulate shared water resources and need to be explored.[26] This posits the question as to which principles specifically govern water allocation.

It is imperative to note that international law suggests that two different regimes apply in respect of water: there is a regime for water that exists wholly within the territorial boundaries of a country, and a separate legislative scheme for water that is shared between countries. In respect of water that exists wholly within the territorial boundary of a country, it is argued that such States have the right to sovereignty over that water and this right is seen is either 'limited' or 'absolute'.[27] In respect of water that is 'shared' or 'transboundary', four theories exist in relation to the allocation of water resources: territorial sovereignty, territorial integrity, equitable utilization, and common management.[28]

---

[19] Agreement Governing the Activities of States on the Moon and other Celestial Bodies (Moon Agreement) (adopted 18 December 1979, entered into force 11 July 1984) art 4 and United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) Preamble.
[20] Birnie, Boyle & Redgwell (note 1 above) 197; See Moon Agreement art 4.
[21] Birnie, Boyle & Redgwell (note 1 above) 194-195.
[22] Ibid 192.
[23] Ibid.
[24] O McIntyre 'International Water Law: Concepts, Evolution and Development' in A Earle, A Jagerskog & J Öjendal (eds) *Transboundary Water Management: Principles and Practice* (2010) 59, 61.
[25] Ibid.
[26] Ibid 59.
[27] Birnie, Boyle & Redgwell (note 1 above) 191; N Schrijver 'The dynamics of sovereignty in a changing world' in K Ginther, E Denters & PJIM de Waart (eds) *Sustainable Development and Good Governance* (Martinus Nijhoff Publishers, Dordrecht: 1995) 80, 88. For a contrary view, see C Yamada 'Special Rapporteur: Third report on shared natural resources: transboundary groundwaters to the United Nations General Assembly' A/CN.4/551 (2005) para 19 <http://legal.un.org/ilc/documentation/english/a_cn4_551.pdf>.
[28] Birnie, Boyle & Redgwell (note 1 above) 540.

This study has already explored the theory of 'equitable utilization' in Chapter 2 of this study and thus, this principle is not be discussed in this chapter. The principle of 'territorial integrity or riparian rights' accords the lower riparian the right to complete access to water of natural quality and any variation of regular flow by the upstream State would need approval from the lower riparian State.[29] The principle of territorial integrity invariably favours the rights of the lower riparian States.[30] It is based on the principle of sovereignty but does have a semblance of the principle of sovereign equality of States.[31] This principle opposes the 'Harmon Doctrine'.[32] It is regarded as 'questionable' and enjoys limited support in State practice.[33] McIntyre asserts that it is seen as a "tool of advocacy" rather than a principle of water sharing.[34] The principle has been employed by Egypt, Argentina, Spain, and Bangladesh.[35] However, it has been argued that the decision in *Lac Lanoux* categorically disavowed this principle.[36]

Third, the principle of 'common management' refers to the sound coalescence between the notion that watercourse basins are most effectively managed as an amalgamated whole and the object of finding apt institutional mechanisms to ensure cooperation on environmental and socio-economic issues.[37] It embodies a community of interest that transcends the apportionment of equitable rights and could help achieve integrated regulation of watercourses.[38] These common management systems are the foundation of sustainable development.[39] As already established in Chapter 2, the principle of 'community of interests' is regarded as embodying the nub of the principle of 'equitable and reasonable utilization'.[40] Ultimately, 'common management' is regarded as a principle based on the latitude of a State to make choices of how to allocate water in a shared watercourse.[41]

[29] Ibid 541.
[30] Ibid.
[31] Ibid 12.
[32] Ibid.
[33] Ibid 544.
[34] McIntyre (note 24 above) 63.
[35] Ibid.
[36] Ibid; *Lac Lanoux Arbitration (France v Spain)* (1957) 12 R.I.A.A. 281; 24 I.L.R. 101.
[37] Birnie, Boyle & Redgwell (note 1 above) 544; McIntyre (note 24 above) 67.
[38] Birnie, Boyle & Redgwell (note 1 above) 544.
[39] Ibid 545.
[40] Ibid; McIntyre (note 24 above) 68.
[41] Birnie, Boyle & Redgwell (note 1 above) 542.

Lastly, there is a view that States have the right to "absolute sovereignty over water within their territory" and have the right to utilize water in any manner they see fit.[42] This is the 'Harmon doctrine', but most modern authors assert that it is antagonistic to the interests of downstream States and enjoys little State support.[43] Despite its unpopularity, the United States of America, Germany, Ethiopia, and India have used the principle.[44] However, it has been argued that the countries that have invoked this right have not followed its prescripts dogmatically.[45] It is also argued that this principle has not enjoyed any judicial endorsement.[46] However, State practice still shows a leaning towards two conflicting principles: absolute territorial sovereignty and absolute territorial integrity.[47] Absolute territorial sovereignty is used by the upper riparian State to justify the arbitrary use of a shared watercourse by the upper riparian State.[48] On the other hand, absolute territorial integrity is employed by lower riparian States to assert that upper riparians must not affect the water in a shared watercourse.[49] Furthermore, the evolution of law in these areas has been hampered by the unwillingness of States to accept even minimal limitations of sovereignty.[50] In other words, some States continue to assert their right to 'absolute' permanent (territorial) sovereignty over shared natural resources. It is this right that is the subject of this chapter.

In the same breath, it is prudent to note that permanent sovereignty over natural resources has also met with some substantial opposition that sought to displace it. First, Schrijver submits that equitable utilization is slowly replacing sovereignty and that sovereignty must evolve to find a balance with new norms of international environmental law, including sustainable development.[51] Similarly, it has been argued that sustainable development was meant to be an ecological response to restrict State sovereignty, but it has lost its environmental potential.[52] By the same token, 'common heritage' has failed to dislodge the principle of permanent

[42] Ibid 540; EL Enyew 'Application of the Right to Permanent Sovereignty over Natural Resources for Indigenous Peoples: Assessment of Current Legal Developments' (2017) 8 *Arctic Review on Law and Politics* 222–245.
[43] Birnie, Boyle & Redgwell (note 1 above) 540.
[44] Ibid; Clarke & Spray (note 9 above) 212.
[45] Birnie, Boyle & Redgwell (note 1 above) 540.
[46] McIntyre (note 24 above) 62.
[47] N Sanchez & J Gupta 'Recent changes in the Nile Region may create an opportunity for a more equitable sharing the Nile River Waters' (2011) 58 *Netherlands International Law Review* 363, 378.
[48] Ibid; Rieu Clarke & Spray (note 9 above) 18.
[49] Sanchez & Gupta (note 47 above) 378.
[50] D Tarlock 'Mexico and the United States Assume a Legal Duty to Provide Colorado River Delta Restoration Flows: An Important International Environmental and Water Law Precedent' (2014) 23 *Review of European Community & International Environmental Law* 76, 87; P Gümplová (note 3 above) 111.
[51] Schrijver (note 8 above) 322; Schrijver (note 27 above) 88.
[52] Gümplová (note 3 above) 110.

sovereignty over natural resources because it is ambiguous.[53] To this end, Schrijver submits that territorial sovereignty has not been subsumed by shared jurisdiction or common management, but implies that States today are required to accept the "correlative rights" of other riparian States and to cooperate with them on matters pertaining to the shared uses of transboundary resources.[54] The notion of carte blanche behaviour in a shared watercourse under the banner of the principle of 'permanent sovereignty over natural resources' is also being challenged by the imperative of 'new regionalism' which emphasises the symbiotic relationship between countries in the same geographical region.[55] In the water context, 'new regionalism' is encapsulated by the 'ecosystem approach' that is propagated by Article 20 of the United Nations Convention on the Law of the Non-navigational Uses of International Watercourses (hereafter, UN Watercourses Convention) and Article 2(a) of the SADC Revised Protocol on Shared Watercourses (hereafter, Revised Protocol).[56] The ecosystem approach rejects the notion that shared water resources inherently require collective action premised on absolute sovereignty rather than 'shared sovereignty'.[57] However, shared sovereignty does not denote that any use of a shared watercourse demands the approval of all the riparian States, but it does imply that the sovereignty of a State over water within its territory is subject to the attendant interests of other States.[58] Nevertheless, despite these valiant attempts to dislodge it, permanent sovereignty over natural resources remains a rule of customary international law.[59]

4.3 An assessment of whether the LHWP complies with the principle of 'permanent sovereignty over natural resources'

At the outset, it is imperative to assert that in this study, permanent sovereignty over natural resources is viewed primarily from the perspective of the right as bestowed on the State and to a minor extent, on indigenous people.[60] The permanent sovereignty on natural resources of

[53] Ibid 99.
[54] Schrijver (note 8 above) 323.
[55] C Mulaudzi 'New Regionalism in Southern Africa? Between South African Hegemony and Globalisation' (2009) XVI *Lusotopie* 47, 49.
[56] Rieu Clarke & Spray (note 9 above) 20-21.
[57] J Brunée & S Toope 'Environmental Security and Freshwater Resources: A Case for International Ecosystem Law' (1994) 5 *Yearbook of International Environmental Law* 26, 27; O McIntyre 'The Protection of Freshwater Ecosystems Revisited: Towards a Common Understanding of the 'Ecosystems Approach' to the Protection of Transboundary Water Resources' (2014) 23 *Review of European Community & International Environmental Law* 88-95.
[58] Birnie, Boyle & Redgwell (note 1 above) 542.
[59] Schrijver (note 8 above) 376.
[60] United Nations Economic and Social Council ' Prevention of Discrimination - Prevention of Discrimination and Protection of Indigenous Peoples: Indigenous peoples' permanent sovereignty over natural resources Final

indigenous people denotes their right "to manage, govern, or regulate the use of the resources by the indigenous people itself, by individuals, or by others".[61] Thus, I accept the view that permanent sovereignty over natural resources can be accorded separately to both the State and its indigenous peoples. However, this discussion does not seek to resolve the merits of this approach suffice it to say that bestowing the right to permanent sovereignty over natural resources to both the indigenous people and States, should in principle, be beneficial to the people of a country. According to the United Nations, the focus should not be on what the right is named but rather on entrenching the right of indigenous people to permanent sovereignty over their natural resources.[62] There is no conflict between both iterations of the right to permanent sovereignty over natural resources.[63]

In this regard, it is argued that riparian States have the right to absolute territorial sovereignty over water within their jurisdiction, and they can exploit it freely without any limitation regardless of the impact this may have on the interests of other riparian States.[64] This is often denoted as the 'Harmon doctrine', which argues for the absolute right to utilize shared watercourses.[65] It is submitted that it enjoys little State support and does not appear to embody international law.[66] Even its chief proponent, the United States of America, seems to have abandoned it in its subsequent treaties, which are more consonant with the principle of equitable utilization.[67] This reticence is probably motivated by the notion that the main environmental advantage of collective regulation is that it ensures a coherent methodology in matters of common interest.[68] However, those who assert their entitlement to freely choose how to sustainably evolve could advocate for the right self-determination in the utilization of heir territorial boundaries and permanent sovereignty over natural resources to restrict the possibilities for global regulation.[69] Thus, States have significant latitude in the implementation

report of the Special Rapporteur, Erica-Irene A. Daes' (2004) paras 18-31 <http://hrlibrary.umn.edu/demo/IndigenousSovereigntyNaturalResources_Daes.pdf>.

[61] Ibid para 46; A Anghie *Imperialism, Sovereignty and the Making of International Law* (2005) 217.

[62] United Nations Economic and Social Council 'Prevention of Discrimination - Prevention of Discrimination and Protection of Indigenous Peoples: Indigenous peoples' permanent sovereignty over natural resources Final report of the Special Rapporteur, Erica-Irene A. Daes' (note 60 above) para 31.

[63] Ibid para 18.

[64] Birnie, Boyle & Redgwell (note 1 above) 540.

[65] Ibid.

[66] Ibid.

[67] Ibid;1906 Convention between the United States and Mexico concerning the Equitable Distribution of the Waters of the Rio Grande for Irrigation Purposes (adopted 21 May 2006); 1944 Treaty between the United States and Mexico Relating to the Utilization of the Waters of the Colorado, Tijuana and Rio Grande Rivers (adopted 3 February 1944), 3 UNTS 314; 1973 Agreement on the Permanent and Definitive Solution of the International Problem of the Salinity of the Colorado River, (adopted, entered into force 30 August 1973) 12 ILM (1973) 1105.

[68] Birnie, Boyle & Redgwell (note 1 above) 455.

[69] Ibid.

of the principle of sustainable use unless there are binding international obligations.[70] It is this proclivity to assert the right to permanent sovereignty over 'shared resources' in times of conflict of uses, which has prompted this discussion.

Various attributes have been employed as an illustration of sovereignty's robust station such as 'absolute', 'full', 'permanent' and 'inalienable'.[71] Within this matrix, the terms 'full' and 'absolute' are used interchangeably to mean the right operates without any restriction whereas the terms 'permanent' and 'inalienable' operate as synonyms to mean that the right cannot be denied "as a consequence of unequal or oppressive arrangements, contracts or concessions, especially those that are characterised by fraud, duress, unfair bargaining conditions, lack of mutual understanding, and the like".[72] It has been argued that at present, sovereignty is not absolute because of the emergence of novel conceptions of resource exploitation that are based on "notions of economic security, ecological protection, and common interest".[73] Schrijver believes that the right to sovereignty is not absolute.[74] These considerations propagate a reconfiguration of sovereignty such that it is no longer regarded as the reason for the exclusion of others, but rather, it countenances a commitment to cooperation.[75] Thus, permanent sovereignty over natural resources can either be 'absolute' (full) or 'limited'.

Within this framework, it is my view that the right to permanent sovereignty over natural resources is not only 'permanent' but also, 'absolute'.[76] This debate on whether sovereignty is 'limited' or 'absolute' was triggered by the fierce contest for the natural resources between newly independent States and their former colonial powers.[77] For the developing countries, permanent sovereignty was absolute to afford them the right to achieve the development required in their countries, whereas the developed countries argued for sovereignty subject to international law to protect their investments in the formerly colonised but now independent

[70] Ibid 200.
[71] N Schrijver *Sovereignty over Natural Resources: Balancing Rights and Duties* (1997) 2.
[72] United Nations Economic and Social Council ' Prevention of Discrimination - Prevention of Discrimination and Protection of Indigenous Peoples: Indigenous peoples' permanent sovereignty over natural resources Final report of the Special Rapporteur, Erica-Irene A. Daes' (note 60 above) para 47.
[73] Birnie, Boyle & Redgwell (note 1 above) 192.
[74] Schrijver (note 8 above) 237.
[75] Birnie, Boyle and Redgwell (note 1 above) 192.
[76] L Atsegbua 'Principle of permanent sovereignty over natural resources and its contribution to modern petroleum development agreements' (1993) 25 *Journal of the Indian Law Institute* 115,116.
[77] Ibid 116-117.

States.[78] Thus, the developed countries saw sovereignty as being 'limited'. This underlying philosophical tension has led to many contradictory agreements on the right to permanent sovereignty over natural resources. Regardless, I argue that permanent sovereignty over natural resources remains 'absolute' or 'full' with some States reluctant to tolerate any diminution from this right.

Brownlie asserts that 'sovereignty' is the fundamental "constitutional" principle in international law.[79] It is the foundation for the entitlements and obligations of countries over natural resources that occur in their jurisdiction.[80] The International Court of Justice (hereafter, ICJ) has confirmed in the *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)* case, that the right to 'permanent sovereignty over natural resources' is a rule of customary international law.[81] The principle of 'sovereignty' originated with the Treaty of Augsburg (1555)[82] and the Peace of Westphalia (1648).[83] It is argued that in the early evolution of international law, the control of natural resources hinged on the attainment of 'sovereignty' over land and water.[84] International law placed minimal restrictions on the use of resources that fell under the regime of "exclusive sovereignty".[85] The adjudication of the early disputes over natural resources usually took the form of territorial control, as in the *Norwegian Fisheries*[86] case or otherwise hinged on the nature of a resource as "shared or

[78] Ibid 117; M Barbieri 'Developing Countries and their Natural Resources. From the elaboration of the principle of Permanent Sovereignty over natural resources to the creation of sovereign wealth funds' (2009) 20-21 <https://vi.unctad.org/resources-mainmenu-64/digital-library?view=browse&by=browse-by-author&cl=2.2.4>; Sands & Peel (note 5 above) 202.
[79] Schrijver (note 8 above) 2; I Brownlie *Principles of Public International Law* 6 ed (2003) 287.
[80] Birnie, Boyle & Redgwell (note 1 above) 192.
[81] *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)* Judgment I.C.J. Reports 2005, p. 168 para 244; *Island of Palmas (Netherlands, USA)* 4 April 1928 VOLUME II pp. 829-871, 838; *Texaco Overseas Petroleum Co. v. Libya* 17 ILM 556 (hereafter, *Texaco*) para 59; S Ng'ambi 'Permanent 'Sovereignty Over Natural Resources and the Sanctity of Contracts, From the Angle of Lucrum Cessans' (2015) 12 *Loyola University Chicago International Law Review* 153, 157-159; Gümplová (note 3 above) 102.
[82] Treaty of Augsburg 1555 <http://www.smixx.de/ra/Augsburger_Religionsfriede_1555.pdf>.
[83] Peace of Westphalia 1648: comprising (A) Peace Treaty of Osnabrück between Emperor Ferdinand III and Queen Christina of Sweden and their respective allies, Osnabrück (October 14/24, 1648) art VIII and art 74 of the (B) Treaty between Emperor Ferdinand III and the King of France, Louis XIV, and their respective allies, Münster (October 14/24, 1648); MP Ferreira-Snyman 'The evolution of state sovereignty :A historical overview' (2006) 12 *Fundamina* 1,10.
[84] Birnie, Boyle & Redgwell (note 1 above) 190.
[85] Ibid 191.
[86] *Fisheries case*, Judgment of December 18th, I95I: I.C. J. Reports 1951, p 116, 124-125.

common property" existing outside the sole jurisdiction of any one country, as in the *Behring Sea Fur Seals*[87] arbitration or the *Icelandic Fisheries* case.[88]

First, in the *Norwegian Fisheries* case, in response to the United Kingdom claim against the seizing of British ships by the Norwegian government because of the latter's delimitation of the territorial sea, the ICJ found that Norway's demarcation of the fisheries jurisdiction by the Norwegian government complies with international law.[89] In this regard, the *Fur Seals Arbitration* case found that the United States of America did not have any right of claim to the property in the fur-seals found in the islands of the United States of America in Behring Sea if the seals in question are not within the confines of the "ordinary three-mile limit".[90] In the *Iceland Fisheries* case, the court found that Iceland was prohibited from unilaterally excluding British vessels from areas regarded as part of its fisheries limits.[91] Significantly, the ICJ held in *Iceland Fisheries* that countries have, in specific instances, a "preferential right" over natural resources from shared watercourses if that resource is crucial for human life and economic development.[92] This evokes the notion of 'vital human needs'. In Chapter 2 of this study, I argued that 'vital human needs' constitute water for potable uses, personal hygiene, and food preparation as well as preserving an ecosystem. I also argued in Chapter 2 that 'vital human needs' trumps all other uses in a conflict of uses. Based on the *Iceland Fisheries* dictum, the principle of permanent sovereignty over natural resources can operate to limit the principle of equitable and reasonable utilization if the resource in question is a 'vital human need'. This is significant in that if there is a conflict of uses and the shared watercourse provides water for 'vital human needs', then States have the right to absolute permanent sovereignty over that shared watercourse.

However, the decisions of other adjudicatory bodies have supported the notion that permanent sovereignty over natural resources is limited. First, in *Iron Rhine*, the Tribunal held that the Netherlands has the right to of 'sovereignty' in its territory unless this would conflict

[87] *Award between the United States and the United Kingdom relating to the rights of jurisdiction of United States in the Bering's sea and the preservation of fur seals*, Decision of 15 August 1893 VOLUME XXVIII pp. 263-276.
[88] Birnie Boyle & Redgwell (note 1 above) 190; *Fisheries Jurisdiction (United Kingdom v. Iceland)*, Jurisdiction of the Court, Judgment, I.C.J. Reports 1973, p. 3.
[89] *Fisheries case*, Judgment of December 18th, I95I: I.C. J. Reports 1951, p 116, 118.
[90] *Award between the United States and the United Kingdom relating to the rights of jurisdiction of United States in the Bering's sea and the preservation of fur seals* (note 87 above) 269.
[91] *Fisheries Jurisdiction (United Kingdom v. Iceland)*, Merits, Judgment, I.C.J. Reports 1974, p. 3 para 71.
[92] Ibid.

with the rights of other States.[93] More significantly, it was held that a country's rights are to be honoured to the extent that it is not restricted by her international obligations, and by that country's obligations under the treaties.[94] This ratio of *Iron Rhine* was confirmed in the *Interpretation of the Statute of the Memel Territory* case.[95] Furthermore, in *Free Zones*, the court held that 'sovereignty' is to be respected to the extent that it is not affected by international law. [96] In this regard, the court in *Wimbledon* held that it is not an abdication of its 'sovereignty' if a State concludes a treaty that obliges it to do or to refrain from doing a specific act.[97] This court then held that any treaty regulating such rights restricts the exercise of the 'sovereign' rights of the State.[98] Thus, the ratification of treaties is a component of a country's 'sovereignty'.[99] The court also held that in relation to water, the treaty-based restrictions on the "exercise" of State sovereignty even though limited, are envisioned to be permanent.[100] In *Lac Lanoux*, the arbitrator went as far as to say that the territorial sovereignty "must bend before all international obligations".[101] Similarly, in the investment sphere, it was held in both *LIAMCO* and *Texaco*, that a State cannot disregard its international obligations based on the right to sovereignty.[102] The same approach was echoed in *Aminoil*.[103] This means that these decisions are of the view that the right to permanent sovereignty over natural resources can be limited.

These judicial pronouncements are not dispositive of the principle of permanent sovereignty over natural resources since this principle has also been the subject of various international law agreements subsequent to the formation of the United Nations, which endorse the view that right can either be absolute or limited. Firstly, the principle of 'sovereignty' constitutes *jus cogens* as per Article 2.1 of the Charter of the United Nations. The Charter of the Nations stipulates that the United Nations is premised on the principle of "sovereign

[93] *Award in the Arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway between the Kingdom of Belgium and the Kingdom of the Netherlands*, decision of 24 May 2005 para 56.
[94] Ibid para 51; *Case of Free Zones of Upper Savoy and the District of Gex* C.I.J., Series A/B, No. 46 (1932) at p. 166) para 222.
[95] *Interpretation of the Statute of the Memel Territory* (P.C.I.J., Series A/B, No. 49 (1932) para 49.
[96] *Case of Free Zones of Upper Savoy and the District of Gex* (note 94 above) para 222.
[97] *Case of the S.S. Wimbledon* (P.C.I. J. Series A, No. 1 (1923) 25.
[98] Ibid.
[99] Ibid.
[100] Ibid.
[101] *Lac Lanoux Arbitration (France v Spain)* (note 36 above) 16.
[102] *Libyan American Oil Co. ("LIAMCO") v. Libya*, 17 I.L.M. 3 (1978), 4 Y.B. COM. ARB. 177 (1979) para 154 and *Texaco* (note 81 above) para 68.
[103] *The Government of the State of Kuwait v. The American Independent Oil Company (AMINOIL)*, YCA 1984, at 71 et seq (hereafter, *Aminoil*) para 95.

equality" of all countries.[104] Thus there is a symbiotic relationship between State sovereignty and complying with international law.[105] It is opined that Article 2.1 confirms the primacy of international law and describes sovereignty within the confines of international law, and therefore it operates as a narrow concept.[106] This is particularly important because it implies that the right to permanent sovereignty over natural resources is not absolute and is thus subject to limitations such as treaty obligations.

In the same breath, it is argued that States have a right or duty to intercede in the internal issues of another country in the context of international humanitarian law and this notion is based on a "moral obligation" for the international community to help people who are in peril without acquiring the approval of the country in question.[107] Despite this principle not being universally accepted, it has been employed by the Security Council on Chapter VII of the Charter of the United Nations on cases relating to threats against international peace and security.[108] This implies that 'sovereignty' can be limited in international law.[109] Thus, there are valid objectives that are of a higher significance than the right to 'sovereignty'.[110] Consequently, it is argued that States may have to accept the notion that 'sovereignty' may be "collectively" implemented.[111]

Some have argued that 'sovereignty' is now regarded as *jus cogens*.[112] There are several reasons proffered to support this contention, including, among other things: trepidation about scarcity, poor bargaining positions of developing countries, the Doha phase of negotiations is irrefutable proof of this; the need to facilitate and shield foreign investments and that nationalization was gaining traction.[113]

Furthermore, the Universal Declaration of Human Rights in 1948 (hereafter, UDHR) provides that 'sovereignty' can be limited.[114] The International Covenant on Civil and Political

[104] The Charter of the United Nations (adopted 26 June 1945, entered into force 24 October 1945) art 2.
[105] Ferreira-Snyman (note 83 above) 23.
[106] Ibid 20-21.
[107] J Nkongolo 'International solidarity and permanent sovereignty over natural resources: antagonism or peaceful coexistence? The case of oil in the Virunga National Park' (2015) 2 *African Journal of Democracy and Governance* 77, 87.
[108] Ibid.
[109] Ibid; Birnie, Boyle & Redgwell (note 1 above) 130.
[110] Nkongolo (note 107 above) 87.
[111] A Ferreira-Snyman 'Sovereignty and the changing nature of public international law: towards a world law?' (2007) XL *Comparative and International Law Journal of South Africa* 395, 407.
[112] Atsegbua (note 76 above) 120.
[113] Schrijver (note 8 above) 4.
[114] Universal Declaration of Human Rights (adopted 10 December 1948) art 2. This is a soft law instrument. Soft law instruments here include amongst others, International Law Association's New Delhi Declaration of

Rights (hereafter, ICCPR) elaborates on the UDHR. Article 1.2 of the ICCPR provides that all peoples have the right to freely utilize their natural resources to meet their needs in line with international law. Thus, Article 1.2 implies that the right to 'sovereignty' over natural resources is not absolute.

However, Article 1.2 of the ICCPR further provides that people must never be denied their means of subsistence. In the same breath, Article 1.2 of the International Covenant on Economic, Social and Cultural Rights (hereafter, ICESCR) rehashes this provision in exact terms. This provision is fundamental in that it guarantees the right to "subsistence" of all peoples in instances of a conflict of uses. The "means of subsistence" in this regard would include water, which is vital to human life. Article 1.2 must be read with Article 25 of the ICESR, which provides that this agreement must protect the right of all peoples to freely utilize their natural resources. This would then imply that the right to sovereignty is absolute as it preaches unbridled control and use of natural resources. Based on sections 39(2) and 233 of the Constitution of the Republic of South Africa (hereafter, Constitution of South Africa), the right to permanent sovereignty over natural resources must be interpreted in a manner that considers international law and is in line with a "reasonable interpretation" of international law. It is common cause that both Lesotho and South Africa have ratified the ICCPR and the ICESCR.[115] This means that the ICCPR and its provisions are binding on South Africa and Lesotho. Based on the ICCPR and the ICESCR, Lesotho can ignore the provisions of the LHWP in times of a conflict of uses because the water is fundamental to "subsistence" or is a 'vital human need' in Lesotho. This would then mean sections 5 and 6 of the Lesotho Water Act 15 of 2008 (hereafter, LWA), which prioritise the 'domestic uses' of Lesotho residents in a conflict of uses, trump the water supply obligations of the LWHP and the Phase II Agreement.[116] As established in Chapters 1 and 2 of this thesis, the LHWP is also regulated by

Principles of International Law Relating to Sustainable Development (adopted 6 April 2002), the World Bank Guidelines on the Treatment of Foreign Direct Investment (1993), UNEP Principles of Conduct, in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States (1978) and the ILC Draft Articles on the Law of Transboundary Aquifers (2008).

[115] For the ICESCR (adopted 16 December 1966, entered into force 3 January 1976); *Lesotho College of Education Staff Union v Lesotho College of Education* (LC 35/14) [2015] LSLC 20 (18 March 2015) para 12; For the ICCPR (adopted 16 December 1966, entered into force 23 March 1976); See also, *Ts'epe v Independent Electoral Commission* (C of A (Civ) No. 11/05 CC 135/05) (NULL) [2005] LSHC 93 (20 April 2005) para 11; *Kaunda v President of the Republic of South Africa* 2005 (4) SA 235 (CC); 2004 (10) BCLR 1009 (CC) (4 August 2004) para 34.

[116] <https://www.water.org.ls/download/lesotho-water-act-no-15-of-2008/>. On the relationship between the LHWP and Lesotho's domestic laws, see Chapter 1 of this thesis at pages 30-31. See also, C Majinge 'The Doctrine of Permanent Sovereignty over Natural Resources in international law and its application in developing countries: The case of the mining sector in Tanzania' (2008) 16 *African Yearbook of International Law* 235,260.

the domestic laws of Lesotho and South Africa. However, despite the fact that Article 18.2 of the Phase II Agreement requires that the municipal laws of Lesotho and South Africa must be aligned with the LHWP, the domestic laws of Lesotho still contradict the LHWP and its protocols on the applicable water allocation regime in respect of the Orange River.

By parity of reasoning, Lesotho could assert its rights based on Article 11 of the ICESCR, which provides for the right to adequate food. This is because human beings require water to have food.[117] This right is recognised in the Constitution of South Africa.[118] This is augmented by the National Policy on Food and Nutrition Security for the Republic of South Africa, which seeks to give effect to the Constitution of South Africa and ensure food security in South Africa.[119] The link between water and food is incontrovertible.[120] The right to food is embedded in the right to health in the Constitution of Lesotho.[121] Read together with the right to "subsistence" as provided in the ICESCR and ICCPR, Lesotho could argue for the right to use water in the Orange River exclusively for its food needs in a conflict of uses.

More specifically, it has been held that the principle of permanent sovereignty over natural resources was explicitly developed over two phases: (i) since its conception in 1952 up to the advent of Resolution 1803 on 14 December 1962 and (ii) from 1962 to the promulgation of Charter of Economic Rights and Duties of States (hereafter, CERDS) in 1974.[122] It must be noted that during the period 1952 – 1962, the principle of permanent sovereignty over natural resources was regarded as a right conferred in the people rather than the States.[123] It is then argued that the principle of permanent sovereignty over natural resources sprouted primarily as a retort by the formerly colonised developing States to the problem of foreign acquisition of their mineral resources that led to the United Nations General Assembly Resolution 1803.[124] Permanent sovereignty over natural resources had been initially broached firstly, as part of the discussions in the General Assembly on the promotion of economic development in underdeveloped countries; and, secondly, in relation to the drafting of the international

[117] See *Mazibuko v City of Johannesburg* 2010 (4) SA 1 (CC) (8 October 2009) para 1.
[118] Section 27(1)(b) and s 28(1)(c) of the Constitution of South Africa.
[119] South Africa National Policy on Food and Nutrition Security para 2.1 <https://www.nda.agric.za/docs/media/NATIONAL%20POLICYon%20food%20and%20nutririon%20security.pdf>.
[120] South Africa National Development Plan 2030 Our Future: Make it Work 95 <https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf>.
[121] Section 27 of the Constitution of Lesotho <https://lesotholii.org/ls/legislation/num-act/1993/1>.
[122] *De Beers Consolidated Mines Ltd v Ataqua Mining (Pty) Ltd* (3215/06) [2007] ZAFSHC 74 (13 December 2007) para 32.
[123] Ibid para 33; Majinge (note 116 above) 260.
[124] Birnie, Boyle & Redgwell (note 1 above) 191.

covenants on human rights, notably under General Assembly Resolution 421 D (V) of 4 December 1950.[125] Through Resolution 545 (VI) of 5 February 1952, the General Assembly had made the decision to recognise the "right of peoples to self-determination" and requested the Commission on Human Rights (hereafter, the Commission) to develop recommendations on international respect for this right.[126] On 14 December 1962, the draft resolution on the permanent sovereignty of peoples and nations over their natural resources, with some minor changes, was overwhelmingly adopted as General Assembly Resolution 1803 (XVII).[127] In this way, the right to permanent sovereignty over natural resources received its most authoritative international endorsement through the United National Resolution 1803 (XVII) (hereafter, Resolution 1803).[128] It must be noted here, that South Africa voted against the adoption of Resolution 1803 although this is of no consequence because as will be shown later in this discussion, the resolution has been incorporated into South African law.

Resolution 1803 provides for the right of States to permanent sovereignty over their natural wealth in the national interest.[129] Resolution 1803 further confirms that the infringement of the rights of peoples and nations to sovereignty over their natural resources is against the purport and principles of the Charter of the United Nations and prevents international co-operation and the maintenance of peace.[130] This means that the Charter of the United Nations and Resolution 1803 (XVII) are intimately connected.

Resolution 1803 further requires that foreign investors must "strictly and conscientiously respect the sovereignty of peoples and nations over their natural wealth and resources in accordance with the Charter".[131] Resolution 1803 (XVII) took a step forward from its precursor, Resolution 1515 of 1960, which suggested that the sovereign right of every State to dispose of its natural resources should be respected as required by international law.[132] It has been held

[125] United Nations 'Procedural History of Resolution 1803 (XVII): "Permanent Sovereignty over Natural Resources" (2012) 1 <http://legal.un.org/avl/ha/ga_1803/ga_1803.html> (hereafter, Procedural History of Resolution 1803).
[126] Ibid.
[127] Ibid 3; United Nations General Assembly Resolution 1314 (XIII): Recommendations concerning international respect for the right of peoples and nations to self-determination of 12 December 1958 para 1 <https://digitallibrary.un.org/record/206915.
[128] United Nations General Assembly Resolution 1803 (XVII) of 14 December 1962: "Permanent sovereignty over natural resources".
[129] Ibid para 1.
[130] Ibid.
[131] Ibid para 8.
[132] United Nations General Assembly Resolution 1515 (XV) of 1960: "Concerted action for economic development of economically less developed countries" of 15 December 1960 para 5 <http://www.worldlii.org/int/other/UNGA/1960/42.pdf>.

that Resolution 1803 (XVII) has been generally accepted as being "conservative, and acceptable to most developed countries".[133] As a United Nations Resolution, it is regarded as "identifying, specifying and confirming a rule of customary law".[134] Resolution 1803 is alleged to be the last resolution in this regard, which recognises the importance of international law in protecting foreign investments.[135] In this way, Resolution 1803 is regarded as asserting that the right to permanent sovereignty over natural resources is not absolute.

The prescripts of Resolution 1803 were incorporated into South Africa law by way of the Minerals and Petroleum Resources Development Act 28 of 2002 (hereafter, MPRDA) which provides that it seeks to give effect to the internationally established right of the State to exercise its sovereignty over all the natural resources within South Africa.[136] In *De Beers*, it was held that South Africa has accepted the right to permanent sovereignty over natural resources as encapsulated by Resolution 1803 and it is a facet of the right to self-determination.[137] This means that South Africa has accepted Resolution 1803 as part of its law, and it must comply with it in relation to the LHWP in times of a conflict of uses.

This endorsement of the right to permanent sovereignty over natural resources has been extended to include indigenous communities in South African law. First, in *Alexkor*, it was implicitly held that 'sovereignty' bestows indigenous communities, the rights to private property, and this includes the right to access and utilize their natural resources.[138] This court also held that a limitation in sovereignty does not affect the rights of private owners.[139] This approach was confirmed in *Gongqose*, where the court held indigenous communities have a customary law right of access and exploitation of natural resources.[140] By the same token, it was held in *Baleni* that under South African law, the State is required to acquire the "consent" of the 'community' who "hold land in terms of customary law" rather than "merely consulting

[133] *De Beers Consolidated Mines Ltd v Ataqua Mining (Pty) Ltd* (note 122 above) para 33; F Visser "The principle of permanent sovereignty over natural resources and the nationalization of foreign interests" (1988) XXI *Comparative & International Law Journal of South Africa* 76, 77.
[134] A Tolentino Jr 'Sovereignty over Natural Resources - Change of Concept or Change of Perception?' (2014) 44 *Environmental Policy and Law* 300, 301.
[135] Atsegbua (note 76 above) 118.
[136] Section 2(a) of the MPRDA.
[137] *De Beers Consolidated Mines Ltd v Ataqua Mining (Pty) Ltd* (note 122 above) para 32.
[138] *Alexkor Ltd v Richtersveld Community* 2004 (5) SA 460 (CC) para 69. For a definition of 'indigenous communities', see *African Commission on Human and Peoples' Rights (Ogiek Community v Republic of Kenya* (2017) Appl No 006/2012 (hereafter, *Ogiek*) para 107.
[139] *Alexkor Ltd v Richtersveld Community* (note 138 above) para 69.
[140] Ibid paras 56-59.

them" as required by the MPRDA.[141] Significantly, the *Baleni* case reveals how the indigenous right to permanent sovereignty over natural resources can be used to veto projects such as the LHWP. *Baleni* also revealed that the objectives of the national government could be in conflict with the objectives of a community. This gives credence to the charge that an evaluation of the needs of the community premised on the 'nation-state' can be misleading and lead to great injustices.

The indigenous communities' claim for the water in the LHWP is strengthened by their right to development.[142] This right to development is endowed with 'substantive', and 'procedural' aspects and contravention of either facet violates this right.[143] This includes the right to 'use' and enjoy the 'benefits' of natural resources.[144] 'Development' in this regard, has a broad and flexible meaning depending on the circumstances of each case and must be seen as a vehicle for the realization of human rights.[145] This right of indigenous communities to enjoy the benefits of their natural resources has been endorsed by the African Commission on Human and Peoples' Rights.[146] Within this context, it has been held that the right to development requires 'equity' as a superordinate norm of the utilization of resources.[147] This also incorporates the right to equitable participation, which is crucial to the achievement of the right to development of groups in line with Article 2.3 of the United Nations Declaration on

[141] *Baleni v Minister of Mineral Resources* 2019 (2) SA 453 (GP) (22 November 2018) para 76; See also s 2 of Interim Protection of Informal Land Rights Act 31 of 1996; *Centre for Minority Rights Development (Kenya) & Minority Rights Group International on behalf of Endorois Welfare Council v Kenya Comm* 276/2003 (2009) AHRLR 75 (ACHPR 2009) (hereafter, *Endorois*) para 291. See also, *Maledu v Itereleng Bakgatla Mineral Resources (Pty) Limited* (CCT265/17) [2018] ZACC 41 (25 October 2018) paras 68 and 96; See also, C Vinti 'The right to mine in a 'protected area' in South Africa: *Mining and Environmental Justice Community Network of South Africa v Minister of Environmental Affairs*' (2019) 35 *SAJHR* 311, 317.

[142] African Charter on Human Peoples Rights art 22; African Youth Charter (adopted 2 July 2006, entered into force 8 August 2009) art 10; Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (adopted 1 July 2003, entered into force 25 November 2005) art 19; CC Ngang 'The right to development in Africa and the requirement of development cooperation for its realisation'. Thesis presented for the degree of PHD at the University of the Pretoria (2017) 143; *Endangered Wildlife Trust v Director General of the Department of Water and Sanitation* (note 134 above) para 151; See for contrast, T Humby 'The right to development-in-environment and its ecological and developmental thresholds' (2016) 32 *SAJHR* 219,229.

[143] *Endorois* (note 141 above) para 277.

[144] *Ogiek* (note 138 above) para 201.

[145] *Ogiek* (note 138 above) para 209; UNDRIPS art 23; CC Ngang 'Towards a right-to-development governance in Africa' (2018) 17 *Journal of Human Rights* 1, 7-9.

[146] *Endorois* (note 141 above) paras 266; Ngang para (note 142 above) 167; SA Kamga 'The right to development in the African human rights system: The *Endorois* case' (2011) 23 *De Jure* 381-391; See in general, S Marks 'The human right to development: between rhetoric and reality' (2004) 17 *Harvard Human Rights Journal* 137,142; I Shai 'Rupturing International Law to Realise the Right to Development' (2019) LII *Comparative and International Law Journal of South Africa* 151,159; S Igbinedion 'Finding value for the right to development in international law' (2019) 19 *African Human Rights Law Journal* 395-417.

[147] *Endorois* (note 141 above) para 277.

Development.[148] This confers on these groups a right of 'free, prior, and informed consent, according to their customs and tradition' and this right can be enforced against domestic and foreign abuse.[149] While this discussion is not dispositive of the right to development, it does show that the right to development of the indigenous communities in Lesotho could be used to address the inequitable regime of the LHWP.

The Stockholm Declaration on the United Nations Conference on the Human Environment (hereafter, Stockholm Declaration) then recognised the principle of permanent sovereignty over natural resources. Principle 21 of the Stockholm Declaration provides that States have, in line with the Charter of the United Nations and the principles of international law, the sovereign right to use their natural resources according to their policies on ecology. It has been opined that principle 21 virtually suggests that States have the right to absolute sovereignty over their natural resources.[150] It also provides the required compromise between the principles of sustainable development and sovereignty over their natural resources.[151] After the 1972 United Nations Stockholm Conference on the Human Environment, this trend was superseded by resource-driven agreements and immediately followed by the adoption of the integrated ecosystem approach.[152]

The same approach was followed by the Rio Declaration on Environment and Development (hereafter, Rio Declaration), which emphasises that States should exploit their resources in line with their environmental and development strategies.[153] Schrijver opines that the Rio Declaration enhanced the prevalence of the principle of permanent sovereignty over natural resources.[154] It is then alleged that the proper management of the earth's scarce natural resources required a softer concept of sovereignty based on "equitable sharing of transboundary natural resources and the global commons".[155] In this way, international environmental law has accepted the notion that despite the fact that States are bestowed the right to permanent

[148] Ibid para 279-282; United Nations General Assembly Resolution 41/128: Declaration on the Right to Development of 4 December 1986.
[149] *Endorois* (note 141 above) para 292; *Sudan Human Rights Organisation & Another v Sudan* (2009) AHRLR 153 (ACHPR 2009) para 222.
[150] Birnie, Boyle & Redgwell (note 1 above) 144.
[151] Ibid 146.
[152] Tolentino Jr (note 134 above) 302; See for instance, Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993) art 3; United Nations Convention on the Law of the Sea (adopted 21 May 1997, entered into force 17 August 2014) art 136 and United Nations Framework Convention on Climate Change (adopted 4 June 1992, entered into force 21 March 1994) Preamble.
[153] Rio Declaration on Environment and Development (adopted June 1992) principle 2.
[154] Schrijver (note 8 above) 128.
[155] Tolentino Jr (note 134 above) 302.

sovereignty over their natural resources, they are not entitled to ignore the protection of the environment of shared natural resources.[156] Even though the pursuit of economic development is a facet of sovereignty over natural resources, it cannot be achieved without due consideration of the deleterious effects on the environment.[157] Consequently, it is argued that sovereignty over natural resources is limited, and it must now be construed within the prescripts of the global obligations spelt out primarily in the United Nations Framework Convention on Climate Change and Biodiversity Conventions, and the Rio Declaration and other relevant instruments, which in principle, propagate protection of the environment.[158] This implies that the right to sovereignty over natural resources is not absolute.

By 1974, the concept of permanent sovereignty over natural resources had been morphed into a political clamour for a "New International Economic Order" under United Nations General Assembly Resolution 3201.[159] Resolution 3201 is emphatic in its affirmation of the principle of permanent sovereignty over natural resources: first, it provides that States have the right to "full permanent sovereignty over its natural resources";[160] second, it provides for the right to sovereign equality and self-determination of all States;[161] third, it provides that developing countries have the right to regain "effective control" of their natural resources and that no State may be denied this right.[162] Now there was untrammelled economic sovereignty in the domain of foreign investment.[163] In this way, Resolution 3201 confirmed the right to permanent sovereignty over natural resources and the right to expropriate them.[164] Therefore, Resolution 3201 represents the unequivocal endorsement of the principle of 'absolute' or 'full' permanent sovereignty over natural resources. However, some argue that Resolution 3201 did not change the conduct of developed states and may not be fundamental to their plans.[165]

---

[156] Birnie, Boyle & Redgwell (note 1 above) 110.
[157] Ibid 115.
[158] Ibid 130; Sands (note 9 above) 246.
[159] *De Beers Consolidated Mines Ltd v Ataqua Mining (Pty) Ltd* (note 122 above) para 33; United Nations General Assembly 3201 (S-VI): Declaration on the Establishment of a New International Economic Order UNGA Res 3201 (S-VI) (1974) <http://legal.un.org/avl/pdf/ha/ga_3201/ga_3201_ph_e.pdf>.
[160] United Nations General Assembly Resolution 3201 (note 159 above) para 4(e).
[161] Ibid; See the United Nations General Assembly Resolution 2625 (XXV): Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations (1970) of 24 October 1970 <https://www.un.org/ruleoflaw/files/3dda1f104.pdf>, which defines "sovereign equality" as essentially being conferred with equal entitlements in the international community.
[162] United Nations General Assembly Resolution 3201 (note 159 above) para 4(h) read with para 4(e).
[163] *De Beers Consolidated Mines Ltd v Ataqua Mining (Pty) Ltd* (note 122 above) para 33.
[164] Birnie, Boyle and Redgwell (note 1 above) 191.
[165] DJ Harris *Cases and Materials on International Law* 6 ed (2004) 580-581.

Furthermore, Resolution 3202 (S-VI): Programme of Action on the Establishment of a New International Economic Order, sought to reconfigure the relationship between developing and developed countries based on the principles of "dignity and sovereign equality". [166] Similarly, the CERDS provides that every country has the right to "full permanent sovereignty" which incorporates the right to utilize all its natural resources.[167] This means that under the CERDS, sovereignty is 'absolute'. The CERDS provides that sovereignty, sovereign equality, and territorial integrity are "fundamental" principles of economic relations.[168] These two provisions represent the most explicit and emphatic endorsement of the principle of 'absolute' or 'full' permanent sovereignty over natural resources. Thus, it has been contended that Resolution 3201 and the CERDS liberated the principle of permanent sovereignty from the shackles of Resolution 1803.[169] Permanent sovereignty over natural resources was now regarded as 'absolute'.

It is argued that by emphasizing the unfettered sovereignty of States over natural resources, Resolution 3201 and the CERDS might be construed to mean that restrictions would likely need agreement between the relevant States.[170] However, these Resolutions and the robust support garnered from developing States to the notion of permanent sovereignty, sought to advocate for the right to nationalize foreign-owned enterprises without any restriction from the previous rules, which protected foreign investments.[171] It is argued that despite the popularity of these Resolutions, they have not hindered the evolution of rules of conservation under customary international law, which restrict the right to permanent sovereignty.[172] In fact, some tribunals have sought to disavow these Resolutions on the basis that they did not acquire the support of the developed nations.[173] However, this does not detract from the fact that sovereignty remains the fulcrum of the rights of States over natural resources in their own jurisdiction.[174] Overall, it is my view that the CERDS and Resolution 3201 provide for absolute permanent sovereignty over natural resources.

[166] United Nations General Assembly Resolution 3202 (S-VI): Programme of Action on the Establishment of a New International Economic Order of 1 May 1974.
[167] United Nations General Assembly Resolution 3281 (XXIX): Charter of Economic Rights and Duties of States (hereafter, CERDS) of 12 December 1974 art 2.1.
[168] CERDS Chapter 1.
[169] Atsegbua (note 76 above) 119; Anghie (note 61 above) 221.
[170] Birnie, Boyle & Redgwell (note 1 above) 191.
[171] Ibid; Harris (note 165 above) 580.
[172] Birnie, Boyle & Redgwell (note 1 above) 191-192.
[173] *Aminoil* (note 103 above) paras 143 and 90; *Texaco* (note 81 above*)* paras 85-86.
[174] Birnie, Boyle, Redgwell (note 1 above) 191-192.

At this juncture, it is apposite to assert that there is much debate about the place of the Resolutions of the General Assembly.[175] It is beyond the scope of this study to resolve this issue. In this study, I accept the view that these Resolutions represent the legal determinations of the main body of the United Nations and thus, must be "respected" as they can provide at the very least, a legal basis for conduct that would otherwise be regarded as illegal.[176] This does not disparage the contrary view that the Resolutions do not carry any legal weight or that it depends on the circumstances surrounding their adoption by the General Assembly.[177] It is argued that this view is propagated by developed countries that did not want the developing countries to use the General Assembly as an international law-making forum to dislodge international law, which they regarded as "colonial".[178] Ultimately, Anghie proffers a cogent view that even if the right to absolute permanent sovereignty has not been unanimously accepted as a rule of customary international law, the developing countries have managed to dislodge the approach prior to Resolution 3201 that this right is limited.[179]

Sovereignty is also affirmed by the African Union Constitution, which provides that States have the right to sovereign equality.[180] It has been submitted that Article 4 of the African Union Constitution text does not seek to protect individual rights but to establish the unpopular regimes in power.[181] This may be so, but Article 4 also operates to protect the rights of smaller States in the face of pressure from regional 'hegemons', particularly in the use of a shared watercourse. In this study, the term 'hegemon' refers to the dominance of one State over other States.[182] By entrenching the right to 'sovereign equality', the Constitution of the African Union guarantees equality in the negotiations between the riparian States in a basin, and it creates a

[175] See for instance, Atsegbua (note 76 above) 121; M Öberg 'The Legal Effects of Resolutions of the UN Security Council and General Assembly in the Jurisprudence of the ICJ' (2005) 16 *The European Journal of International Law* 879–906; G Kerwin 'The Role of United Nations General Assembly Resolutions in Determining Principles of International Law in United States Courts' 1983 *Duke Law Journal* 876-880; S Schwebel 'The Effect of Resolutions of the U.N. General Assembly on Customary International Law' (1979) 73 *Proceedings of the Annual Meeting (American Society of International Law)* 301-309.
[176] Atsegbua (note 76 above) 121; Barbieri (note 78 above) 12-13; See J Dugard & M Du Plessis (note 4 above) 703-704.
[177] Atsegbua (note 76 above) 121. See also, *Texaco* (note 81 above) paras 87-90.
[178] Anghie (note 61 above) 222-223.
[179] Barbieri (note 78 above) 14.
[180] Constitutive Act of the African Union (adopted 7 November 2000, entered into force 26 May 2001) art 4(a) <https://au.int/sites/default/files/pages/34873-file-constitutiveact_en.pdf>.
[181] T Mboya 'Conflict between State Sovereignty and the Right of Intervention under the Constitutive Act of the African Union' (2009) 39 *Africa Insight* 77, 87.
[182] For a further discussion of the genesis of this concept in respect of South Africa and Lesotho, see L Mahao 'The Power of Hegemonic Theory in Southern Africa: Why Lesotho Cannot Develop an Independent Foreign Policy'. Thesis presented for the degree of Master of Arts at Rhodes University (2006) 4-17; M Mahlakeng and H Solomon 'Internal and External Political Dynamics Influencing Lesotho's Foreign Policy' (2013) 5 *Insight on Africa* 35, 38.

justiciable right that could be used to invalidate treaty provisions borne out of 'power asymmetry'.

In the same vein, Article 21.1 of the African Charter on Human and Peoples Rights (hereafter, African Charter) provides that all peoples shall freely use their natural resources in the public interest. This right cannot be denied.[183] To this end, it has been held that a State government that does not accord special consideration to the interests of the people in respect of natural resources and that denies them the right to benefit from these natural resources violates Articles 21 and 22 of the African Charter.[184] This implies that the African Charter recognises the principle of absolute permanent sovereignty over natural resources such as water.

However, the African Charter provides that free utilization of natural resources must be exercised without compromising international law.[185] This could implicitly be guaranteeing the rights of other countries acquired through a treaty. This seems to be a limitation of this right.

The African Charter also provides that States parties must exercise the right to free disposal of their natural resources with the object of strengthening African unity.[186] This provision emphasises the free disposal of natural resources. It also means that treaties in Africa must be interpreted to promote the interests of African countries. Significantly, the African Charter provides that State parties must undertake to remove foreign economic exploitation to ensure that their peoples properly benefit from the advantages derived from their natural resources.[187] In this respect, the Constitution of Lesotho provides that Lesotho is a sovereign country.[188] South Africa ratified and is thus bound by the African Charter as found by the court in *Gongqose*, which held that a contracting party to the Charter must prioritise exploitation of natural resources, particularly by indigenous communities that own the land upon which the natural resources exist.[189] This strengthens Lesotho's sovereignty over its natural resources in

[183] African Charter on Human and People's Rights (adopted 1 June 1981, entered into force 21 October 1986) art 21.1. For a definition of 'peoples' here, see *Sudan Human Rights Organisation & Another v Sudan* (note 149 above) paras 220-223.
[184] 155/96: *Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) / Nigeria* case para 55; *Democratic Republic of Congo v Burundi, Rwanda and Uganda* (2009) AHRLR 9 (ACHPR 2009) paras 94-95.
[185] African Charter on Human and Peoples' Rights art 21.3.
[186] African Charter on Human and Peoples' Rights art 21.4; See SA Kamga 'A call for a 'right to development' - informed pan-Africanism in the twenty-first century' (2019) 19 *African Human Rights Law Journal* 418, 437-438.
[187] African Charter on Human and Peoples' Rights art 21.5.
[188] Constitution of Lesotho art 1.
[189] *Gongqose v Minister of Agriculture, Forestry, Gongqose and S* 2018 (5) SA 104 (SCA) para 58.

the manner envisaged by its Constitution.[190] Overall, read holistically and contextually, it appears that the African Charter leans towards 'absolute' or 'full' permanent sovereignty over natural resources. The African Charter's contradictory approach to whether permanent sovereignty is 'absolute' or 'limited' conveys the inherent tension between the quest of developed countries to protect foreign investments pitted against the right of developing countries to fully exploit their natural resources.

The African Charter must be read within the context of the United Nations Declaration on Rights of Indigenous Peoples (hereafter, UNDRIPS).[191] The UNDRIPS provides that there must be no deviation from the right to territorial integrity of sovereign States in line with the United Nations Charter.[192] This right is also entrenched by the provision that indigenous peoples have the right to self-determination, which affords them the right to freely pursue their socio-economic development objectives.[193] More specifically, the UNDRIPS provides that indigenous peoples have the right to exploit their resources.[194] The UNDRIPS can be regarded as acceptance by the international community of the right of the indigenous people to exploit their natural resources.[195] The decision in *Gongqose* favours the interpretation that indigenous communities must not be denied their sovereign right to exploit and access their water resources.[196]

In the same vein, the Protocol Against the Illegal Exploitation of Natural Resources provides that the Member States shall freely utilize their natural resources and that this right should be exercised for the sole benefit of "the people".[197] This follows the same tone of the African Charter in exclusively promoting the rights of local communities. This implies that the right of the peoples to "freely" exploit their natural resources operates without any restriction.

Furthermore, the Protocol Against the Illegal Exploitation of Natural Resources provides that people must always be accorded this right.[198] The Protocol Against the Illegal Exploitation of Natural Resources then states that the free exploitation of natural resources must be exercised without detracting from the duty of facilitating international economic

[190] Constitution of Lesotho art 1.
[191] *Gongqose v Minister of Agriculture, Forestry, Gongqose and S* (note 189 above) para 58.
[192] United Nations Declaration of the Rights of Indigenous People (adopted 13 December 2007) art 46.
[193] United Nations Declaration of the Rights of Indigenous People art 3.
[194] United Nations Declaration of the Rights of Indigenous People art 26.2.
[195] Majinge (note 116 above) 242.
[196] *Gongqose v Minister of Agriculture, Forestry, Gongqose and S* (note 189 above) para 58.
[197] Protocol Against the Illegal Exploitation of Natural Resources (adopted 30 November 2006) art 3.1.
[198] Protocol Against the Illegal Exploitation of Natural Resources art 3.1.

cooperation.[199] In this way, this Protocol is hobbled by the contradiction in the African Charter of attempting to balance the full exploitation of natural resources with the protection of foreign investments.

The Protocol Against the Illegal Exploitation of Natural Resources also provides that the unlawful exploitation of natural resources must be regarded as a violation of the right of Member States to permanent sovereignty over their natural resources.[200] Furthermore, this Protocol provides that any investment treaty that seeks to exploit natural resources must comply with the principle of permanent sovereignty of each Member State over its natural resources, in line with national and relevant international law.[201] This provision emphatically affirms the principle of permanent sovereignty over natural resources. Significantly, this provision elevates municipal law to the same level as international law in the interpretation of the right to permanent sovereignty over natural resources. Overall, despite the contradictory nature of the Protocol Against the Illegal Exploitation of Natural Resources in attempting to find the balance between protecting foreign investments and free exploitation of natural resources, it is my view that the Protocol leans towards the principle of 'absolute' or 'full' permanent sovereignty over natural resources because it advocates the utilization of resources to the sole benefit of the people and that they must never be deprived of this right.

Similarly, the Southern African Development Community (SADC) Treaty provides that the SADC Member States facilitate the principle of sovereign equality of all Member States.[202] However, this right must be practised within the imperative of regional integration.[203] This evokes the notion of shared sovereignty.[204] In the same vein, the SADC Southern African Vision for Water, Life and Environment recognises that the achievement of sustainable use of shared water resources may have an adverse effect on national sovereignty.[205] This implies that permanent sovereignty over natural resources may have to be restricted to facilitate the

[199] Protocol Against the Illegal Exploitation of Natural Resources art 3.3.
[200] Protocol Against the Illegal Exploitation of Natural Resources art 4.
[201] Protocol Against the Illegal Exploitation of Natural Resources art 5.1.
[202] Consolidated Treaty of the Southern African Development Community (adopted 17 August 1992) art 4(a). Southern African Development Community Regional Water Policy (2005) para 3.1.1 and para 1.2.1. <https://www.sadc.int/files/1913/5292/8376/Regional_Water_Policy.pdf>. See SADC Treaty Preamble; Towards the Southern African Development Community: A Declaration by the Heads of State or Government of Southern African States (adopted 17 August 1992) <.https://www.sadc.int/files/8613/5292/8378/Declaration__Treaty_of_SADC.pdf>.
[203] Southern African Development Community Regional Water Policy (note 205 above) paras 4.3.1 and 3.1.1.
[204] Ibid para 4.3.1.
[205] The Southern African Vision for Water, Life and Environment in the 21st Century (2009) 17 <http://www.foresightfordevelopment.org/sobipro/55/698-southern-african-vision-for-water-life-and-environment-in-the-21st-century>.

principle of sustainable development. More importantly, this confirms that the achievement of sustainable development and its corollary of equitable and reasonable utilization may sometimes require a restriction of the principle of permanent sovereignty over natural resources.

In the water context, the Helsinki Rules on the Uses of the Waters of International Rivers (hereafter, the Helsinki Rules) provide that each riparian State has the right within its territory, to a reasonable and equitable share in the advantageous utilization of the waters of shared watercourses.[206] It has been submitted that this provision is anathema to the principle of unlimited sovereignty, as encapsulated by the "Harmon Doctrine".[207] It is then argued that Article IV of the Helsinki Rules reiterates the notion that each riparian State has equal rights with the other riparian States, but this does not denote a similar apportionment of water.[208] This will hinge on the balancing of factors stated in Article V, which provides for the principle of equitable and reasonable utilization.[209] According to the ICJ in the *Botswana v Namibia* case, this means that the Helsinki Rules limit the principle of permanent sovereignty over natural resources. [210]

In the same vein, the UN Watercourses Convention, which regulates 'international watercourses' confirms that watercourse States have the right to "sovereign equality" to achieve sustainable utilization of the shared watercourse.[211] Thus under the UN Watercourses Convention, sovereign equality is a *sine qua non* to the equitable use of a transboundary water resource.[212] As established in Chapter 2 of this thesis, the UN Watercourses Convention provides that the riparian States must utilize international watercourses equitably and reasonably.[213] This represents a limitation of the right to permanent sovereignty in respect of shared natural resources, as stated by the ICJ in *Botswana v Namibia*. [214] Overall, it has been established that the UN Watercourses Convention seeks to achieve equitable and reasonable utilization and the sustainable use of international watercourses. Thus, it has been argued that

[206] Helsinki Rules on the Uses of the Waters of International Rivers (adopted August 1966) art IV.
[207] ILA Commentary on the Helsinki Rules 3 <https://www.internationalwaterlaw.org/documents/intldocs/ILA/Helsinki_Rules-original_with_comments.pdf>.
[208] Ibid 4.
[209] Ibid.
[210] *Kasikili/Sedudu Island* (Botswana*/Namibia,)* Judgment, I. C. J. Report.1999, p. 1045 para 33.
[211] UN Watercourses Convention (adopted 21 May 1997, entered into force 17 August 2014) art 8.1.
[212] UN Watercourses Convention art 8.1; Schrijver (note 8 above) 323.
[213] UN Watercourses Convention art 5.1; Art 2 of the UN Watercourses Convention defines an 'international watercourse' as a watercourse whose parts are located in different States.
[214] *Kasikili/Sedudu Island (Botswana/Namibia,) Judgement* (note 210 above) para 33; Schrijver (note 8 above) 323.

these principles work in tandem to limit the right to permanent sovereignty in respect of shared watercourses.[215] Ironically, the UN Watercourses Convention shows that the sustainable utilization of a shared watercourse requires respect for the permanent sovereignty of the riparian States.

However, in contradiction to its forerunner, the Revised Protocol provides for the right to sovereignty in shared watercourses in respect of water in each country's territory.[216] In this way, the Revised Protocol does not distinguish between shared watercourses and water that exists wholly within a country's territory. This implies that States have the right to absolute sovereignty over the shared water that exists within its national boundaries. A 'shared watercourse' is defined as a watercourse that passes through or forms the border between two or more countries.[217] Ironically, the Revised Protocol then provides that States in their respective territories must utilize a shared watercourse equitably and reasonably.[218] This seems to be a limitation of the principle of sovereignty in respect of a shared watercourse within a State's territorial boundaries, as contemplated by Article 3.2 of the Revised Protocol. It is unclear which principle takes precedence in this regard. Both South Africa and Lesotho ratified the Revised Protocol.

In the same breath, while this thesis does not broach the legal framework on 'groundwater' in the LHWP, the ILC Draft Articles on the Law of Transboundary Aquifers (2008) in Article 3, does reiterate the approach of the Revised Protocol by providing that countries only have sovereignty over that portion of a transboundary aquifer or groundwater that is located within its territory but *subject* to international law. While these draft articles constitute a soft law instrument, they do mimic the approach of the Revised Protocol on sovereignty over water resources.

It is also argued that United Nations General Assembly Resolutions have accepted the general principle that States do not have the right to absolute sovereignty over 'shared resources'.[219] First, it is submitted that claims of absolute sovereignty are virtually universally rejected on the basis that it offers no tangible solutions in a conflict of use situation, especially in respect of shared natural resources.[220] Second, the United Nations General Assembly

[215] Schrijver (note 8 above) 323.
[216] Revised Protocol (adopted 7 August 2000, entered into force 22 September 2003) art 3.2.
[217] Revised Protocol art 1.
[218] Revised Protocol art 3.7(a).
[219] Birnie, Boyle & Redgwell (note 1 above) 192.
[220] A Kiss & D Shelton *International Environmental law* 3 ed (2004) 101.

Resolution 3129 calls for co-operation between countries through the creation of appropriate international norms for the conservation and peaceful utilization of natural resources, which are shared by two or more States.[221] While this resolution is ambiguous, it confirms that States are required to find "standards" that will assist the "harmonious" exploitation of the shared resources. Presumably, if States practice absolute sovereignty over natural resources, this may not result in "harmony" in a shared watercourse. Third, the Charter of Economic Rights and Duties of States (hereafter, CERDS) provides that in the utilization of a shared resource, each State must cooperate based on information sharing and prior consultation to achieve the "optimal use" of these resources without harming the interests of others.[222] Thus, it is argued that the CERDS affirms the notion that permanent sovereignty over shared natural resources is subject to the achievement of sustainable and equitable utilization of the shared watercourse.[223] By the same token, the United Nations Environment Programme Principles of Conduct, in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States (hereafter, UNEP Principles) provide that the permanent sovereignty over natural resources is subject to the principle of equitable and reasonable utilization in shared watercourses.[224] These UNEP Principles were affirmed by the United Nations General Assembly in Resolution 34/186.[225]

However, the United Nations General Assembly has not accepted the UNEP Principles because of the consternation caused by earlier resolutions on this matter, but it is argued that they do in some regard, encapsulate State practice and current international law.[226] Significantly, the notion that international watercourses are 'shared resources' was initially recognised by the International Law Commission (hereafter, ILC), but it has been disavowed by many countries because of its novelty and unpredictable legal consequences and even worse, the UNEP Principles and UN resolutions do not specify which resources should be regarded as 'shared'.[227] The concept of 'shared resources' was expunged from ILC Draft Articles in 1984,

[221] United Nations General Assembly Resolution 3129 (XXVIII): Co-operation in the field of the Environment concerning Natural Resources Shared by Two or More States of 13 December 1973 para 1 <http://www.cawater-info.net/bk/water_law/pdf/newyork_1973_e.pdf>.
[222] CERDS art 3.
[223] Birnie, Boyle & Redgwell (note 1 above) 193.
[224] See UNEP Principles of Conduct, in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States (1978) principle 1; Birnie, Boyle & Redgwell (note 1 above) 193.
[225] United Nations General Assembly Resolution 34/186: Co-operation in the field of the Environment concerning Natural Resources Shared by Two or More States of 18 December 1979 para 2 <https://research.un.org/en/docs/ga/quick/regular/34>. Birnie, Boyle & Redgwell (note 1 above) 193.
[226] Birnie, Boyle & Redgwell (note 1 above) 193.
[227] Ibid 193 and 541-542.

on the basis that nothing of consequence was missing and that what was crucial was the explanation of rights and duties relating to shared watercourses.[228] It is common cause that the UN Watercourses Convention and the Revised Protocol endorse the notion of shared resources and Lesotho has ratified the latter and not the former treaty. However, as stated earlier, Article 3 of the Revised Protocol recognises both the right to sovereignty over shared watercourses in one's territory together with the right to equitable and reasonable utilization and thus creates confusion as to which principle takes precedence.

In the same breath, the UN Watercourses Convention only has 36 parties since its adoption more than 20 years go. Therefore, in my view, the UN Watercourses Convention is not universally accepted even though some commentators such as Wouters, have correctly opined that the convention largely resembles rules of customary international law. Salman recounts a myriad of problems that plagued the ratification of the convention such that it took 17 years before it took effect in 2014, and since then, it has virtually not received any further ratifications. Amongst some of the issues cited by some States is that the UN Watercourses Convention will make them lose their sovereignty over shared watercourses even though it had initially garnered wide acceptance because of its flexibility.[229] For instance, Turkey stated that it would not sign this convention because it does not provide for the "indisputable" principle of sovereignty.[230] The Czech Republic had "serious misgivings" about the failure to recognise the right to sovereignty over shared watercourses in a country's territory, a rule they regarded as part of international law. [231] China, the major riparian in the Mekong basin, asserted that this right is "indisputable" over those parts of shared watercourses that flow through its territory and found it "incomprehensible and regrettable" that the draft Convention did not endorse this principle.[232] Rwanda echoed the same concerns.[233] This means that some riparian States continue to assert that they have the right to absolute permanent sovereignty over shared watercourses. This could have contributed to the low level of ratifications of the UN Watercourses Convention despite the ICJ's commendable and attempt at asserting that the convention evinces customary international law. However, Salman argues that these States misconstrued current transboundary water law that has disavowed the principle of absolute

[228] Ibid 541-542.
[229] SMA Salman 'The United Nations Watercourses Convention Ten Years Later: Why Has its Entry into Force Proven Difficult?' (2007) 32 *Water International* 1, 12-14.
[230] United Nations General Assembly Verbatim records of plenary meeting No. 99 of 21 May 1997 (A/51/PV.99) 5 <https://legal.un.org/avl/ha/clnuiw/clnuiw.html>.
[231] Ibid 6.
[232] Ibid.
[233] Ibid 12.

territorial sovereignty in favour of a 'limited' form of sovereignty.[234] Thus, Salman views the Convention as the most fundamental pronouncement of international water law because it enjoys widespread support.[235]

Overall, it can then be seen that the right to permanent sovereignty is a rule of customary international law. In this regard, there are two opposing views: on the one hand, there is a view that this right is 'limited', whereas others contend that this right is 'absolute'. In particular, Resolution 1803 and the PCIJ has confirmed in its decisions in *Iron Rhine*, *Free Zones*, *Memel* and *Wimbledon*, that the right to permanent sovereignty over natural resources can be limited. In the water context, the Helsinki Rules and the UN Watercourses Convention, reject the principle of absolute sovereignty over natural resources in shared watercourses, in favour of the principle of equitable and reasonable utilization.

Despite contradictory provisions in this regard, a holistic reading of the UNDRIPS, the African Charter on Human and Peoples' Rights, the Protocol Against the Illegal Exploitation of Natural Resources, and the Revised Protocol evinces that they lean towards an absolute form of permanent sovereignty over natural resources.[236] Significantly, Resolution 3201 and the CERDS unequivocally provide for absolute permanent sovereignty over natural resources and reflect the views of developing countries. This approach confirms the dictum of the court in the *Iceland Fisheries*, which tacitly reasoned that in shared watercourses, the principle of absolute permanent sovereignty is applicable if the water is needed to satisfy 'vital human needs'. Significantly, counties continue to assert their right to absolute permanent sovereignty over shared watercourses. [237] Thus in my view, the UN Watercourses Convention may not be universally accepted because it failed to provide for this right. Therefore, based on Resolution 3201, the CERDS and the dictum of the court in *Iceland Fisheries*, it is my view that in a conflict of uses, States will treat the shared watercourses in the same manner as they treat natural resources that exist wholly within its territory, i.e., the principle of 'absolute' or 'full' permanent sovereignty will apply. This confirms that the right to absolute permanent

[234] Salman (note 229 above) 12.
[235] Ibid 13.
[236] United Nations Declaration on Rights of Indigenous Peoples (adopted 13 December 2007) art 46; African Charter on Human and Peoples Rights art 21.1; Protocol Against the Illegal Exploitation of Natural Resources art 3.1. See also, CC Ngang 'Right to development in Africa and the common heritage entitlement' (2020) 45 *Journal for Juridical Science*' 28, 28-32.
[237] See Rieu-Clarke & Spray (note 9 above) 18.

sovereignty over natural resources is a legitimate alternative and can coexist with the principles of equitable and reasonable utilization and sustainable development.

While the contrary view may be sound and enjoy the support of the developed States, I accept Anghie's assertion that the developing countries have through Resolution 3201 and the CERDS, managed to dislodge the limited form of permanent sovereignty over natural resources as the only iteration of this right. The consequence of this view is that the notion of absolute permanent sovereignty over natural resources is a valid right and a legitimate alternative. This avenue is available to Lesotho in the LHWP, particularly in a conflict of uses. This approach is buttressed by the fact that the LHWP does not provide for the principle of equitable and reasonable utilization, which can operate to limit the right to permanent sovereignty over natural resources. Thus, the LHWP does not prevent Lesotho from asserting its right to absolute permanent sovereignty over the water in the Orange River. I accept that asserting the right to absolute permanent sovereignty over natural resources may have significant economic consequences because it may discourage foreign investors. However, these considerations would, in my view, be seen as peripheral in a conflict of uses to protect vital human needs.

To this end, Article 4.1 of the LHWP, Annexure II of the LHWP and Article 7 of the Phase II Agreement, severely curtail the right of Lesotho to absolute permanent sovereignty over the water in the LHWP. These provisions are buttressed by Article 4.2 of the LHWP which deems potable water use of Lesotho residents as an "ancillary development," and it can occur "without prejudice" to the duty to ensure the provision of water to South Africa. Thus, Lesotho is hindered from 'taking' or 'diverting' water from the LHWP in a conflict of uses in the manner contemplated by sections 5 and 6 of the LWA. It follows then that the LHWP prioritises water supply to South Africa even in a conflict of uses. This means that Lesotho cannot fully exploit its water resources. Consequently, the LHWP contravenes Lesotho's right to 'absolute' or 'full' permanent sovereignty over the water resources in the Orange River. Even if Lesotho's' sovereignty could be deemed to be 'limited' on the basis that it voluntarily signed the LHWP and Phase II Agreement, the above-mentioned provisions of these two agreements would still be in violation of Lesotho's right to utilize the water in the Orange River if they prevent the supply of water for 'domestic water uses' in a conflict of uses. This is because the water required by Lesotho for 'domestic water use' constitutes vital human needs, which cannot be regarded as "ancillary" to the supply of water to South Africa. It is inconceivable that Lesotho would waive its right to access water in the LHWP during a conflict of uses. In this way, the LHWP contravenes Lesotho's permanent sovereignty over natural resources, whether it is

absolute or limited. In this way, the LHWP has resulted in the hydrocolonisation of Lesotho's water.

In this regard, the ZAMCOM Agreement does not provide for permanent sovereignty over natural resources and is instead, premised on the principles of equitable and reasonable utilization and sustainable development.[238] This is aptly illustrated by the Zambezi River Authority Act (Chapter 467) promulgated under the banner of the ZAMCOM Agreement. The Zambezi River Authority Act has led to the construction of the Kariba Dam, which will work in tandem with the proposed Batoka Gorge Hydro-Electric Scheme. These two schemes are jointly owned and managed by Zambia and Zimbabwe. Thus, it has been opined that the ZAMCOM Agreement has made the member States waive some of their sovereignty to the ZAMCOM.[239] This means that the ZAMCOM Agreement tacitly restricts the principle of 'absolute' sovereignty over the Zambezi River.

However, a discussion of permanent sovereignty over natural resources would not be complete without an evaluation of the threat of 'expropriation' of the water and water rights in the Orange River by Lesotho if a conflict of uses occurs. This is because it is inherent in the right to sovereignty, that States have the right to expropriate or nationalize foreign investments, and this was recognised prior to the permanent sovereignty resolutions.[240] The discussion to follow explores the possibility of this conundrum in the LHWP.

4.4 An evaluation of Lesotho's right to Expropriate/Nationalize the LHWP

The terms 'expropriation' and 'nationalization' have often been used as synonyms: 'expropriation' refers to autonomous meddling by the State with the property or similar rights of a proprietor in general.[241] More specifically, 'expropriations' denote "property-specific or enterprise-specific takings where the property rights remain with the State or are transferred by the State to other economic operators".[242] In this regard, 'nationalization' represents the relocation of an economic enterprise to the public sector as a facet of a programme of socio-

[238] ZAMCOM Agreement (adopted 13 July 2004, entered into force 19 June 2011) arts 12, 13 and 14.
[239] S Schmeier 'The Organizational Structure of River Basin Organizations Lessons Learned and Recommendations for the Mekong River Commission (MRC) Paper Prepared for the Mekong River Commission (MRC)' (2010) 31 <http://www.mrcmekong.org/assets/Publications/governance/MRC-Technical-Paper-Org-Structure-of-RBOs.pdf>.
[240] Schrijver (note 8 above) 270.
[241] Ibid.
[242] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (2012) 5-6 <https://unctad.org/en/Docs/unctaddiaeia2011d7_en.pdf>.

economic restructuring.[243] 'Nationalization' refers typically to huge or large-scale acquisition of private equity in all economic sectors.[244] Thus, 'nationalization' is a species of 'expropriation'.[245] Formerly colonised countries regarded nationalizations as a core facet of their decolonisation imperative in the period after the end of the Second World War.[246] Consequently, it is accepted for purposes of this study, that 'expropriation' and 'nationalization' are the same.[247] The focus of this chapter is on 'expropriation'.

It must also be borne in mind that expropriation can either be direct or indirect. Direct expropriation refers to the "transfer of title and/or outright physical seizure of the property".[248] However, some measures may not involve the "physical taking" but may also permanently eviscerate the economic value of the investment or deny the owner of its right to "manage, use or control its property in a meaningful way".[249] These measures are called 'indirect expropriations'.[250] State practice, doctrine, and arbitral award have established that 'indirect expropriation' has the following accumulative elements:

(a) An act attributable to the State;

(b) Interference with property rights or other protected legal interests;

(c) Of such degree that the relevant rights or interests lose all or most of their value or the owner is deprived of control over the investment;

(d) Even though the owner retains the legal title or remains in physical possession.[251]

A tribunal that must adjudicate on an expropriation claim must verify that the respondent State committed the acts in question.[252] This is usually not difficult because takings are usually conducted through, among other things, statutes, and executive decrees.[253] The conduct of a State is regarded as an act of that State according to international law "whether the organ

[243] Schrijver (note 8 above) 270; *Iran-US Claims Tribunal, Amoco Int'l Finance Corp. v. Iran,* 15 IRAN-U.S. C.T.R., at 189 et seq. para 114.
[244] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 5.
[245] Harris (note 165 above) 577.
[246] Ibid.
[247] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 1.
[248] Ibid 6.
[249] Ibid.
[250] Ibid.
[251] Ibid 12.
[252] Ibid 14.
[253] Ibid 15.

exercises legislative, executive, judicial or any other functions, whatever position it holds in the organization of the State, and whatever its characterisation as an organ of the central Government or of a territorial unit of the State".[254] Finally, there are also regulatory measures, which do not usually demand compensation, but they may have the same consequences as an indirect expropriation.[255]

It must also be noted that nationalization or expropriation in international law can occur through a court decision, a statute, or an executive act.[256] If a court decision in giving effect to legislation denies a foreigner of their right to property, then the court order will be regarded as an act of expropriation.[257] This is seen by way of taking of property, the obliteration of a right or any act which annihilates a right even if no corporeal property has been taken.[258] Thus, expropriation can occur through various modes.

States also have a sovereign right under international law to nationalize property owned by foreigners for socio-economic, political, social, and other reasons.[259] Diplomatic precedents confirm this right.[260] It is accepted internationally, that there is no problem with a State that nationalizes property if it provided for by its own domestic law.[261] This matter would then be resolved through municipal law.[262] The only limit to the right to nationalize emanates from international obligations.[263] It is also argued that a State may nationalize to pursue national security policy.[264] Ultimately, a State does not have the latitude to unilaterally determine its rationale and framework for nationalization, but it is liable to international law.[265] However, in practice, States have extensive discretion.[266]

There have been three distinct periods of the metamorphosis of the right to expropriate. The first significant period of expropriations occurred through revolutionary groups in Russia

[254] Ibid.
[255] Ibid 6.
[256] *Van Zyl v Government of the Republic of South Africa* (20320/02) [2005] ZAGPHC 70 (20 July 2005) para 38.
[257] Ibid.
[258] Ibid.
[259] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 1.
[260] *Texaco* (note 81 above) para 60.
[261] Ibid para 61.
[262] Ibid.
[263] Ibid para 62.
[264] Schrijver (note 8 above) 275.
[265] Ibid 276.
[266] Ibid.

and Mexico;[267] the second phase of expropriations occurred after the period of decolonisation that occurred after the Second World War.[268] The discussion then shifted to the States' right to economic self-determination, which included the right to expropriate without "full" compensation, but instead to pay "appropriate" compensation.[269]

The *Chorzow Factory* case is, in certain instances, cited as one of the first decisions that recognised a State's right to take foreign property under narrow grounds.[270] This court held that 'expropriation' is a valid but unusual mechanism if the law provides for it.[271] The court further held that expropriation would ordinarily be a contravention of international law and contrary to how foreign property is treated.[272] Thus, this judgment established the right to 'expropriate' foreign property. Similarly, in the *Anglo Iranian Oil Company* case, one of the issues before the ICJ was to decide whether the promulgation of these laws violated international law.[273] Unfortunately, the court held that it had no jurisdiction to hear this matter and thus, the 'nationalization' could not be revoked.[274] This meant that the nationalization was accepted by default.

Resolution 1803 triggered the creation and strengthened the unassailable sovereignty of States over their natural resources.[275] Resolution 1803 provides that nationalization or expropriation must be based on the grounds of public or national or security interests.[276] These are regarded as superseding individual interests, both domestic and foreign.[277] The free and beneficial implementation of the right to sovereignty of countries over natural resources must be facilitated by the "mutual respect of States based on their sovereign equality".[278] Thus,

[267] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 1.
[268] Ibid.
[269] Ibid.
[270] *Factory at Chorzow (Germ. v. Pol.)*, 1928 P.C.I.J. (ser. A) No. 17 (Sept. 13) 15; United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 111; Schrijver (note 8 above) 271-272.
[271] *Factory at Chorzow (Germ. v. Pol.)* (note 270 above) 27.
[272] Ibid.
[273] *Anglo-Iranian Oil Co., U.K. v. Iran*, Judgment, 1952 I.C.J. 93 (July 22) 95.
[274] Ibid 115.
[275] United Nations General Assembly Resolution 1803 (XVII) of 14 December 1962: 'Permanent sovereignty over natural resources' and United Nations General Assembly Resolution 1514 (XV): Declaration on the Granting of Independence to Colonial Countries and Peoples of 14 December 1960 <http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/1514(XV)>.
[276] United Nations General Assembly Resolution 1803 (XVII) of 14 December 1962: 'Permanent sovereignty over natural resources' para 4.
[277] Ibid.
[278] Ibid para 5.

Resolution 1803 authoritatively provides for the right to expropriate on the basis of the right of permanent sovereignty over natural resources.

In the *Texaco* case, it was held that Resolution 1803 (XVII) encapsulates the customary law of 'nationalization'.[279] It was then held that the right of a State to 'nationalize' is universally accepted.[280] It is a consequence of international customary law.[281] This exercise of the right to national sovereignty is regarded as an incidence of the State's territorial sovereignty.[282] Territorial sovereignty affords the State an exclusive power to reorganise its economic policies.[283] It is an essential right of sovereignty for national governments to freely construct an economic and social system.[284] The significance of such a right is, in fact, confirmed by the fact that in practice, a decision to nationalize is usually made at the highest echelons of government.[285] Thus, the *Texaco* decision explicitly established Resolution 1803 as evincing customary international law.

Resolution 1803 was then affirmed in various judicial pronouncements.[286] First, Resolution 1803 was emphatically endorsed as encapsulating customary international law in the *Sedco* Case.[287] Similarly, in *Aminoil*, the arbitrator held that the legal regime for lawful nationalisation is contained in Resolution 1803.[288] It was then held that Resolution 1803 had received unanimous acceptance by the General Assembly.[289] Similarly, the *Amoco Arbitration* held that Resolution 1803 constitutes customary international law.[290] Thus, Resolution 1803 enjoys support from developing and developed States, and it recognises the right to expropriate foreign property.[291] Overall, there is no doubt that Resolution 1803 and the right to expropriate foreign property enjoy universal judicial support.

Expropriation has also been accepted by various international agreements. To this end, the UDHR provides that people have the right to own property and not to be "arbitrarily deprived"

[279] *Texaco* (note 81 above) para 59.
[280] Ibid.
[281] Ibid.
[282] Ibid.
[283] Ibid.
[284] Ibid.
[285] Ibid.
[286] Harris (note 165 above) 578.
[287] *Sedco (second Interlocutory Award)* (1986)10 Iran-US. CTR 634.
[288] *Aminoil* (note 103 above) para 143.
[289] Ibid.
[290] Ibid.*US Claims Tribunal, Amoco Int'l Finance Corp. v. Iran*, 15 IRAN-U.S. C.T.R., at 189 et seq. para 116.
[291] Harris (note 165 above) 579.

of their property.[292] Similarly, the African Charter protects the right to property and that this right may only be derogated from in the public interest and in accordance with the law.[293] The provisions of the UDHR and the African Charter bind both South Africa and Lesotho because they have ratified these pertinent instruments.[294] Therefore, there is no doubt that international law prohibits the deprivation of property except according to the rules of property law.[295] These pertinent instruments envisage the deprivation of property in the public interest.[296] It is clear then that the major regional instruments provide for the right to expropriate.

To this end, the CERDS provides that in the application of the right to permanent sovereignty over natural resources, States have the right to expropriate subject to the payment of "appropriate compensation" taking into account its relevant law.[297] In this regard, the United Nations General Assembly Resolution 3201 provides that the States have the right to expropriate or nationalize as an "expression" of the right to full permanent sovereignty over natural resources.[298]

In the water context, the UN Watercourses Convention provides for the payment of compensation in instances whereby the rights of a State have been infringed through 'significant harm' in respect of Articles 5 and 6, which provide for equitable and reasonable utilization.[299] The same provision is made in the Revised Protocol for compensation to be paid in respect of 'significant harm' as a last resort when negotiation and mitigation have failed to alleviate the harm.[300] The Revised Protocol in Article 1 defines 'significant harm' as palpable harm that can be established through probative material, which is material. The UN Watercourses Convention does not proffer a definition of the term 'significant harm'. For purposes of this discussion, it is my view that both the UN Watercourses Convention and the

[292] Universal Declaration of Human Rights art 17.
[293] African Charter on Human Peoples Rights art 14. Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms (adopted 20 March 1952, entered into force 18 May 1954) art 1; American Convention on Human Rights (adopted 22 November 1969, entered into force 18 July 1978) art 21; Charter of Fundamental Rights of the European Union (adopted 2 October 2000, entered into force 7 December 2000) art 17; Association of Southeast Asian Nations Comprehensive Investment Agreement (adopted 26 February 2009, entered into force 24 February 2012) art 14.1.
[294] *Van Zyl v Government of the Republic of South Africa* (note 256 above) para 37.
[295] Ibid para 38.
[296] Ibid.
[297] CERDS art 2.2(c). World Bank Guidelines on the Treatment of Foreign Direct Investment (1993) art IV.1. United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 1.
[298] United Nations General Assembly Resolution 3201 (note 159 above) para 4(e).
[299] Kiss & Shelton (note 220 above) 252; See UN Watercourses Convention art 7.
[300] Revised Protocol art 3.10(b); The Revised Protocol in art 1 defines 'significant harm' as non-trivial harm capable of being established by objective evidence without necessarily rising to the level of being substantial.

Revised Protocol regard compensation as a mechanism of last resort and is not the first option when there has been significant harm as that would have happened in the context of expropriation. By analogy, it can then be argued that international freshwater law recognises the right to compensation in respect of expropriation.

Overall, for expropriation to be lawful under international law, the exercise of this sovereign right must comply with the following conditions:

(a) Property has to be taken for a public purpose;

(b) On a non-discriminatory basis;

(c) In accordance with due process of law;

(d) Accompanied by compensation.[301]

Consequently, there is no doubt that the right to expropriate foreign property enjoys universal support. However, this right to expropriation would need to be conducted through the medium of the domestic law of Lesotho. This then requires an inquiry on the law of Lesotho in this regard. Since it would be the property of South Africa that could be 'expropriated', this also necessitates a comparative discussion on the law of expropriation in South Africa.

In this regard, the Constitution of Lesotho guarantees the right to "freedom from arbitrary seizure of property" provided this right does not deny the rights of others.[302] More specifically, section 17 of the Constitution of Lesotho provides that there are three conditions for a valid expropriation under Lesotho law: first, the expropriation must for "public benefit"; second, the "hardship" caused must be reasonably justifiable and lastly, it is subject to the payment of full compensation. However, it has been held that freedom from arbitrary seizure of property is not an absolute right.[303] In short, expropriation is allowed in Lesotho law.

The right to 'expropriate' under the Constitution of Lesotho is entrenched by the right that every person who has an "interest" or "right" over property that has been expropriated, has the right of direct access to the High Court for -

[301] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 1.
[302] S 4(1)(m) of the Constitution of Lesotho.
[303] *Tsenoli v Lesotho Revenue Authority* (CC5/2009) [2011] LSHC 51 (20 April 2011) 14-18.

(a) the determination of his interest or right, the legality of the taking of possession or acquisition of the property, interest or right and the amount of any compensation to which he is entitled; and

(b) the purpose of obtaining prompt payment of that compensation.[304]

This provides for the right of judicial review on the "legality" of an expropriation, which augments the requirement that the expropriation must be through "applicable" law.

In this regard, the LWA provides for the expropriation of water rights.[305] In such an instance, the LWA requires that the government negotiate with the affected parties on the terms of such acquisition and compensation.[306] Similarly, section 5 of the LWA permits the diversion of water from any water source to satisfy 'domestic use' needs if there is a conflict of use. This should also be regarded as an expropriation as it could permanently extinguish the interest or rights of South Africa over that water in the LHWP.

The LWA further provides that if expropriation of land under the Land Act results in a "loss of the right to use water", then the holder of such right to use water can negotiate the terms of that "acquisition" and the compensation.[307] This means that the LWA recognises that expropriation of land can also result in expropriation of water rights. The phrase "loss of right" read in tandem with the term "acquisition" mirror the definition of 'expropriation' which is the loss of property or rights to property that takes away the substance of the property or the right in the manner contemplated by section 17 of the Constitution of Lesotho. This means that South Africa's water rights in the LHWP can be "compulsorily acquired" or 'expropriated' according to the LWA. For purposes of this study, this means that sections 5 and 6 of the LWA permit the expropriation of the water in the LHWP in times of a conflict of use or "emergency". This would be in the interests of public health and, ultimately, public benefit as required by section 17 of the Constitution of Lesotho. There is no doubt that a conflict of uses in the LHWP would justify the 'hardship' of South Africa losing its right or interests in the LHWP. This means that Lesotho would be justified to expropriate the LHWP in a conflict of uses subject to the payment of compensation.

Alternatively, expropriation of the water in LHWP could occur through the expropriation of land. According to the Land Act of Lesotho, land can be expropriated if it is not held under

[304] Sections 17(1) and 17(2) of the Constitution of Lesotho.
[305] Section 30(2) of the LWA.
[306] Section 30(2) of the LWA.
[307] Section 30(3) of LWA.

a lease for "public purposes".[308] The Land Act further provides that one of the reasons for expropriation based on a public purpose is for "water reservoirs".[309] This would permit the expropriation of the Orange River in times of a conflict of uses. The Minister is also entitled, after consulting with the relevant allocating body, to expropriate land if it is in the 'public interest' that land is required for purposes of development.[310] This land could invariably have water. Land can be expropriated in the 'public interest' for the development of agriculture by modern farming methods, construction or development of a new residential, commercial or industrial precinct or development or reconstruction of existing built-up area.[311] In this way, the *Moletsane* case provides that the Land Act demands that the expropriation must specify a purpose; otherwise, it will be deemed arbitrary.[312] Therefore, the Lesotho Land Act goes further than the Constitution of Lesotho in that it provides for expropriation both for "pubic purposes" and in the 'public interest'. Significantly, the Lesotho Land Act could be used to subtly expropriate water from the LWHP.

It bears mention that 'expropriation' under the Lesotho Land Act is premised on the following principles:

> (a) the Government shall first negotiate with the holder of land rights, which are the subject of potential expropriation and resort to expropriation only upon failure of the negotiations due to the unreasonableness of the holder of the rights to the land;
>
> (b) prior adjudication of the land proposed for expropriation and other lands, whether adjoining or not as may be affected by the expropriation;
>
> (c) payment or settlement of compensation as provided for in Part X of the Land Act and under the regulations;
>
> (d) a party whose land rights are the subject of expropriation by the Government shall have the right to seek review from the Land Court against any decision of the Government in this regard.[313]

It follows then that there is a right to expropriate foreign property under Lesotho law. In fact, expropriations have been occurring under the LWA and the Lesotho Land Act in the LHWP. Thus, there is a huge possibility Lesotho could expropriate the entire LHWP joint venture. It is

[308] Section 49(1) of the Lesotho Land Act 8 of 2010 <https://lesotholii.org/ls/legislation/num-act/2010/8>.
[309] Section 50(1) (c) of the Lesotho Land Act.
[310] Section 51(1) of the Lesotho Land Act.
[311] Section 51(2) of the Lesotho Land Act.
[312] *Moletsane v Attorney General* (CIV/APN/163/2001) (CIV/APN/163/2001) [2004] LSHC 123 (18 October 2004) 64.
[313] Section 52 of the Lesotho Land Act.

imperative then, to have a peek at South African law to predict the points of dispute between South Africa and Lesotho if the latter decides to expropriate the LHWP.

When considering any expropriation under South African law, section 25(1) of the Constitution of South Africa is the applicable law.[314] Section 25 of the Constitution of South Africa reads:

> (1) No one may be deprived of property except in terms of law of general application, and no law may permit arbitrary deprivation of property.
>
> (2) Property may be expropriated only in terms of law of general application—
>
> (a) for a public purpose or in the public interest; and
>
> (b) subject to compensation, the amount of which and the time and manner of payment of which have either been agreed to by those affected or decided or approved by a court.

The construal of this section must uphold the values that inform an "open and democratic society based on human dignity, equality, and freedom".[315] International law should be considered and foreign law may be consulted.[316] The object of section 25 should be to protect current private property rights and to promote the public interest.[317] These are potentially conflicting imperatives and will be difficult to achieve, particularly concerning natural resources such as water and land.

The word 'expropriate' in South African law generally refers to the process whereby a State organ takes property for a public purpose and this is normally accompanied by the payment of compensation.[318] To prove 'expropriation', a litigant must prove that the State has acquired the essence of what it was deprived of.[319] Expropriation occurs through State compulsion and without the authority of the affected owner.[320] A legislative intention to permit expropriation without compensation will not be construed without explicit words or plain suggestion or in accordance with section 25(2) of the Constitution of South Africa.[321] Furthermore, the rights acquired by the State do not have to be identical to the rights lost.[322]

---

[314] *Haffejee NO v eThekwini Municipality* 2011 (12) BCLR 1225 (CC) (25 August 2011) para 29.
[315] Ibid.
[316] Ibid; Section 39 of the Constitution of South Africa.
[317] *Haffejee NO v eThekwini Municipality* (note 314 above) para 31.
[318] *Harksen v Lane NO* 1998 (1) SA 300 (7 October 1997) para 31.
[319] *Minister of Minerals and Energy v Agri South Africa* 2012 (9) BCLR 958 (SCA) (31 May 2012) para 58.
[320] *Arun Property Development (Pty) Ltd v City of Cape Town* [2014] ZACC 37 para 58.
[321] *Arun Property Development (Pty) Ltd v City of Cape Town* (note 320 above) para 59.
[322] *Minister of Minerals and Energy v Agri South Africa* (note 319 above) para 58.

However, there must be an adequate connection or material similarity between what has been lost and what will be taken.[323] A mutual exchange is not a *sine qua non* of this process.[324] Thus, it can be seen that 'expropriation' requires 'deprivation' which causes property to be taken by the State.[325]

In the same breath, in *Msiza v Director-General for the Department of Rural Development And Land Reform* it was held that for section 25 of the Constitution of South Africa to apply, it must first be found that such 'deprivation' amounts to an act of 'expropriation'.[326] 'Deprivation' refers to the "sacrifices that holders of private property rights may have to make without compensation", whereas 'expropriation' refers to the State taking property in the public interest subject to the payment of compensation.[327] Thus, 'deprivation' in terms of section 25 includes expunging a right enjoyed in the past, and 'expropriation' is an element of this.[328] This 'deprivation' always occurs when property or rights in this regard are acquired or materially impaired, but this is not the case with 'expropriation'.[329] If the 'deprivation' constitutes an 'expropriation', then it must comply with the inquiry under section 25(2)(a) and provide for compensation under section 25(2)(b).[330] Section 25(2)(a) of the Constitution of South Africa provides that expropriation must either done in the 'public interest' or for a 'public purpose' whereas section 25(2)(b) provides that the expropriation requires the payment of compensation. This means that a clear distinction between 'expropriation' and 'deprivation' is crucial because the former requires compensation, whereas the latter does not.

Furthermore, the infringement contemplated in section 25(1) of the Constitution of South Africa is restricted to establishing whether the deprivation of property is "arbitrary", within the meaning of that concept as employed in section 25(1).[331] A deprivation is "arbitrary" within

[323] Ibid.
[324] Ibid.
[325] Ibid para 59.
[326] 2016 (5) SA 513 (LCC) (5 July 2016) para 6.
[327] *Minister of Minerals and Energy v Agri South Africa* (note 319 above) para 48.
[328] Ibid.
[329] Ibid; W Marais 'When does State Interference with Property (Now) Amount to Expropriation? An Analysis of the Agri SA Court's State Acquisition Requirement (Part II)' (2015) 7 *PER/PELJ* 3033, 3033; E Marais 'When does State Interference with Property (Now) Amount to Expropriation? An Analysis of the Agri SA Court's State Acquisition Requirement (Part I)' (2015) 3 *PER/PELJ* 2983, 2983.
[330] *First National Bank of SA Limited t/a Wesbank v Commissioner for the South African Revenue Services; First National Bank of SA Limited t/a Wesbank v Minister of Finance* 2002 (4) SA 768 para 59.
[331] Ibid para 61.

the confines of section 25 when section 25(1) does not avail "sufficient reason" for that specific deprivation or is procedurally unfair.[332] 'Sufficient reason' is to be established as follows:

> (a) It is to be determined by evaluating the relationship between means employed, namely the deprivation in question, and ends sought to be achieved, namely the purpose of the law in question;
>
> (b) A complexity of relationships has to be considered;
>
> (c) In evaluating the deprivation in question, regard must be had to the relationship between the purpose for the deprivation and the person whose property is affected;
>
> (d) In addition, regard must be had to the relationship between the purpose of the deprivation and the nature of the property as well as the extent of the deprivation in respect of such property;
>
> (e) Generally speaking, when the deprivation in question embraces all the incidents of ownership, the purpose for the deprivation will have to be more compelling than when the deprivation embraces only some incidents of ownership and those incidents only partially;
>
> (f) Depending on such interplay between variable means and ends, the nature of the property in question and the extent of its deprivation, there may be circumstances when sufficient reason is established by, in effect, no more than a mere rational relationship between means and ends; in others this might only be established by a proportionality evaluation closer to that required by section 36(1) of the Constitution;
>
> (g) Whether there is sufficient reason to warrant the deprivation is a matter to be decided on all the relevant facts of each particular case, always bearing in mind that the enquiry is concerned with "arbitrary" in relation to the deprivation of property under section 25.[333]

It can be seen that these listed factors presumably elaborate on the 'public purpose' or 'public interest' requirement of section 25(2)(a) of the Constitution of South Africa. This is because, in the language of the Constitution of South Africa, an 'expropriation' would be "arbitrary" if it was not in the 'public interest' or 'public purpose'.

This discussion invariably posits the question as to the meaning of the terms 'public interest' and 'public purpose' within the scope of section 25 of the Constitution of South Africa. The 'public purpose' requirement for expropriation is endorsed as a rule of international law.[334]

---

[332] Ibid para 100.
[333] Ibid; *Staufen Investments (Pty) Ltd v Minister of Public Works* (756/2017) [2018] ZAECPEHC 51 (25 September 2018) para 37; See E Marais (note 329 above) 2983-3031.
[334] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (2012) (note 242 above) 28.

It has been held that international law provides for expropriation for public purposes.[335] Under international law, 'public purpose' connotes that the reason for the expropriation must be based on a licit welfare objective and not private or unlawful gains.[336] The 'public purpose' requirement is determined according to the law when the expropriation occurred.[337] It is immaterial whether or not the purport of the measure is successfully achieved.[338] Equally, an expropriation that was not designed for a 'public purpose' will not become lawful if the property that has been taken starts serving a 'public purpose' in the future.[339] To this end, the Constitution of South Africa does not define the term 'public purpose'. This gap is plugged by the Expropriation Act, which provides that 'public purposes' includes all objectives related to the implementation of any law by a State organ.[340] It is argued that this wide formulation is meant to give government flexibility.[341] Regard must also be had to the fact that this illuminates the duty imposed by section 25 not to elevate private property rights over the State's social responsibilities.[342] It must be borne in mind that the history of South Africa does not permit the elevation of individual property rights at the expense of the paramount duty to ensure equitable access to natural resources.[343] There is no doubt that an expropriation by the State that is carried out in the private interest is unlawful.[344] However, section 25(4) of the Constitution of South Africa confirms that expropriation for the benefits a private individual is allowed in respect of land reform.[345] This is because the purpose of the expropriation supersedes the interests of an individual as it is for public benefit.[346] This approach is in line with the public interest to ensure redistribution of resources, which is the essence of section 25 of the Constitution of South Africa.[347] Thus it has been opined that 'expropriation' is a necessary instrument in a modern democratic society' in that it ensures organised development.[348]

---

[335] *Van Zyl v Government of the Republic of South Africa* (note 256 above) para 39.
[336] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 28-29.
[337] Ibid 31.
[338] Ibid.
[339] Ibid.
[340] Section 1 of the Expropriation Act.
[341] B Slade 'Public purpose or public interest and third party transfers' (2014) 17 *PER/PELJ* 167, 180.
[342] *Minister of Minerals and Energy v Agri South Africa* (note 319 above) para 62.
[343] Ibid.
[344] *Msiza v Director-General for the Department of Rural Development And Land Reform* 2016 (5) SA 513 (LCC) (5 July 2016) para 15.
[345] Ibid para 14.
[346] Ibid para 15.
[347] Ibid.
[348] K Gray 'Human property rights: the politics of expropriation' (2005) 16 *Stellenbosch Law Review* 398, 399. *Waters v Welsh Development Agency* 2004 1 WLR 1304 para I.

In respect of 'public interest', the Constitution of South Africa provides that the 'public interest' includes the pursuit of land reform and equitable access to all South Africa's natural resources.[349] Aside from land reform, this implies that to prove that expropriation is in the 'public interest', one must prove that the measure ensures fair access to natural resources. In this regard, the National Environmental Management Act 107 of 1998 (hereafter, NEMA) provides that the Minister of Environmental Affairs may, expropriate any property, subject to compensation, for any purpose under this Act, if that purpose is a 'public purpose' or is in the 'public interest'.[350] This means that expropriation may occur for the interest of the environment, such as ensuring there is enough water for the ecological reserve or to cover basic human needs. This would permit expropriation in a conflict of uses to ensure that there is enough water for 'domestic uses,' i.e. *including* water that is diverted or taken from a watercourse for personal and household needs, as is contemplated by sections 1, 5 and 6 of the LWA. The compensation contemplated in the NEMA must be done according to section 25(3) of the Constitution of South Africa.[351] Overall, it can be argued that the 'public purpose' denotes government purposes while 'public interest' refers to purposes that are to the advantage to the public.[352] It is conceivable to argue then, that the purposes of government and the public should coincide, and thus, these terms are the same.

Furthermore, if expropriation is 'arbitrary', the consequent limitation or deprivation must be evaluated in terms of section 36 of the Constitution of South Africa.[353] The availability of less restrictive means to achieve the same purpose is relevant to this inquiry.[354] This means that more is required to prove 'expropriation' even though there is a correlation and no clear line of separation between sections 25(1) and 25(2).[355] Consequently, section 25 of the Constitution of South Africa prohibits the "arbitrary deprivation" of property and it allows for the expropriation of property under the following conditions: First, the expropriation must be according to a "law of general application" and second, it must be implemented for a 'public purpose' or in the 'public interest'.[356] Third, the time and manner of the compensation that must be paid must either be agreed to by those affected or must be decided on by a court and

[349] Section 25(4)(a) of the Constitution of South Africa.
[350] Section 36(1) of the National Environmental Management Act 107 of 1998 (NEMA).
[351] Section 36(3) of the NEMA.
[352] Slade (note 352 above) 187.
[353] *Staufen Investments (Pty) Ltd v Minister of Public Works* (note 333 above) para 37.
[354] Ibid para 39.
[355] *Minister of Minerals and Energy v Agri South Africa* (note 319 above) paras 48 and 67; *EThekwini Municipality v Haffejee NO; Haffejee NO v eThekwini Municipality* [2010] 2 All SA 358 (KZD) para 22.
[356] *Ethekwini Municipality v Haffejee NO; Haffejee NO v eThekwini Municipality* (note 355 above) para 22.

must also be "just and equitable".[357] The question of whether expropriation has indeed occurred must be done on a case-by-case basis.[358] This is so because the acquisition is likely to occur in different ways.[359]

The provisions of the Protection of Investment Act 22 of 2015 must be considered in relation to nationalization/expropriation. This is because the Protection of Investment Act provides that investors have the right to property as provided by section 25 of the Constitution of South Africa.[360] This means that their property may not be expropriated without the safeguards and conditions provided for by section 25 of the Constitution of South Africa. Significantly, the Protection of Investment Act provides that foreign investors and their investments must be treated the same as South African investors in "like circumstances".[361] This means that any privilege, advantage or benefit accorded to South African investors must be given to all foreign investors in "like circumstances". For purposes of the Protection of Investment Act, "like circumstances" includes the following factors amongst others:

(*a*) effect of the foreign investment on the Republic, and the cumulative effects of all investments;

(*b*) sector that the foreign investments are in;

(*c*) aim of any measure relating to foreign investments;

(*d*) direct and indirect effect on the environment.[362]

This list is obviously not exhaustive as seen by the use of the word "including". Each factor is given equal weight in this assessment.[363] This provision is particularly significant for the LHWP. First, the Protection of Investment Act provides that an 'investment' for purposes of this Act, includes "any lawful enterprise established, acquired or expanded by an investor in accordance with the laws of the Republic, committing resources of economic value over a reasonable period of time, in anticipation of profit".[364] This would include the LHWP venture. In respect of the notion of amending the Constitution of South Africa to provide for expropriation without compensation or even that the Constitution could indeed provide for this,

[357] Ibid.
[358] *Minister of Minerals and Energy v Agri South Africa* (note 319 above) para 64.
[359] Ibid.
[360] Section 10 of the Protection of Investment Act.
[361] Section 8 of the Protection of Investment Act.
[362] Section 8(2) of the Protection of Investment Act.
[363] Section 8(3) of the Protection of Investment Act.
[364] Section 2(1)(a) of the Protection of Investment Act

it is my submission that the national treatment provision could be employed to argue for discriminatory treatment of foreign nationals. The factors listed as implicitly disqualifying one from equal treatment under the "like circumstances" criteria are extensive and ambiguous such that they could be manipulated to justify a reason why the government decided not to grant due compensation for expropriation. It is argued that this provision has the effect of negating the national treatment clause in section 8 of the Protection of Investment Act, which accords equal treatment for foreign investors and domestic investors.[365] This is compounded by the inadequate "physical protection" that is afforded by section 9 of the Protection of Investment Act that makes such protection subject to the "availability of resources" and "capacity".[366] It is noteworthy that the Protection of Investment Act also analyses the effect of the "investment' on the environment. This is ambiguous. However, it is presumed that if an "investment" irreparably harms the environment, then it will not be treated like other investments.

The last requirement for an expropriation to be valid is that it must be coupled with 'compensation'.[367] Different approaches to valuation may be used to establish the amount of compensation.[368] There is no proof in treaty law that States can refuse to pay compensation or freely establish the amount of compensation.[369] It actually requires the payment of compensation and prescribes the amount of compensation.[370] International law provides that where the property of a foreigner has been expropriated, then "prompt, adequate and effective" compensation should be made in the case of expropriation of a specific property.[371] This means that nationalization/expropriation requires compensation for the affected persons. To this end, section 17(c) of the Constitution of Lesotho provides that expropriation requires prompt payment of "full" compensation. In this regard, the LWA provides that where the compulsory acquisition of land is required, compensation must be made according to the Land Act.[372] On this score, the Lesotho Land Act provides that in instances whereby land is expropriated, the affected person must be paid compensation at "market value".[373] This further highlights the

[365] M Qumba 'Safeguarding foreign direct investment in South Africa: Does the Protection of Investments Act live up to its name? (2018) 25 *South African Journal of International Affairs* 341,347.
[366] Ibid 349.
[367] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 40.
[368] Ibid.
[369] Schrijver (note 8 above) 278.
[370] Ibid.
[371] *Van Zyl v Government of the Republic of South Africa* (note 256 above) para 39.
[372] Section 30(1) of the LWA.
[373] Section 56 of the Lesotho Land Act.

notion that the expropriation of land will sometimes also entail the expropriation of water and water rights.

In the same breath, the Lesotho Land Act provides that in evaluating compensation, regard must be had -

> (a) to the value of the property as certified by an odd number of valuers one of whom shall be the Government valuer, having regard to the present and replacement value; and
>
> (b) to the expenses incidental to any necessary change of residence or of place of business.[374]

This means that "market value" under the Land Act takes precedence in the determination of the compensation.

On the contrary, the Constitution of South Africa takes a different approach to the issue of "market value" and its place in determining compensation. The Constitution of South Africa provides that the "amount of the compensation and the time and manner of payment should be just and equitable, reflecting an equitable balance between the public interest and the interests of those affected".[375] "Relevant circumstances" in this regard include amongst others:

(i) the current use of the property;

(ii) the history of the acquisition and use of the property;

(iii) the market value of the property;

(iv) and the purpose of the expropriation.[376]

These factors identified in section 25(3) are not hierarchical.[377] Market value is usually considered as the point of departure to the analysis because it is the most concrete factor in all of the elements specified in section 25(3).[378] This does not mean that market value is the most significant factor in the evaluation of just and equitable compensation; the goal is to ascertain compensation that is "just and equitable", not to establish the market value of the property.[379]

[374] Section 58(2) of the Lesotho Land Act.
[375] Section 25(3) of the Constitution of South Africa; *Haffejee NO v eThekwini Municipality* (note 314 above) para 38.
[376] *Haffejee NO v eThekwini Municipality* (note 314 above) para 38.
[377] *Msiza* (note 344 above) para 33.
[378] Ibid para 30.
[379] Ibid.

Thus, market value acts as the point of departure for establishing compensation which is a variable, which would achieve an equitable balance between the public and private interest.[380]

Consequently, it has been held that there is a two-leg process to determining compensation: first, establishing the market value of the property and second, deducting from or increasing the amount of the market value, as the context requires.[381] The ethos for this two-leg approach is that there is no specific method for calculating elements that hinge on equity.[382] This marks a departure from the Lesotho approach. In practice, South African law uses "market value" as the starting point of the compensation determination, but it is not on its own, dispositive of the amount of compensation to be paid.

In this regard, the Expropriation Act, which was promulgated during the apartheid era, provides that market value is the formula for establishing compensation payable to an individual whose property has been expropriated by the State.[383] However, the Expropriation Act does say that the amount of compensation must reflect the aggregate of the market value of the expropriated property and the actual financial loss caused by the expropriation and if it is right, the amount lost by the expropriation of the right.[384]

Furthermore, the obligation to compensate requires that the owner of the expropriated property "may not be in a better or worse plight as a result of the act of expropriation".[385] The affected person must be returned to the same position they were prior to the expropriation through a financial award and the equivalent in value should be given to cover the property lost.[386] Thus, courts are of the view that the value of a property "is its value in the owner's hands and not in the hands of the expropriator".[387] In a similar domain, the Protection of Investment Act provides that expropriation of foreign property must be determined according to section 25 of the Constitution of South Africa.[388] Qumba submits that this greatly compromises the protection afforded to foreign investments.[389] Overall, the Constitution of

[380] Ibid para 35.
[381] *Msiza* (note 344 above) para 34.
[382] Ibid para 36.
[383] Ibid para 32.
[384] Section 12(1) of the Expropriation Act 63 of 1975; *Du Toit v Minister of Transport* 2006 (1) SA 297 (CC) para 33.
[385] *City of Cape Town v Helderberg Park Development (Pty) Ltd* 2007 (1) SA 1 (SCA) para 21.
[386] *City of Cape Town v Helderberg Park Development (Pty) Ltd* para 21.
[387] *City of Cape Town v Helderberg Park Development (Pty) Ltd* para 21.
[388] Section 10 of the Protection of Investment Act.
[389] Qumba (note 365 above) 352.

South Africa rejects the market-driven method of compensation in cases of expropriation.[390] Market value is merely one of the factors under deliberation in this regard.[391] Thus, compensation, which is less than the market value, may be in accordance with the Constitution of South Africa, if it is "just and equitable".[392] This could open the door for the expropriation of foreign investments without compensation. This would have significant implications for South Africa's rights under the LHWP.

The Lesotho Land Act also provides that compensation must in all instances of compulsory acquisition, be paid before the expropriation is concluded.[393] The Constitution of Lesotho does not explicitly provide for compensation prior to expropriation as it requires a "prompt" payment of compensation.[394] This is vague, and it is unclear whether this refers to "prompt" payment before or after the expropriation. In this regard, section 25 of the Constitution of South Africa allows for compensation prior to a valid expropriation, but the opposite is equally conceivable.[395] Thus, it has been held that section 25 of the Constitution of South Africa permits the interpretation that compensation must occur before expropriation.[396] In the same vein, it has been held that the Expropriation Act does not require that the amount of compensation and the time and manner of payment be established before expropriation takes effect.[397] However, the transfer of ownership and possession of the affected property may occur prior to that determination.[398] The duty to pay compensation is a requirement for expropriation, but not a prerequisite for its implementation.[399] Thus in South African law, compensation can be paid before or after the 'expropriation'.

In this regard, international law provides that an act of expropriation complying with the requirements established by international law "constitutes a lawful act of the State, and the duty to pay compensation is the consequence of the legal exercise of a recognised sovereign right of a State".[400] This requirement may be complied with from the beginning or after litigation

[390] *Msiza* (note 344 above) para 32.
[391] Ibid.
[392] Ibid.
[393] Section 60 of the Lesotho Land Act.
[394] Section 17(1)(c) of the Constitution of Lesotho.
[395] *Haffejee NO v eThekwini Municipality* (note 314 above) para 35.
[396] Ibid.
[397] Ibid para 14.
[398] Ibid.
[399] Ibid.
[400] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 44.

when expropriation is determined.[401] Failure to pay any compensation for a direct expropriation can be fatal to the legality of an expropriation.[402] However, this is not the case when a measure in question is an "indirect expropriation".[403] The duty to pay compensation should only occur as a result of a finding of expropriation.[404] The obligation to compensate is conferred on the entity conducting the expropriation.[405] Thus, under Lesotho law, compensation should be paid prior to expropriation, which is in line with international law and South African law.

Furthermore, the standards of compensation differ for both countries. South African law provides for "just and equitable" compensation, whereas Lesotho and the LHWP provide for "full" compensation".[406] To this end, Article 7.18 of the LHWP provides that the LHDA must ensure that all the local communities in Lesotho that are "affected" by the project, be enabled to maintain a standard of living not inferior to that which existed at the time of the first disturbance and if such measures are not adequate, compensation must be provided.[407] In the same breath, the Phase II Agreement provides that compensation in the LHWP must be paid according to Article 7.18 and the principles in Article 15 of the LHWP Treaty.

Article 7.18 of the LHWP bears due consideration. The term "affected" in Article 7.18 of the LHWP refers to those people that are impacted by 'expropriation'. Second, this provision requires the maintenance of a standard of living of a person at least similar to the time before the project commenced. Third, this provision implies that 'compensation' is secondary to other "measures" that could be used to address the diminution in the standard of living. Thus, the other "measures" are the primary instrument of restitution for the affected parties and 'compensation' need not be paid unless the "measures" are deemed "inadequate". This is in line with the *Chorzow Factory* case, which provides that in the case of expropriation, the first mechanism is restitution of property, but if this is not possible, payment of the value of the expropriated property plus compensation of any incidental losses is the probable remedy.[408] In this regard. Article 15 of the LHWP requires the maintenance of the welfare of the persons immediately affected by the project. In the same breath, section 44(2)(a) of the LHDA Order states that "as far as reasonably possible, the standard of living and the income of persons

[401] Ibid.
[402] Ibid.
[403] Ibid.
[404] Ibid.
[405] Section 57 of the Lesotho Land Act.
[406] See s 25(3) of the Constitution of South Africa and s 17(1)(c) of the Constitution of Lesotho.
[407] LHWP art 7.18.
[408] *Factory at Chorzow (Germ. v. Pol.)* (note 270 above) 47; United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 113.

displaced by the construction of an approved scheme shall not be reduced from the standard of living and the income existing prior to the displacement of such persons". This means that the LHDA Order goes further than the Phase II Agreement and the LHWP as well as the Constitution of South Africa in that they provide that "income of persons" is also another factor that deserves compensation. Therefore, the LHWP seeks to maintain the "welfare" or "standard of living" as the object of the compensation of affected communities.

To this end, the Phase II Agreement provides for the payment of compensation in cash or in-kind for the loss of "benefits" caused by the LHWP.[409] This could mean that Lesotho could pay South Africa in kind through say, electricity, for the expropriation of the Orange River. Interestingly, this provision implies the payment of compensation for the loss of "benefits", which is a wide ground for claiming compensation. In this regard, the newly minted LHWP Phase II Compensation Regulations defines "compensation" as payment in cash or kind or other legal payment tendered for the property or resource that is acquired or affected by the project.[410] Thus, these regulations include a broad compensation paradigm as it provides for "other legal payment". This approach mimics the LHWP, which provides for other "measures" in lieu of compensation.

The Phase II Agreement also provides that compensation must be made according to the Phase II Compensation Policy and in a "fair" and "prompt" manner.[411] More specifically, the Phase II Compensation Policy provides that where the expropriation is permanent, the affected parties are entitled to "full" compensation.[412] If there is a "temporary acquisition", the Compensation Policy provides that the LHWP will as far as possible, reinstate the resource to its prior condition.[413] This implies that under the LHWP, 'expropriation' can be either "temporary" or "permanent". This could be a reference to 'deprivation' as opposed to 'expropriation' because "temporary expropriation" requires restoring the resource to its previous condition. A "temporary acquisition" falls short of an 'expropriation' and does not give rise to "full compensation". This provision is significant in that Lesotho could allege that the acquisition of water under sections 5 and 6 of the LWA could be seen as "temporary" acquisitions of the water in the Orange River and could simply be restored by returning the

[409] Phase II Agreement (adopted, entered into force 11 August 2011) art 7.2(c).
[410] Section 2 of the Lesotho Highlands Water Project Compensation Regulations 2017 <http://www.lhda.org.ls/lhdaweb/documents/documents>.
[411] Phase II Agreement art 15.4.
[412] LHWP Phase II Compensation Policy para 3.2.
[413] Ibid para 3.3.

quantity of water lost by South Africa. This would not require any compensation to South Africa.

The legal regime in international law for ascertaining the type and extent of the compensation to be paid and the circumstances of its payment are not well established.[414] In the latest international investment agreements, there is an emerging consensus concerning the standard of compensation that must be paid to make an expropriation lawful.[415] One of the fundamental trends among these agreements is that most of them accept the "standard of prompt, adequate and effective compensation", also called the "Hull standard".[416] In this regard, compensation is regarded to be "prompt" if paid without undue delay, "adequate", if it has a "reasonable relationship with the market value of the investment concerned"; and "effective", if made in "convertible or freely useable currency".[417] The determination of what amounts to an "adequate" compensation, involves consideration of the "investment's fair market value, market value, just price, real value, and genuine value or real economic value".[418] However, the Hull standard does not enjoy the required State support.[419]

It must be noted that full compensation reflecting the market value of the property is not the only available threshold of compensation.[420] The standard mostly cited in the 1960s and 1970s is that of "appropriate" compensation, located in United Nations General Assembly Resolutions and could still encapsulate the standard of customary international law.[421] The *Texaco Award*, the *Aminoil Award*, and the *Ebrahimi Award* affirm the 'appropriate" compensation standard in Resolution 1803.[422] There is no explanation as to the meaning of the term "appropriate" compensation.[423] However, these norms have been impugned by developing States who replace the compensation standard with their domestic standards.[424] Hence, in South Africa, where Resolution 1803 is part of the legislative framework, "appropriate"

[414] *Iran-US Claims Tribunal, Amoco Int'l Finance Corp. v. Iran*, 15 IRAN-U.S. C.T.R., para 117.
[415] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 40.
[416] Ibid.
[417] Ibid.
[418] Ibid.
[419] Harris (note 165 above) 598.
[420] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 41.
[421] Ibid. See United Nations General Assembly Resolution 1803 (XVII) of 14 December 1962: 'Permanent sovereignty over natural resources' para 4. World Bank Guidelines on the Treatment of Foreign Direct Investment art IV.1.
[422] *Ebrahimi* v. *Iran* (1994), Iran-US Claims Tribunal, 12 October 1994, The Hague, paras 88 and 95; *Aminoil* (note 103 above) para 143; *Texaco* (note 81 above) paras 87–88.
[423] Harris (note 165 above) 598.
[424] *Van Zyl v Government of the Republic of South Africa* (note 256 above) para 36.

compensation has been replaced with "just and equitable" compensation, whereas Lesotho provides for "full" compensation.

Similarly, the CERDS provides that "appropriate" compensation must be paid in line with the law of the State implementing such measures in the exercise of sovereignty and international law.[425] The CERDS further provides that where the question of compensation is a contentious matter, it should be resolved according to the municipal law of the nationalising State and by its courts; unless it is freely agreed on other "peaceful' alternatives.[426] It is then opined that Article 2 of the CERDS highlighted rising Third World discord about the international principle propagated by Resolution 1803.[427] While it permits the ""appropriate"" compensation, it uses the term ""should"", subject to the relevant legislation and the relevant circumstances.[428] It does not mention international law standards and procedures.[429] However, it has been argued that the standards contained in Article 2.2(c) have not been universally accepted by States.[430] Reasons for advancing the grounds of Article 2.2(c) of CERDS are based on the notion that current law consistently ignores the interests of the indigent, and that there is no way to disturb this status quo except by dismantling the legal framework of that order.[431] It is conceivable that this standard permits less than full compensation where this is equitable in the circumstances in question.[432]

In this regard, the ASEAN Comprehensive Investment Agreement provides for payment of "adequate" compensation, which is defined as compensation that reflects the "fair market value" upon expropriation.[433] Alternatively, the Charter of Fundamental Rights of the European Union and the UNDRIPS provide that expropriation must be accompanied by "fair" compensation.[434] It has already been established that in respect of transboundary water law, States have a right to compensation, but the UN Watercourses Convention and the Revised Protocol are silent as to the standard of compensation. In the absence of direction, the

[425] CERDS art 2.2(c); *Aminoil* (note 103 above) paras 143-144. World Bank Guidelines on the Treatment of Foreign Direct Investment art IV.2.
[426] CERDS art 2.2(c).
[427] Visser (note 133 above) 83.
[428] Ibid.
[429] Ibid.
[430] Ibid 87.
[431] Ibid 88.
[432] United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (note 242 above) 41.
[433] Association of Southeast Asian Nations Comprehensive Investment Agreement (adopted 26 February 2009, entered into force 24 February 2012) art 14.1(c).
[434] Charter of Fundamental Rights of the European Union art 17. UNDRIPS art 10 and art 28.1.

applicable approach will be the one proffered by international law, which itself is plagued by uncertainty. Thus, international law is undecided on the standard of compensation as it vacillates between "full", "fair" "adequate" and "appropriate" compensation standards.

On the whole, there is no doubt that Lesotho has the right to expropriate the LHWP for "public benefit" in the manner contemplated by sections 5 and 6 of the LWA and the Land Act because this is an incidence of the right to absolute permanent sovereignty over natural resources. The right to expropriate foreign property is universally endorsed and is also provided for by the laws of South Africa and Lesotho. In light of the above, it is my view that the expropriation of the LHWP by Lesotho would require "full" compensation as provided by the LHWP: Phase II Compensation Policy and the Constitution of Lesotho. This approach finds favour with international law, which endorses the payment of "full" compensation for expropriation. However, it must be noted that the LHWP regime does not favour compensation as the first form of redress and rather, would countenance the restoration or restitution of the water that is lost. Consequently, South Africa may not receive financial compensation. This approach could conceivably be justified under the "just and equitable" standard of the Constitution of South Africa. The issue of expropriation is unlikely in the ZAMCOM Agreement because the riparian States in this basin have embraced the notion of shared sovereignty through the principles of equitable utilization and sustainable development to resolve a conflict of uses.

4.5 The nexus between absolute 'permanent sovereignty over natural resources' and 'power asymmetry' in transboundary water agreements

A discussion of 'sovereignty' would not be complete without a discussion of the element of 'power asymmetry'. The principle of 'power asymmetry' explains the unequal bargaining power between small and large States. It proposes that the larger State will always impale the smaller nation that it is negotiating with to conform to its needs.[435] There are two paths in the literature on asymmetrical negotiations: the one is encapsulated in the submission that in instances of unequal bargaining power between riparians, the riparian with high power usually behaves exploitatively, while the less powerful riparian is not submissive since both parties have a common objective.[436] This much can be gleaned from the blatantly unfair provisions of

[435] F Pfetsch & A Landau 'Symmetry and Asymmetry in International Negotiations' (2000) 5 *International Negotiation* 21, 26; D Shlomi 'Power Asymmetry and Negotiations in International River Basins International Negotiation' (2009) 14 *International Negotiation* 329, 330.
[436] Pfetsch & Landau (note 435 above) 23.

the LHWP and the Phase II Agreement. The alternative path refers to cases in which weak parties emerge with much better results.[437] This is not the case with the LHWP.

Shared water basins cause political tension.[438] It is postulated that when there are abundant water resources, riparian States do not need to cooperate.[439] However, as water availability dissipates, the need for cooperation increases.[440] Others contend that as water becomes very scarce, riparian States are reluctant to cooperate and thus, treaty adoption becomes unlikely.[441] It is then argued that basins that evince higher variability may be characterised by consternation, although some argue that higher levels of variability may countenance cooperation.[442] This means that water availability also has an impact on power asymmetry.

Wegerich and Olson assert that in respect of the interactions between basin States, the authority of the individual States is crucial.[443] In this regard, it has been argued that upstream hegemons are reluctant to cooperate since they are able to freely exploit the river's water.[444] Others contend that economically weaker States are prone to behave carte blanche, lack the necessary resources for alternative positions, and suffer from increased constraints on managing their resources.[445] There are also instances whereby hegemonic downstream riparian States act in a rather genial manner whereby cooperation is incentivised.[446] Some authors have also argued that cooperation often produces its supply.[447] In addition, there also instances when upstream States that are hegemons, cooperate with an otherwise weaker downstream on their own volition.[448] Thus, the political power of counties could have a positive or negative impact on power asymmetry.

---

[437] Ibid.
[438] L Khennache 'Power analysis among riparian countries to improve River Basin Organization implementation in transboundary waters'. Thesis presented for the degree of PHD at McGill University (2015) 8; A Dinar *et al* 'Does precipitation and runoff variability affect treaty cooperation between states sharing international bilateral rivers?' (2010) 69 *Ecological Economics* 2568, 2570-2571.
[439] Dinar *et al* (note 438 above) 2570.
[440] Ibid.
[441] Ibid.
[442] Ibid and 2577.
[443] K Wegerich & O Olsson 'Late developers and the inequity of "equitable utilization" and the harm of "do no harm"' (2010) 35 *Water International* 707,714.
[444] Shlomi (note 435 above) 330.
[445] Ibid 334-335.
[446] D Shlomi 'Scarcity and Cooperation along International Rivers: An Empirical Assessment of Bilateral Treaties' (2011) 55 *International Studies Quarterly* 809,815; Dinar *et al* (note 438 above) 2571.
[447] Dinar *et al* (note 438 above) 2569-2570.
[448] Shlomi (note 446 above) 814 and 829.

It is also opined that the higher the history of militarised encounters in a bilateral water agreement, the adverse effects such interactions may affect the extent of cooperation.[449] Contrary to this approach, it is contended that despite a history of militarised conflict, cooperation may still occur among riparian States as they are aware of the apparent benefits of cooperation.[450] Consequently, water scarcity in a conflict of uses may cause either cooperation or conflict. To this end, in the LHWP, it is my view that a conflict of uses may cause a war between South Africa and Lesotho. This is because South Africa has used its military and economic power to coerce Lesotho to unfairly allocate the water in the LHWP. Military and economic power are the core elements of "material power" which South Africa has used to entrench the power asymmetry in the LHWP and thus erode Lesotho's permanent sovereignty over the water in the LHWP.

"Material power" speaks to "economic power, military power, and technological power as well as international and financial support".[451] On the leg of "military power", the volatile political and military history of Lesotho has prompted repeated interventions by South Africa. Firstly, the history of South Africa's interference with Lesotho can be traced back to South Africa's economic embargo of Lesotho, which precipitated the 1986 military take-over, although it cannot be conclusively argued that it prompted the *coup*.[452] This culminated in South Africa's apparent "invasion" of Lesotho in 1998, with the assistance of Botswana, under the guise of restoring peace and security.[453] The decision to intervene was at the request of the Prime Minister of Lesotho to the then SADC Chair, the President of South Africa.[454] In this regard, it is argued that Botswana's intervention only sought to disguise what would otherwise have been cited as an invasion of Lesotho by South Africa, as a SADC initiative.[455] A significant issue with the intervention was that it begun with South African forces firstly securing the Katse Dam, which is part of the LWHP treaty regime, and then proceeding to

[449] Ibid 816.
[450] Ibid 830.
[451] A Cascao & M Zeitoun 'Power, hegemony and critical hydropolitics' in A Earle, A Jagerskog & J Öjendal (eds) *Transboundary Water Management: Principles and Practice* (2010) *Transboundary Water Management: Principles and Practice* (2010) 27,31.
[452] Mahlakeng & Solomon (note 182 above) 39; M Molomo 'External Military Intervention in Lesotho's Recent Political Crisis' (1999) 5 *Lesotho Social Science Review* 133, 144; C Tlali 'Water deal irks Lesotho's new rulers' *Mail & Guardian* (7 December 2012) <http://mg.co.za/article/2012-12-07-00-water-deal-irks-lesothos-new-rulers>; Consolidated Treaty of the Southern African Development Community art 4(a).
[453] Mahlakeng & Solomon (note 182 above) 40-41; D Flemes 'Regional power South Africa: Co-operative hegemony constrained by historical legacy' (2009) 27 *Journal of Contemporary African Studies* 135,144; Tlali (note 452 above).
[454] F Likoti 'The 1998 Military Intervention in Lesotho: SADC Peace Mission or Resource War?' (2007) 14 *International Peacekeeping* 251,253.
[455] Molomo (note 452 above) 145; Tlali (note 452 above).

Maseru to restore peace.[456] In response, South Africa alleged that securing the dam was part of the mandate given to South Africa by the Prime Minister of Lesotho.[457] However, it is argued that the intervention was inconsistent with the SADC Treaty, which provides for the principle of sovereign equality of all member States.[458] It is also argued that South Africa, Botswana, and SADC, did not get the requisite approval from the UN Security Council as required by Chapter VIII of the United Nations Charter, but the decision to intervene was allegedly based on agreements reached at SADC summits.[459] It is thus alleged that it was inconsistent with the UN Charter, especially Chapters VI, VII and VIII.[460] In the same vein, it is argued that the operation did not entail minimum use of force, which is a precondition for peacekeeping forces working under the United Nations instruments.[461] On the whole, South Africa's intervention under the banner of "collective security" seems dubious because it had declined similar invitations in respect of the Democratic Republic of Congo and Angola, which had been mired in bloody conflict.[462] Consequently, it is argued that the Lesotho intervention affirmed the notion that most conflict in this millennium will be over finite water resources.[463] It can then be argued that the intervention was driven by South Africa's need to secure the much-needed water resources of the LWHP.[464] This is evinced by the fact that the South African and Botswana militaries did not leave Lesotho until the Phase II Agreement was concluded in 1999.[465] Thus, it has been argued that South Africa has played the role of an impediment to the formulation of an independent foreign policy by Lesotho that would create the platform for policies that cater to the "well-being" of the people of Lesotho.[466] This has significant implications for the equitable participation of Lesotho in the formulation of the water sharing regime in the LHWP. It could explain the inequitable water-sharing regime in the LHWP and Phase II Agreement that relegates Lesotho's domestic water uses to the status of "ancillary"

[456] Likoti (note 454 above) 253.
[457] Ibid.
[458] Ibid.
[459] Ibid; Mahlakeng & Solomon (note 182 above) 39.
[460] K Matlosa 'Conflict and Conflict Management: Lesotho's Political Crisis After the 1998 Election' (1999) 5 *Lesotho Social Science Review* 163, 188.
[461] Likoti (note 454 above) 257.
[462] Ibid 253-254.
[463] Ibid 253.
[464] Ibid; F Likoti 'African Military Intervention in African Conflicts: An Analysis of Military Intervention in Rwanda, the DRC and Lesotho'. Thesis presented for the degree of PHD at the University of the Western Cape (2006) 166, 178-179; Mahao (note 182 above) 91-92; A Turton 'Water and State Sovereignty: The Hydropolitical challenge for States in Arid Regions' MEWREW Occasional Paper No. 5 Water Issues Study Group (1999) 7 <https://www.soas.ac.uk/water/publications/papers/>.
[465] Tlali (note 452 above).
[466] Mahlakeng & Solomon (note 182 above) 40.

uses that must never prejudice water supply to South Africa. This has the effect of eroding Lesotho's permanent sovereignty over the water in the LHWP.[467]

Recently, in 2017, SADC had to deploy its military wing to address instability in Lesotho after the killing of that country's top army commander.[468] This incident occurred two months after elections and eviscerated hopes of bringing in a new dispensation of stability in the volatile country.[469] Therefore, since Lesotho is plagued by political and military instability, it is susceptible to military intervention by South Africa under the facade of "collective security". On this score, South Africa has superior defence expenditure, which accords it, military supremacy in the SADC region.[470] This military power nullifies Lesotho's geographic power because it lacks the material power to influence its bargaining position with South Africa.[471] It has also been argued that Lesotho's landlocked and subservient position with regards to South Africa, has fundamentally guided its foreign policy.[472] Thus, South Africa has a significant military power advantage over Lesotho, which it could have used to negotiate the unfair provisions of the LHWP and the Phase II Agreement.

On the economic leg of the "material power", it has been contended that South Africa has employed its economic capability as a "soft power" resource to acquire power.[473] There are contentions that the royalties are lower than the market price of water. [474] Lesotho is also alleged to be aggrieved with the LHWP's concession that South Africa will not be required to pay tax for the provision of services and other implements for the Polihali Dam's construction.[475]

---

[467] Ibid 49. Mahao (note 182 above) 93.
[468] News Afrika 'As SADC we can't and shall not be in Lesotho forever' *News Afrika* (16 September 2017) <https://www.news24.com/Africa/News/zuma-as-sadc-we-cant-and-shall-not-be-in-lesotho-forever-20170916>.
[469] News24 'Regional SADC force ends Lesotho mission' *News24* (28 November 2018) <https://www.news24.com/Africa/News/regional-sadc-force-ends-lesotho-mission-20181128>.
[470] See D Flemes 'Conceptualising Regional Power in International Relations: Lessons from the South African Case' (2007) *Regional Power in International Relations* 21 <https://www.giga-hamburg.de/en/publication/conceptualising-regional-power-in-international-relations-lessons-from-the-south-african>.
[471] Cascao & Zeitoun (note 451 above) 36.
[472] Mahlakeng & Solomon (note 182 above) 38.
[473] O Ogunnubi & C Isike 'Regional hegemonic contention and the asymmetry of soft power: A comparative analysis of South Africa and Nigeria' (2015) 37 *Strategic Review for Southern Africa* 152,168.
[474] Tlali (note 452 above); G De Villiers 'South Africa's Water Resources and the Lesotho Highlands Water Scheme: A Partial Solution to the Country's Water Problems' (1996) 12 *International Journal of Water Resources Development* 65,74- 76; See also G Dunn 'Water Wars:A Surprisingly Rare Source of Conflict' (2013) <http://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=8&sid=ebb39c1b-993a-43f5-8b71-003b282236e2%40sessionmgr111&hid=112>; Dinar *et al* (note 438 above) 2568–2581.
[475] Tlali (note 452 above); See Phase II Agreement art 14.

Furthermore, it is argued that trade between riparian States may encourage cooperation on water-related issues, but if the trade involves huge trade volumes, then it could be fertile ground for disputes.[476] This is seen in the Southern African Customs Union (SACU) to which both Lesotho and South Africa are contracting parties. The SACU agreement ensures that South Africa provides crucial finance to Lesotho, but it compromises its sovereignty.[477] Essentially, South Africa collects duties on behalf of all SACU Members and distributes virtually all of this income to the three other members as a form of aid.[478] It is a contentious formula.[479] SACU provides the patent illustration of how South Africa has transformed itself from regional hegemon in the past, and how it is reconfiguring its approach towards that of a benevolent hegemon in the region.[480] However, despite the changes to the revenue-sharing formula introduced by the South African government, the structural basis of the relationship remains fundamentally unchanged because the currency connection to the South African Rand guarantees that none of the SACU countries have the sovereign right to determine fiscal policy nor macroeconomic policies without South Africa's consent.[481]

There is also an allegation that South Africa has employed its huge mineral and material resources to covertly increase its influence in the continent in ways that reinforce its position as Africa's regional hegemon of choice.[482] This approach has resulted in the growth of South African businesses into many parts of Africa and is an apt illustration of how economic resources can be reconfigured into particular soft power results.[483] To this end, it has been argued that increased trade ensures compliance with treaty rules.[484] This could be the case in the LHWP. Consequently, it can be argued that South Africa has used its military and economic power as a form of "material power" to increase the power asymmetry in the LHWP and eroded Lesotho's right to absolute permanent sovereignty over the water in the Orange River. This is aptly reflected in the skewed and inequitable provisions of the LHWP and the Phase II

[476] Shlomi (note 446 above) 816.
[477] Southern African Customs Union (SACU) Agreement (adopted 21 October 2002, entered into force 15 July 2004).
[478] S Zibi 'Southern African Customs Union: in danger of collapse' *Financial Mail* (2 August 2013) <http://www.financialmail.co.za/fm/Features/2013/08/22/southern-african-customs-union-in-danger-of-collapse>; See also Southern African Customs Union Agreement (2002) art 33 and art 34 read with Annex A: Revenue Sharing Formula.
[479] Zibi (note 478 above); Windhoek Observer 'Namibia favours SACU status quo' *Windhoek Observer* (19 July 2019) <https://www.observer.com.na/index.php/national/item/11312-namibia-favours-sacu-status-quo>.
[480] C Alden & M Soko 'South Africa's economic relations with Africa: hegemony and its discontents' (2005) 43 *Journal of Modern African Studies* 367, 370.
[481] Ibid 372. See Southern African Customs Union Agreement art 33 and the Annex A: Revenue Sharing Formula.
[482] Ogunnubi & Isike (note 473 above) 168.
[483] Ibid.
[484] Shlomi (note 446 above) 816.

Agreement that favour the interests of the people of South Africa over the needs of Basotho residents.

Significantly, the overall impact of power asymmetry is not only on Lesotho's permanent sovereignty over its natural resources, but it could be argued that South Africa has used this power imbalance to frustrate the underlying principles of equitable and reasonable utilization and sustainable development of the water in the LHWP and to acquire control of Lesotho's water. This glaring absence of these superordinate norms in the LHWP could have been caused by South Africa's subtle and sometimes brazen erosion of Lesotho sovereignty over its water resources through power asymmetry. Ironically, this implies that sometimes, sovereignty can be used to ensure that environmental considerations like sustainable utilization of natural resources are given proper consideration. In this way, it can then be seen that permanent sovereignty over natural resources can operate not only to resolve a conflict of uses, but it can be used to advocate for equitable, reasonable and sustainable utilization of a transboundary watercourse. Thus, the principle of permanent sovereignty over natural resources can sometimes be compatible with the principles of equitable and reasonable utilization and sustainable development.

In respect of power asymmetry, the ZAMCOM does not seem to have issues in this regard. It has also been found that the ZAMCOM reflects "low power asymmetries" with no prospects of conflict and minimal power imbalances.[485] It is submitted that this is because the economies of the ZAMCOM countries are at identical stages of economic development, they endorse democracy, all these riparians are signatories to the ZAMCOM Agreement and most of the riparian countries are members of the South African Development Community (SADC), and they share a colonial past that dismantled colonialism. [486]

On the whole, it seems that there is no discernible power asymmetry in the ZAMCOM, and this has strengthened the sovereignty of the ZAMCOM members. It follows then, that regional hegemons may either cooperate or refuse to cooperate in a shared watercourse. Finally, the ZAMCOM basin shows how a 'limited' form of permanent sovereignty over natural resources can work to promote equitable and reasonable utilization and sustainable development of a shared watercourse.

[485] Khennache (note 438 above) 168.
[486] Ibid 182.

4.6 Conclusion

It is my view that the applicable regime for water that exists wholly within the territorial boundaries of a State is the principle of absolute 'permanent sovereignty over natural resources'. In respect of water that would be typically classified as a "shared resource", it is difficult to establish the applicable principle. This is because the notion of a "shared resource" is disputed with no consensus on its meaning nor its implications and it does not enjoy the required State and treaty support. In respect of these "shared/transboundary" waters, countries have resorted to the interrelated principles of 'equitable and reasonable utilization' and 'sustainable development'. While this approach is cogent and seeks to promote equity and sustainable utilization of shared watercourses, there is a resurgence of the principle of 'permanent sovereignty over natural resources' by riparian hegemons who are reluctant to compromise their unfettered control of these natural resources. Consequently, a study of the relevant conflict of uses principles in the LHWP would be incomplete without a study of the possibility of Lesotho asserting its right to permanent sovereignty over the water and the natural resources in the LHWP.

After a survey of legislation, treaties, soft law instruments, jurisprudence, and the literature on shared watercourses, it has been established that States have the right to 'permanent sovereignty' over shared natural resources. This right to permanent sovereignty over shared natural resources is a rule of customary international law. However, there are two divergent approaches in this regard: on the one hand, there is a view that the principle of permanent sovereignty over natural resources can be 'limited', whilst on the other hand, there is a contention that it is 'absolute'. More specifically, Resolution 1803 and the PCIJ has confirmed in its decisions in *Iron Rhine, Free Zones*, *Memel* and *Wimbledon,* that the right to permanent sovereignty over natural resources can be limited. In the water context, the Helsinki Rules and the UN Watercourses Convention, limit the principle of absolute sovereignty over natural resources in shared watercourses through the principle of equitable and reasonable utilization.

Despite contradictory provisions in this regard, a holistic reading of the UNDRIPS, the African Charter on Human and Peoples' Rights, the Protocol Against the Illegal Exploitation of Natural Resources and the Revised Protocol reveals that they lean towards an absolute form

of permanent sovereignty over natural resources.[487] Significantly, Resolution 3201 and the CERDS unequivocally provide for absolute permanent sovereignty over natural resources and reflect the views of developing countries. This approach confirms the ratio of the court in the *Iceland Fisheries*, which tacitly reasoned that in shared watercourses, the principle of absolute permanent sovereignty is applicable if the water is needed to satisfy 'vital human needs'. Significantly, countries continue to assert their right to absolute permanent sovereignty over shared watercourses.[488] Therefore, in my view, the UN Watercourses Convention is not universally accepted because it failed to provide for this right. Therefore, based on Resolution 3201, the CERDS and the dictum of the court in *Iceland Fisheries*, it is my view that in a conflict of uses, States will treat the shared watercourses in the same manner as they treat natural resources that exist wholly within its territory, i.e. the principle of 'absolute' or 'full' permanent sovereignty will apply. To this end, I argue that the LHWP contravenes Lesotho's right to absolute permanent sovereignty over the water in the LHWP in a conflict of uses. Even if it was accepted that Lesotho's' sovereignty could be deemed to be 'limited' on the basis that it voluntarily signed the LHWP and Phase II Agreement, the unfair provisions of these two agreements would still contravene Lesotho's right to utilize the water in the Orange River if it prevents the supply of water for 'domestic water uses' in a conflict of uses.

This contravention of Lesotho's right to absolute permanent sovereignty over natural resources could compel Lesotho to 'expropriate' the LHWP. It has been argued that Lesotho has the right to 'expropriate' the LHWP subject to the payment of full compensation as an incidence of its right to permanent sovereignty over natural resources.

In tandem with this, the indigenous communities in Lesotho can assert their sovereign right to access the water in the LHWP in a conflict of uses in line with the dictum of the courts in *Alexkor*, *Gongqose*, and *Baleni*. This right emanates from customary law, which deserves special consideration. Indeed, a failure to consult indigenous communities will likely result in ineffective and unsustainable utilization of natural resources.[489] This is augmented by the right to development of indigenous communities in the LHWP.

[487] United Nations Declaration on Rights of Indigenous Peoples art 46; African Charter on Human and Peoples Rights art 21.1; Protocol Against the Illegal Exploitation of Natural Resources art 3.1.
[488] See Rieu-Clarke & Spray (note 9 above) 18.
[489] S Hesse & H Wissink ' Incorporating Indigenous Knowledge Systems into the Field of Development' , in W Fox & E Van Rooyen (eds) *The Quest for Sustainable Development* (2004) 47, 50; A Paterson & M Mkhulisi 'Traversing South Africa's conservation and land reform objectives — lessons from the Dwesa-Cwebe Nature Reserve' (2014) 131 *South African Law Journal* 365, 398.

A peek at similar transboundary agreements in this regard, reveals an interesting picture. The ZAMCOM Agreement is explicitly predicated on the principle of equitable and reasonable utilization and the principle of sustainable development. These two principles are built on the community of interests principle that propagates an equitable exploitation of shared natural resources. Consequently, by providing for an equity-based approach, these agreements implicitly reject the principle of permanent sovereignty over natural resources. This finding is significant for the LHWP, which is devoid of any mention of the principles of equitable and reasonable utilization and sustainable development.

However, the absence of these provisions in a transboundary water agreement is not fatal to the pursuit of equitable and sustainable utilization of a transboundary watercourse. 'Equity' and 'sustainability' may still be pursued in the implementation of the programmes in a shared watercourse by the 'weaker' riparian such as Lesotho through asserting its right to permanent sovereignty over natural resources. In this way, as Schrijver has argued, permanent sovereignty can serve as the foundation for the equitable and sustainable utilization of a shared watercourse. In this way, in light of the power asymmetry in the LHWP, the right to permanent sovereignty can be used to complement and infuse equitable and sustainable utilization of shared watercourse in a conflict of uses. The converse of this notion is also possible.

To this end, power asymmetry can also work to eviscerate the sovereignty of a State. This power asymmetry can culminate in unfair treaty obligations between riparian States that share a transboundary water resource. It is my view that the power symmetry between South Africa and Lesotho borne out of material power has resulted in the promulgation of unfair agreements in the LHWP that are skewed towards the supply of water to South Africa. This is emphatically illustrated by the proviso that the potable water uses of Lesotho residents are deemed as "ancillary" uses that must be implemented "without prejudice" to ensuring that South Africa has an adequate water supply. The power asymmetry conundrum has culminated in the LHWP regime explicitly requiring that Lesotho legislation must be brought into line with the LHWP. Consequently, the LHWP is an apt example of a regional hegemon unilaterally taking control of a water resource despite being a lower riparian State and thereby compromising Lesotho's permanent sovereignty over natural resources in the Orange River. This is what I call 'hydrocolonisation'.

This problem has been prevented from occurring in the ZAMCOM because of the equal economic power of the riparian States and a willingness to respect each other's sovereignty.

Consequently, this study has shown that despite the power symmetry in a shared water basin, countries can still cooperate based on respect for the right of riparian States to absolute permanent sovereignty over their natural resources. This right to absolute permanent sovereignty over natural resources would in tandem with the principle of equitable and reasonable utilization, be able to prevent and resolve a conflict of uses in the LHWP.

Finally, it is my view that without addressing the developmental and socio-economic challenges of the people in developing countries, it will be difficult to find a balance between the protection of foreign investments and the sovereign right to fully exploit natural resources. This tension will become more pronounced if a conflict of uses occurs in a transboundary water agreement because riparian States will be compelled to choose either to honour their treaty obligations or to provide the shared water to their residents if it constitutes a vital human need. The LHWP brings this issue to the fore.

Chapter 5: Conclusion

Chapter 5: Conclusion

5.1 Introduction

The Treaty on the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (hereafter, LHWP) is confronted with a potential decline in the quantity and quality of water due to the coalescence of climate change, drought, population growth, sedimentation and pollution in the Orange River. Thus, the World Bank has predicted that Lesotho may eventually be unable to provide water to South Africa under the LHWP. Access to the water in the LHWP is regulated by the LHWP, the domestic legislation of both Lesotho and South Africa, and international law. To this end, the LHWP prioritises the supply of water to South Africa and regards the potable water uses of Lesotho as "ancillary" to the project, which can only occur "without prejudice" to the supply of adequate water to South Africa. This objective is contradicted by the water legislation of Lesotho, which prioritises water supply to the residents of Lesotho in a conflict of uses. This disjuncture in the legislative regime of the LHWP will be unable to address the projected conflict of uses in the LHWP. Consequently, in this thesis, I sought to suggest legal responses to the projected conflict of uses in the LHWP. Therefore, the main research question in this study was whether the LHWP complies with the key underlying transboundary water law principles that address a conflict of uses, namely: 'equitable and reasonable utilization', 'sustainable development' and 'permanent sovereignty over natural resources'. It is my view that these principles constitute the most appropriate mechanisms to address the projected conflict of uses in the LHWP. This study then necessitated an assessment of the potential consequences and implications of the LHWP findings for similar transboundary freshwater treaties with a specific focus on the Agreement on the Establishment of the Zambezi Watercourse Commission (2004) (hereafter, ZAMCOM Agreement) as a proximate transboundary water agreement that demonstrates the inequity of the LHWP.

In this regard, I argued that the LHWP is predominantly inequitable and evinces unsustainable utilization of the water in the Orange River. Furthermore, the LHWP has unjustifiably compromised Lesotho's permanent sovereignty over the water in the Orange River. Therefore, it is my view that the LHWP has caused the 'hydrocolonisation' of the Orange River by South Africa as it has virtually acquired control of Lesotho's water resources. In this regard, the ZAMCOM Agreement provides a blueprint for the incorporation and substantive application of the principles of equitable and reasonable utilization, sustainable

development and permanent sovereignty over the natural resources in a shared watercourse. In this way, the ZAMCOM Agreement is better suited to respond to a conflict of uses in the Zambezi basin than the LHWP is, in respect of the Orange River. The purpose of this chapter is to summarise my findings, insight, and recommendations.

5.2 Problem Statement

The LHWP is a bilateral treaty between the Republic of South Africa and the Kingdom of Lesotho that was signed in 1986. The essence of the LHWP is that Lesotho supplies South Africa with water in exchange for royalties. The project is divided into four phases and is currently in Phase II. In pursuance of this approach, the Agreement on Phase II of the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (2011) (hereafter, Phase II Agreement) was concluded to implement Phase II of the project as well as to maintain Phase I of the project. If there is a conflict in the interpretation of a term, the meaning stipulated in the Phase II Agreement prevails with respect to reading of this agreement and not to the interpretation of the LHWP.[1] The requirements of the LHWP are binding unless amended by the Phase II Agreement.[2] Thus, the Phase II Agreement and the LHWP must be read together.

The LHWP is crucial for the Gauteng province, which is the economic fulcrum of South Africa. It is projected that urbanisation, population growth, pollution, and sedimentation in the Orange River will adversely impact water availability and quality in the LHWP and in turn, intensify competition for the water in the Orange River. It must also be noted that Botswana and Namibia have plans for further abstraction of the water from the Orange River. This competition will be further exacerbated by climate change and drought, which are expected to result in Lesotho being unable to meet its water supply obligations to South Africa under the LHWP. It is my view that Lesotho will then have to choose either to supply water to South Africa as required by the LHWP or to supply water to its residents. This is called a ‘conflict of uses’. This prompts the question as to whether the LHWP has adequate legal mechanisms to respond to a ‘conflict of uses’ between South Africa and Lesotho. Consequently, this study sought to assess whether the LHWP complies with the key underlying transboundary water principles of ‘equitable and reasonable utilization’, ‘sustainable development’ and ‘permanent sovereignty over natural resources’ that address the anticipated conflict of uses situation. It is

[1] Phase II Agreement art 1.3.
[2] Phase II Agreement art 3.

my view that these principles are the appropriate underlying principles of transboundary water law that address a conflict of uses over a 'shared' watercourse. As established in Chapter 1 of this study, my choice of these principles is motivated by the fact that they are part of customary international law, and they are explicitly endorsed by the laws of South Africa and Lesotho. This evaluation was conducted through a Desktop review of literature engaging with international legal instruments, constitutions, legislation, relevant case law, soft law, and domestic as well as international law. This study then necessitated an assessment of the potential consequences and implications of the LHWP findings for similar transboundary freshwater treaties. In particular, these findings were extrapolated onto the Agreement on the Establishment of the Zambezi Watercourse Commission (2004) (hereafter, ZAMCOM Agreement) as a proximate transboundary water agreement that demonstrates the inequity of the LHWP.

To this end, the study sought to respond to four secondary research questions:

i. To what extent does the LHWP comply with the principle of 'equitable and reasonable utilization'?

ii. In what way does the LHWP comply with the principle of 'sustainable development' as an inherent component of the principle of 'equitable and reasonable utilization'?

iii. To what extent does the LHWP comply with the principle of 'permanent sovereignty over natural resources'?

iv. If the LHWP is not in accordance with these underlying freshwater principles, what are the implications for similar transboundary water agreements with a specific focus on the ZAMCOM Agreement?

The three main chapters of this study responded to these four questions.

5.3 Summary of main findings

5.3.1 Chapter 2: To what extent does the LHWP comply with the principle of 'equitable and reasonable utilization'?

Chapter 2 explored the LHWP's compliance with the principle of 'equitable and reasonable utilization' as a key underlying principle that addresses a conflict of uses. It has been established in this study that the principle of 'equitable and reasonable utilization' is a rule of

customary international law and that both Lesotho and South Africa have explicitly stated that they are bound by this principle. For purposes of this study, I identified the principles of 'equitable utilization', 'equitable participation', 'benefit sharing', and 'reasonable utilization' as the constitutive elements of the principle of 'equitable and reasonable utilization'. The LHWP was then evaluated against these four components of the principle of 'equitable and reasonable utilization'. These are the findings and insights made in this regard.

5.3.1.1 'Equitable utilization'

After a survey of relevant jurisprudence, soft law, treaties and literature, it is my view that 'equitable utilization' requires that transboundary water use must be just, fair, deny preferential treatment, accommodating, proportional and must ensure "perfect equality" between riparian States. This approach is in line with the principle of *Ubuntu*. Despite the LHWP making perfunctory reference to "equitable sharing of water resources" in its Preamble, this is merely an aspiration rather than a binding and enforceable obligation.

It is my view that the LHWP subverts and eviscerates the principle of 'equitable utilization' in its substantive provisions. This is shown by Article 6.8 of the LHWP, which expressly prohibits any 'unilateral' disturbance with the provision of water to South Africa. In the same breath, Article 4.2 of the LHWP makes it clear that potable water supply to Lesotho, is an "ancillary development" that can only be permitted "without prejudice" to the obligation to provide water to South Africa in specific quantities. In other words, the supply of water to South Africa trumps Lesotho's potable water uses. Thus, it is my view that the primary objective of the LHWP is to supply water to South Africa. This impedes the imperatives of "perfect equality", accommodation and fairness, which are the essence of the principle of "community interest" that is at the heart of 'equitable utilization' in shared watercourses.

In the same breath, Article 7.2(a) of the Phase II Agreement read with Article 4.1 of the LHWP, provide that the 'Operating Rule' for the Phase II Agreement is that Lesotho must ensure it provides South Africa with "optimal water security". This suggests that Lesotho must ensure that South Africa has adequate water supplies. This provision is buttressed by Article 18.2 of the Phase II Agreement, which provides that the provision of water to South Africa must be implemented without fail. This then means that the LHWP treaty regime does not accommodate the interests of Lesotho and is thus, unjust.

By the same token, an evaluation of Articles 4.1 and 4.2 of the LHWP and Annexure II of the LHWP as well as Articles 7.2 and 18 of the Phase II Agreement against the factors that determine the principle of 'equitable utilization' as stipulated in Article 6 of the UN Watercourses Convention and Article 3.8 of the Revised Protocol - reveal an inequitable water allocation regime in favour of South Africa. Thus, the reference to "equitable sharing" in the Preamble of the LHWP is merely a perfunctory nod to the principle of 'equitable and reasonable utilization'. Therefore, the LHWP contravenes the principle of equitable utilization.

However, the domestic legislation of Lesotho controverts the 'inequitable' regime of the LHWP. In this regard, section 5(2) of the Lesotho Water Act 15 of 2008 (hereafter, LWA) provides that in a conflict of uses, the 'domestic uses' trump all other uses. 'Domestic use' here is defined as *including* the 'taking', 'impounding' and 'diversion' of water from a watercourse as well as 'altering' its course. On the other hand, section 1 of the LWA defines 'domestic water use' narrowly as meaning water for 'personal and household needs'.[3] It is my view that the terms 'domestic use' and 'domestic water use' can be used interchangeably and the difference in terminology between section 1 and section 5 of the LWA is immaterial. Consequently, sections 1 and 5 of the LWA are complementary and must be read together. This is because section 5 of the LWA does not specifically define the term 'domestic' and thus, section 1 is instructive in this regard. This would then mean that 'domestic use' under section 5 should be construed to *include* the 'taking' or 'impounding' of water from a watercourse to satisfy 'personal and household needs'. This is in line with the concept of 'vital human needs' in Article 10.2 of the UN Watercourses Convention. In the same breath, section 6 of the LWA permits the Minister of Water in an 'emergency,' i.e. when there is a serious water shortage due to drought or other causes such as climate change, to demand that any person "make available" such water that it does not need for its domestic uses. This mimics the impounding or diversion of the flow of a watercourse, which is listed as one of the 'domestic uses' under section 5 of the LWA. Similarly, section 13 of the LWA guarantees water to meet the needs of the 'basic human needs reserve' and the 'ecological reserve'. This means that the LWA contradicts the LHWP. This is because in a conflict of uses, the LWA priorities Lesotho's 'domestic uses' and water for preserving the environment, whereas the LHWP priorities the provision of water to South Africa. It can then be said that the 'conflict of uses' provisions in the LHWP and the LWA are irreconcilable.

[3] Section 1 of LWA.

In this regard, Article 5.1 of the Phase II Agreement provides that South Africa and Lesotho must ensure that their domestic legislation complies with their obligations under the agreement and the LHWP, either through amendment of existing legislation or enactment of new legislation to that effect. The Phase II Agreement also provides that the LHWP must comply with other rules of international law that are in conformance with this agreement.[4] This implies that the LHWP and the Phase II Agreement supersede the laws of Lesotho with respect to the water in the Orange River. In simple terms, the provisions of the LWA, Lesotho Environment Act 10 of 2008, and the Constitution of Lesotho (1993) must be brought into line with the LHWP or read in such a manner that they give effect to the LHWP. However, this approach is superseded by the fact that the interpretation of the conflict of uses principles in the LHWP must comply with customary international law and the international obligations of the signatories to the LHWP. It has already been established that South Africa and Lesotho have consistently and explicitly accepted that they are bound by customary international law, the UN Watercourses Convention and the Revised Protocol as well as the domestic legislation of both countries in respect of the LHWP, which all collectively and explicitly endorse the principle of 'equitable and reasonable utilization'.

Furthermore, the court in *Gabcikovo-Nagymaros* held that the place of the principle of equitable and reasonable utilization in international law is strengthened by the adoption of the UN Watercourses Convention. It was also held that treaty interpretation is not an inert process, and thus, treaties must be read to be in line with new emerging principles of international law. The ICJ in the *Botswana v Namibia* took this approach a step further by finding that a provision in a treaty that has not entered into force can bind the parties who are not party to it if it is a rule of customary international law. This includes the principles of 'equitable and reasonable utilization', sustainable development and permanent sovereignty over natural resources. Since the principle of 'equitable utilization' as a sub-principle of the principle of equitable and reasonable utilization, is now part of customary international law, this means that the LHWP must comply with this principle. The only way South Africa could not be bound by the principle of 'equitable and reasonable utilization' is if it was a 'persistent objector' to this principle.[5] On the contrary, South Africa has persistently and explicitly endorsed the principle of 'equitable and reasonable utilization' by endorsing water treaties such as the UN Watercourses Convention and the Revised Protocol and in concluding various water agreements that are

[4] Phase II Agreement art 18.9.
[5] P Sands & J Peel *et al Principles of International Environmental law* 4 ed (2018) 124.

based on this principle. This then means that South Africa has accepted and is bound by the principle of 'equitable and reasonable utilization'. Thus, the LHWP must be read in line with the principle of 'equitable utilization' as a sub-principle of the principle of 'equitable and reasonable utilization'.

Further augmenting the interests of Lesotho, the UN Watercourses Convention provides that if a conflict of uses ensues, there must be "special" consideration to the 'vital human needs'.[6] For purposes of this study, it is accepted that the 'vital human needs' constitute water for drinking purposes, personal hygiene, and food preparation and preserving the ecosystem. This means that based on the principle of 'vital human needs', Lesotho would be able to argue that the water required under sections 5 and 6 of the LWA trumps the water allocation provisions of the LHWP and the Phase II Agreement particularly in a conflict of uses. These findings were then extrapolated onto the ZAMCOM as a proximate and similar transboundary freshwater agreement to illustrate the inequity of the LHWP.

In this respect, it is found that the ZAMCOM Agreement explicitly recognises the principle of 'equitable utilization'.[7] This is augmented by the principle of cooperation and the duty to share information, which are crucial to the achievement of 'equitable utilization'.[8] In this way, the ZAMCOM takes a step forward from the LHWP in that it expressly recognises the principle of 'equitable utilization'. Thus, the ZAMCOM Agreement is best suited to the achievement of equitable utilization because of a legislative framework that clearly provides for equity, cooperation, and information sharing among all the riparian countries on the Zambezi River. The effect of the principle of equitable utilization can be seen in the promulgation of the Zambezi River Authority Act under the banner of the ZAMCOM Agreement, which has seen Zimbabwe and Zambia construct the Kariba Dam and the proposed Batoka Gorge Hydro Electric Dam project. These two projects are jointly owned and managed by Zimbabwe and Zambia. These equitable water-sharing projects based on "perfect equality" and accommodation of the interests of both Zimbabwe and Zambia would be difficult to manage without the explicit recognition of the principle of equitable and reasonable utilization by the ZAMCOM Agreement. Therefore, the ZAMCOM Agreement provides a blueprint for the resolution of a conflict of uses in that it explicitly provides for 'equitable utilization' as a binding commitment. Thus, the ZAMCOM is not susceptible to the ambiguity of the LHWP

[6] UN Watercourses Convention art 10.2.
[7] ZAMCOM Agreement art 12.1(h) read with art 13.
[8] ZAMCOM Agreement art 12.1(g) read with art 15 and art 16.

and closes the door to unilateral actions by the ZAMCOM Member States based on domestic legislation as is the case with the LHWP.

5.3.1.2 'Equitable participation'

The second sub-principle of the principle of 'equitable and reasonable utilization' is the principle of 'equitable participation'. This right to equitable participation is recognised by the Helsinki Rules, UN Watercourses Convention, the Revised Protocol, and other major water law treaties. However, these agreements do not provide sufficient elaboration on what this right entails. In light of this uncertainty, guidance on the content of the principle of 'equitable participation' can be sought from the dictum of the court in *Doctors for Life* case, the National Environmental Management Act 107 of 1998 (NEMA) and the Aarhus Convention.

To this end, the court in *Doctors for Life* held that public participation has also manifested in the environmental context and the court cited the Rio Declaration on Environment and Development as encapsulating this point. In this way, the court in *Doctors for Life* established that public participation constitutes 'equitable participation' in the "environmental law context". In this regard, section 2(4)(f) of the NEMA provides that public participation must guarantee the "equitable" participation of interested parties. Thus, 'equitable participation' is an objective of 'public participation. In this respect, Article 3 of the Aarhus Convention, in essence, stipulates that States must ensure public participation in environmental decision-making, which confirms the connection between public participation and equitable participation as found by the court in *Doctors for Life*. However, this does not adequately explain the constitutive elements of the principle of equitable participation. Since 'public participation' connotes and ensures 'equitable participation', this thesis assessed various legal instruments that provide for the principle of 'public participation' to ascertain the contours of the principle of 'equitable participation' in shared watercourses.

In this regard, it is found that the principle of 'public participation' requires the following amongst others, consultation, accommodation of all relevant stakeholders; cooperation to be able to raise concerns and mitigate the negative impacts of projects, and the dissemination of relevant information in a timely manner. This then means that 'equitable participation' includes the right to be consulted, to have your interests accommodated, to cooperate and be able to raise concerns and to mitigate the negative impacts of projects, access to information, accountability and transparency in a shared watercourse projects. This ensures the 'community

of interests' that is sought by the principle of 'equitable and reasonable utilization' of a shared watercourse. The LHWP was then assessed in light of these considerations.

To this end, it was found that the LHWP has substantially complied with the equitable participation imperative although this process has not been without blemish. In particular, the resolution of disputes over compensation has been slow coupled with a failure to consult the communities affected by the LHWP. However, despite the Lesotho Highlands Development Authority (LHDA) and the Trans-Caledon Tunnel Authority (TCTA) providing platforms for Lesotho and South Africa to participate in the management of the LHWP - it can be argued that the inflexible water supply requirements of the LHWP and Phase II Agreement, constitute sound proof that there was no 'equitable participation' of Lesotho in respect of the drafting process of both these agreements. An analysis of Articles 7 and 18.2 of the Phase II Agreement and Articles 4.1 and 4.2 of the LHWP and Annexure II to the LHWP, reveals that these instruments prioritise water supply to South Africa and regard Lesotho's water uses as "ancillary" to the supply of water to South Africa. These inflexible and unfair provisions imply that there was no 'equitable participation' of Lesotho in their drafting. This could have been caused by the 'power asymmetry' between South Africa and Lesotho that will be addressed later in this chapter. It can then be argued that in this regard, the LHWP and its protocols contravene the principle of 'equitable participation'. The inequitable participation of Lesotho would hinder the proper resolution of a conflict of uses in the LHWP.

'Equitable participation' is also provided for in the ZAMCOM Agreement through various mechanisms such as the ZAMCOM Council and the Technical Committee whose task is to create rules for the equitable and reasonable utilization of the water in the Zambezi River.[9] There is also the Zambezi Basin Stakeholders' Forum, which ensures participation by all relevant parties in the basin. Thus, the ZAMCOM has a broad legislative and practical framework for the equitable participation of its signatories.

The Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (hereafter, MRA) adds a significant dimension in this regard. This is because China has not signed the MRA despite being the major riparian in the basin. However, China and the MRA signatories have made a concerted effort to build a regime of cooperation and equitable participation in the Mekong River through the Lancang Mekong Cooperation (hereafter, LMC) mechanism. It follows then, that without an agreement that involves all riparian States,

[9] ZAMCOM Agreement arts 8, 10 and 12.

equitable participation can still be achieved through establishing a platform for cooperation and information sharing between signatories to a transboundary water agreement and those riparian States that have not signed the agreement in question. This will go a long way in ascertaining whether a water use is equitable.

It is then my view that the Agreement between the governments of the Republic of Botswana, Kingdom of Lesotho, Republic of Namibia and the Republic of South Africa on the establishment of the Orange-Senqu River Commission Agreement (2000) (hereafter, ORASECOM Agreement) can fulfil the same function as the LMC for the LHWP. This is because the ORASECOM Agreement is premised on 'equitable and reasonable utilization' of the Orange River.[10] This is ensured through the 'equitable participation' of all the riparian States in the Orange River basin.[11] This is augmented by the requirement for cooperation and sharing of data.[12] The parties to the ORASECOM Agreement are also required to share accessible information pertaining to water quality, the weather, and the state of the environment in the Orange River basin.[13] South Africa and Lesotho are signatories to the ORASECOM Agreement. The immediate implication of the ORASECOM Agreement is that despite the fact that this agreement has no bearing on the LHWP, it does confirm that the principles of equitable utilization and sustainable development are part of the underlying principles that must guide the interpretation and application of the LHWP. It would be unsound if South Africa and Lesotho would disavow these principles in respect of the LHWP and yet actively endorse them under the ORASECOM Agreement, which regulates the same shared watercourse. Thus the ORASECOM Agreement may function like the LMC, in that it incorporates all the parties to the LHWP. In this way, the ORASECOM Agreement may be used as a platform through which the parties to the LHWP can achieve equitable and reasonable utilization and sustainable development over the water in the Orange River.

It can then be argued that a transboundary water basin that lacks cooperation and information sharing would inevitably fail.[14] This is because as shown earlier in this discussion by Sands *et al*, without cooperation and information sharing in a transboundary water basin, it would be impossible to ascertain the current and potential water uses of the riparian States in a shared watercourse. This would then, in turn, mean that the determination of which use is

[10] ORASECOM Agreement art 7.2 read with art 5.2.2.
[11] ORASECOM Agreement art 5.2.4.
[12] ORASECOM Agreement art 7.1 read with art 7.4.
[13] ORASECOM Agreement art 7.4.
[14] Sands & Peel *et al* (note 5 above) 216-217.

'equitable' or 'reasonable' would be a speculatory process that could only breed confusion. It would then be impossible to assess the 'sustainability' of water uses in a shared watercourse. It follows then, that an agreement on 'equitable utilization' of a transboundary watercourse would be futile without a concomitant duty to ensure that the parties are bound to cooperate and provide all the relevant information. Consequently, a cooperative and information-sharing platform is required for the achievement of 'equitable and reasonable utilization' and 'sustainable development' of a transboundary watercourse. It is then my recommendation that the LHWP must be amended to explicitly provide for the principle of 'equitable participation' and the duties to cooperate and share information. This would provide appropriate procedural mechanisms to prevent and address a conflict of uses in the LHWP.

5.3.1.3 'Benefit-sharing'

The third major aspect of the principle of 'equitable and reasonable utilization' is the principle of 'benefit sharing'. 'Equity' in respect of access to the benefits from a watercourse use implies that water must be apportioned in such a manner that it affords a huge benefit to all.[15] Benefit-sharing is a sub-principle of the principle of equitable and reasonable utilization as provided by the UN Watercourses Convention, the Revised Protocol and the International Law Association Berlin Rules on Water Resources. Significantly, both the UN Watercourses Convention and the Revised Protocol regard benefit-sharing as the main goal of the principle of equitable and reasonable utilization. In this regard, the LHWP provides in its Preamble that the project "considers" the "equitable sharing of water" and recognises the benefits of "mutual water resources" for both South Africa and Lesotho in respect of economic development and social upliftment. This is not a binding commitment but, merely, an aspiration in which equitable sharing of water is simply one of the factors under "consideration" in the LHWP.

In this regard, Article 7.2(d) of the Phase II Agreement provides that Lesotho must not be "disadvantaged" in terms of the benefits arising out of the royalty payments. The Phase II Agreement also requires that the "most advantageous options for the long-term energy security of Lesotho without diminishing the benefits derived from the water delivery system" must be achieved.[16] Thirdly, the Phase II Agreement provides for compensation for the loss of benefits from the hydropower facility, either in kind or in monetary value.[17] Overall, it can be argued

[15] National Water Resource Strategy: Water for an Equitable and Sustainable Future (2013) 45 <http://www.dwa.gov.za/documents/Other/Strategic%20Plan/NWRS2-Final-email-version.pdf>.
[16] Phase II Agreement art 7.2(b).
[17] Phase II Agreement art 7.2(c).

that the LHWP advocates for the parties to this agreement to mutually and equitable share benefits arising out of the project. To this end, it is found that the benefits of the LHWP have not been 'equitably shared' because of corruption, political meddling, and poor institutional management of the compensation to be paid to the communities affected by the LHWP. This issue is compounded by the failure of the Lesotho government to enable the affected communities to beneficially utilize the compensation received from the LHWP. Benefit-sharing requires that the affected communities be given the necessary knowledge and training to be able to properly utilize the benefits acquired from a project. Consequently, the LHWP has had no impact on poverty and unemployment in Lesotho. To date, the project has failed in its "desire" to augment the standard of living of the people of Lesotho as it aspired to do in its Preamble to the LHWP. On the other hand, South Africa receives an assured and virtually undisturbed supply of water in line with the central objectives of the LHWP. Thus, it is my view that the LHWP has not benefitted South Africa and Lesotho mutually and equitably. This means that the LHWP contravenes the principle of 'benefit sharing'.

In this regard, the ZAMCOM Agreement provides that the Member States must seek to achieve 'equitable and reasonable utilization' to achieve optimal utilization of benefits.[18] Benefit-sharing in the ZAMCOM is managed under the Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin that provides that it is essential for the ZAMCOM countries to develop infrastructure that facilitates the sharing of benefits. However, some of the projects under the banner of ZAMCOM, such as the Kariba Dam project have been hampered by a severe lack of benefit sharing because compensation was not paid. The affected communities did not benefit from the benefits accruing to people and industries who are not proximate to the project. By its own assessment of the lack of benefit-sharing in the Kariba Dam project, the Zambezi River Authority set up the Zambezi Valley Development Fund in 2000 to address basic needs in the area. Consequently, there is a concerted effort to comply with the principle of equitable benefit sharing in the ZAMCOM Agreement and projects managed under its auspices.

5.3.1.4 'Reasonable utilization'

Finally, there was an evaluation of the LHWP's compliance with the principle of 'reasonable utilization', which refers to finding a balance between the competing uses of the riparian States

[18] ZAMCOM Agreement art 14.1.

in case of a conflict of uses. 'Reasonableness' prevents 'unsustainable' water use.[19] Since 'reasonable utilization' hinges on 'sustainable utilization' of a shared watercourse, this means that the question of whether there is 'reasonable utilization' of water in the LHWP was assessed in Chapter 3 of this thesis. This is because 'sustainable utilization' is a sub-principle of 'sustainable development' discussed under Chapter 3 of this thesis.

It follows then that the achievement of 'sustainable development' hinges on the realization of the principle of 'equitable and reasonable utilization'. This invariably implies that a transboundary water agreement that violates the principle of 'equitable and reasonable utilization' is unlikely to survive the scrutiny of the principle of 'sustainable development'. In the final analysis, the LHWP is found to be 'inequitable', hobbled by 'inequitable participation' of Lesotho and does not 'equitably' share the benefits between South Africa and Lesotho. This inequity in water use, sharing and participation, work in tandem to evoke the charge of hydrocolonisation in the LHWP.

Consequently, the LHWP is in contravention of the principle of 'equitable and reasonable utilization'. Thus, it is recommended that Lesotho and South Africa amend the LHWP to recognise this principle and its sub-principles in order to provide an adequate mechanism to prevent the projected conflict of uses in the Orange River. If the conflict of uses occurs in the LHWP, it is my view that the concept of vital human needs, as an incidence of the principle of equitable and reasonable utilization, must be used to assert Lesotho's right to the water in the LHWP. The case for the vital human needs is strengthened by the principle of absolute permanent sovereignty over natural resources to be discussed later in this chapter. It is my view that the approach to equitable and reasonable utilization in the LHWP should be the same approach that must be followed in respect of the allocation of water to all four riparians in the Orange River basin and to the resolution of a conflict of uses in this regard.

5.3.2 Chapter 3: In what way does the LHWP comply with the principle of 'sustainable development' as an inherent component of the principle of 'equitable and reasonable utilization'?

[19] P Wouters 'Legal responses to water scarcity and water conflict: The UN Watercourses Convention and Beyond'. (Paper presented at the Summer Conference on Allocating and Managing Water for a Sustainable Future: Lessons from Around the World 11 -14 June 2002) 37.

As has already been established, an inquiry into the LHWP's compliance with the principle of 'equitable and reasonable utilization' would not be complete without evaluating this agreement's compatibility with the principle of 'sustainable development'. This is because the principles of 'sustainable development' and 'equitable and reasonable utilization' are inexorably connected.[20] A transboundary water agreement may be 'equitable' between two riparians, but this does not imply that it is in line with the principle of 'sustainable development' if it does not find a balance between environmental, developmental, and intergenerational factors.[21] In simple terms, 'sustainable development' denotes development that caters to the needs of the current generation without hampering the needs of future generations. This requires finding a balance between the pillars of environmental protection, economic development and social upliftment. It is thus required that the LHWP must give effect to the principle of 'sustainable development'.

At the outset, it is imperative to note that the courts in Lesotho have not adjudicated on the principle of 'sustainable development'. Fortunately, there is ample jurisprudence in South Africa on the principle of 'sustainable development' that climaxed in the *Fuel Retailers* decision. Consequently, for the purposes of this study, I accept the "evolving elements" of 'sustainable development' as identified by the Constitutional Court of South Africa in the *Fuel Retailers* case and these include, the principle of 'integration'; the principle of 'sustainable utilization' of natural resources; the pursuit of 'equity' in the utilization and allotment of natural resources, that is, the principle of 'intra-generational equity' and the principle of 'inter-generational' equity.[22] This then necessitated an inquiry on these "recurring" principles of 'sustainable development'. The court in *Fuel Retailers* also identified the harmonious application of international law rules as an element of sustainable development, but it does not fall within the ambit of this study. The right to development is embedded into the case for the sovereign right of indigenous communities to the exploitation of their natural resources in Chapter 4 of this thesis.

5.3.2.1 The principle of 'integration'

[20] *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Judgment, I.C.J. Reports 2010, p. 14 para 177.
[21] P Birnie, I Boyle & C Redgwell International Law and the Environment 3 ed (2009) 561.
[22] *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province* (CCT67/06) 2007 (6) SA 4 (CC) (7 June 2007) paras 51 and 75; Sands *et al* (note 5 above) 218-219.

At its simplest form, 'sustainable development' aspires to ensure the 'integration' of economic development, environmental protection and social upliftment. This 'integration' requires striking a balance between these three "pillars" of sustainable development. On this score, the principle of 'integration' is evident in the phrasing of Article 15 of the LHWP. Article 15 of the LHWP provides for the protection of the "existing quality of the environment and the welfare of persons". This ensures that the development pillar of 'sustainable development' is balanced with environmental protection and social upliftment pillars. Whilst the Phase II Agreement 'Operating Rule' seeks to ensure economic development and social upliftment for Lesotho and South Africa, it does not provide for environmental protection in this nexus.[23] Thus, the blatant disregard for the environmental protection pillar in the Phase II Agreement means that the legislative scheme of the project on the principle of integration is fundamentally flawed and consequently, in contravention of the principle of 'sustainable development'.

However, the LHDA accepts the conceptualisation of 'sustainable development' as is provided in the Brundtland Report and invariably, the *Fuel Retailers*' conceptualisation. In this regard, the LHWP has implemented various initiatives aimed at 'integrating' environmental protection, economic development and social upliftment. For instance, the LHWP has promulgated the Requirements for Aquaculture Development within the Orange River and these specifically require the completion of an Environmental Impact Assessment prior to an aquaculture development as provided by the Lesotho Environment Act.[24] These regulations also require integration in that they demand that the aquaculture project in the LHWP must show that the selected site will cater to the environmental needs of the affected species.[25] In tandem with this approach, it is also required that the proposed aquaculture project take due consideration of the needs of competing users of the natural resource to balance the economic development with social upliftment.[26] In the same vein, a Flow, Water Quality and Geomorphology and IFR Baseline Study have been concluded that sought to establish the volume, incidence, timing and period of water flows that must be retained in the downstream river following the building of the Polihali Dam. The LHWP has also conducted a Socio-Economic Baseline Study, which sought to comprehend the livelihoods and quality of life of

[23] See Phase II Agreement art 7.2.
[24] Requirements of Aquaculture Application para 6 <http://www.lhda.org.ls/lhda/documents/Requirements%20for%20Aquaculture%20Application.pdf>.
[25] Ibid para 7.1.
[26] Ibid para 8.1.1.

the community in the project area. Thus, the LHWP attempts to create a concrete framework providing for the principle of 'integration'.

Ultimately, the LHWP does not comply with the principle of 'integration' in that despite some progress in sharing the benefits of the LHWP, the project's impact on the standard of living, unemployment and poverty levels has been minuscule. This was established under Chapter 2 on the discussion of the equitable sharing of benefits in the LHWP. This means that the LHWP has not adequately taken into consideration, the social upliftment and economic development "pillars" of 'sustainable development'. Thus, the LHWP has failed to achieve the 'integration' of the three "pillars" of 'sustainable development'. On this ground alone, the LHWP contravenes the principle of 'sustainable development'.

The ZAMCOM Agreement also provides for 'sustainable development' and invariably, the principle of 'integration'.[27] There have been significant strides to achieve an 'integrated' approach in the ZAMCOM.[28] This has been addressed through a coordinated approach that has created the Rules and Procedures for sharing of information concerning the management and development of the Zambezi Watercourse, which require the dissemination of hydrological information that works in conjunction with the ZAMCOM Procedures for Notification of Planned Measures. This means that the ZAMCOM has created a platform for an 'integrated' approach to 'sustainable development' that incorporates environmental protection, economic development and social upliftment in the ZAMCOM basin. However, it was established that some of the projects under the ZAMCOM such as the Kariba Dam project, failed to integrate the social upliftment of the communities displaced by the dam although efforts have recently been made to address this issue. Thus, the ZAMCOM reflects substantial compliance with the principle of integration.

It can then be argued that the achievement of 'sustainable development' hinges on an approach that integrates environmental protection, economic development and social upliftment. In this regard, some States choose a paradigm that prioritises one pillar over the other. This is because States will always have to consider the objects of their economic development, environmental protection and social upliftment policies. Section 24(b)(iii) of the

[27] ZAMCOM Agreement art 12.1(a).
[28] ZAMCOM Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin (2008) 29 <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/Zambezi%20River_Basin_IWRM_Strategy_ZAMSTRAT.pdf>.

Constitution of the Republic of South Africa, 1996 (hereafter, Constitution of South Africa) provides for 'ecologically sustainable development' which propagates an ecocentric approach to integration. This prioritises environmental protection over economic development and social upliftment. In this respect, section 36 of the Constitution of Lesotho read with the Lesotho Environment Act also provides for an ecocentric-based model of integration. Thus, I accept Vinti's assertion that an 'integration' approach that prioritises one pillar over another is sound because States have different needs at different times. It can then be argued that since the domestic legislation of both Lesotho and South Africa regulates the LHWP and they require an ecocentric approach to integration, it follows that the LHWP must follow an ecocentric approach to sustainable development. This certainly is in line with the object of protecting the "existing quality of the environment" as provided by Article 15 of the LHWP. Irrespective of the model of 'integration', 'sustainable development' would not be possible without finding equilibrium between the three pillars of sustainable development.

5.3.2.2 'Sustainable utilization'

The term 'sustainable' does not have a universal meaning. 'Sustainable use' refers to the "rate of use or exploitation of specific natural resources rather than on their preservation for future generations".[29] It must be borne in mind that the achievement of 'sustainable utilization' depends on the duties to cooperate and to share information as required by the UN Watercourses Convention and the Revised Protocol and other major water law treaties. As established in Chapter 2 of this study, the achievement of an 'equitable and reasonable utilization' of a transboundary water resource depends on ascertaining the nature of the use. According to the International Law Association, this is also an empirical process hence the duties to cooperate and share relevant information.

In this regard, Article 15 of the LHWP provides that the parties to the agreement must take "reasonable measures" to ensure that the project is consistent with protecting the "existing quality" of the environment and must pay particular attention to the maintenance of the well-being of communities that are directly impacted by the project. This provision speaks to 'sustainable use' in that it advocates for development within the project that is "compatible" with the "existing quality" of the environment. This requires that any development project must be sustainable to protect the "quality" of the environment. To this end, there are concerns about whether the uses of the Orange River are 'sustainable'. On the basis of uncertainty on the

[29] Sands & Peel *et al* (note 5 above) 222.

current water uses and the impact of sedimentation, pollution and land degradation on water quality and availability in the LHWP, the regulatory authorities of the LHWP must proceed in a "cautionary" manner that regards the LHWP water uses as 'unsustainable'. This is compounded by the fact the LHWP has not established the water volumes required to preserve the ecosystem neither is there a basin-wide pact on the quantity of the water to be allotted to each country. In this regard, the 'precautionary principle' requires that the LHWP must err on the side of caution. Furthermore, it has already been established in Chapter 1 of this study, that current climate projections mean that Lesotho will eventually be unable to meet the LWHP water supply obligations to South Africa. Consequently, it can be argued that the LHWP is propagating the 'unsustainable utilization' of the water in the LHWP.

In this regard, Article 12.1(b) of the ZAMCOM Agreement recognises the principle of 'sustainable utilization' and several instruments have been promulgated to give effect to this duty such as the Agreement on the Action Plan for the environmentally sound management of the Common Zambezi River 1987. These measures ensure an 'integrated' approach is taken by the ZAMCOM Members who will be able to have a complete picture before they make a decision on the 'sustainability' of a water use in the Zambezi basin. However, despite the rules on 'sustainable use' of the Zambezi River, recent studies have found 'unsustainable' water use because of *inter alia*, pollution, siltation, and overpopulation. Consequently, the ZAMCOM Agreement contravenes the principle of 'sustainable utilization'.

The key finding in this regard is that it is impossible to achieve 'sustainable use' of a shared watercourse in the absence of 'integration' of the three "pillars" of 'sustainable development'. This 'integration' is obviously dependent on cooperation and an information-sharing requirement. This would invariably mean that it would be impossible to decipher what uses of a shared watercourse are 'sustainable'. This shows the significance of the equitable participation of all riparian States because a failure to ensure the proper participation of all riparian States would impede the integration of all the pillars of sustainable development in a shared watercourse. One cannot 'integrate' the unknown. This would then be fatal to establishing the 'sustainability' of water uses in a shared watercourse. Thus, equitable and reasonable utilization and sustainable development are symbiotically linked.

As was established in Chapter 2 of this thesis, an inquiry into the 'reasonable utilization' of a shared watercourse as an aspect of the principle of 'equitable and reasonable utilization', invariably constitutes an evaluation of the 'sustainability' of water uses under the principle of

'sustainable development' explored in Chapter 3 of this thesis. Since it has been found that the water uses in the LHWP and the ZAMCOM Agreement are 'unsustainable', it follows then that the water uses in these agreements contravene the principle of 'reasonable utilization'.

5.3.2.3 The principles of 'intergenerational equity' and 'intragenerational equity'

The third sub-principle of 'sustainable development' is the principle of 'intergenerational equity'. The theory of 'intergenerational equity' elaborates on the "optimum basis for the relationship between one generation and the next".[30] It requires that each generation must utilize the environment in a way that it can be conferred on future generations in the same state it was received.[31] On the other hand, 'intragenerational equity' refers to the use of natural resources to the benefit of people in the 'current generation'. I accept Sands' submission that the principle of 'intragenerational equity' denotes the principle of 'equitable utilization' of natural resources. Since the matter of 'equitable utilization' was resolved in Chapter 2 of this study, it follows that an inquiry into the principle of intragenerational equity is superfluous. Having established that the LHWP contravenes the principle of 'equitable utilization', then it violates the principle of intragenerational equity. Therefore, this chapter only focused on assessing whether the LHWP complies with the principle of intergenerational equity.

In this regard, I have argued that Article 15 of the LHWP incorporates the principle of 'sustainable development' in that it provides that the parties must implement all cogent measures to facilitate the implementation of the project to conserve the "existing quality" of the environment. Protecting the "existing quality" of the environment connotes the principle of 'sustainable use'. The reference to "existing quality" connotes that this is a continuous duty that pertains to the present, and the future. It can then be argued that this duty to "protect the existing quality" of the environment implicitly requires that natural resources must be conserved for the benefit of the existing and future generations. This approach is sound because using a transboundary water resource 'sustainably'- invariably ensures that it preserved for the benefit of the current and future generations. This is the encapsulation of the principles of 'intragenerational equity' and 'intergenerational equity'. This means that the achievement of 'equity' in water use requires 'sustainable' use. 'Sustainable use' in turn requires an 'integration' of the pillars of sustainable development. It follows then, that a regime that does not have an 'integrated' approach will invariably be 'unsustainable' which immediately means

[30] Birnie, Boyle & Redgwell (note 21 above) 119.
[31] Ibid.

that the water uses in the basin will be in violation of the principles of 'intragenerational' and 'intergenerational' equity.

To this end, it is doubtful whether the water in the LHWP is being used to the advantage of current and future Basotho generations. It has already been argued that the current uses of water in the LHWP are 'unsustainable'. If current water uses of the LHWP are 'unsustainable', it means that they be would insufficient water to cater to the needs of existing and future Basotho generations. This means that the LHWP contravenes the principles of 'intergenerational equity' and 'intragenerational equity'.

In this regard, the ZAMCOM members have made a commitment to 'intergenerational equity' and intragenerational equity.[32] In light of the finding that water uses in the ZAMCOM Agreement are 'unsustainable', I argue that this agreement violates the principles of 'intergenerational equity' and 'intragenerational equity'.

The jurisprudential contribution of Chapter 3 is that even though Article 15 of the LHWP implicitly provides for sustainable development and that the LHDA has embraced the Brundtland Commission's definition of 'sustainable development', the LHWP still falls short of providing for this principle. This is because the LHWP does not explicitly provide for the principle of sustainable development. Thus, even though the LHWP may have policies that may cater to the prescripts of the principle of 'sustainable development', this is not a legally binding obligation in the LHWP and thus, may be ignored when it is convenient to do so. This, of course, raises questions about the legitimacy of the LHWP.

Secondly, the 'sustainability' of water uses in a transboundary/shared watercourse hinges on an 'integrated' approach that balances the three "pillars" of sustainable development. In other words, a failure to adhere to the principle of 'integration' impedes the achievement of 'sustainable' water use. This invariably means that an agreement that contravenes the principle of 'sustainable utilization' invariably violates the principles of 'intergenerational equity' and 'intragenerational equity'. If water is not used sustainably, there will be inadequate water to cater to the needs of the existing and future generations.

To this end, the ascertainment of the sustainability of water uses hinges on the duties to cooperate and share information. This means that sustainability as an empirical factor hinges on equitable participation as required by the principle of equitable and reasonable utilization.

[32] ZAMCOM Agreement art 12.1(e) read with art 14.3(a).

This does not always require an orthodox treaty platform that incorporates all the riparian States as has been shown by the LMC in the Mekong River basin. In this way, the inequitable participation of all riparian States in a shared watercourse compromises the ability to 'integrate' the three pillars of sustainable development, which then hinders the empirical determination of the 'sustainability' or 'reasonability' of water uses. This, in turn, means that it would not be possible to determine whether the water use is 'equitable' in respect of both current and future generations. In short, an agreement that contravenes the principle of 'equitable and reasonable utilization' invariably falls foul of the principle of 'sustainable development'. It is recommended then, that the LHWP must be amended to provide for the principle of sustainable development. This principle, in tandem with its corollary, the principle of equitable and reasonable utilization, would work together to prevent inequitable and unsustainable utilization of the water in the LHWP. This would prevent the materialisation of a conflict of uses in the LHWP in the existing and future generations.

Finally, the constitutive elements of the principle of sustainable development as stipulated by Sands and the court in *Fuel Retailers* may have significant implications for the principle of equitable and reasonable utilization. In Chapter 2 of this study, I argued that three of the sub-principles of the principle of equitable and reasonable utilization are equitable utilization, equitable participation, and reasonable utilization. In this regard, it was found in Chapter 2 that reasonable utilization connotes sustainable utilization. By the same token, I argued in Chapter 3 that equitable utilization connotes intragenerational equity. Similarly, equitable participation invariably connotes public participation, which is a fundamental sub-principle of sustainable development. This means that the principle of sustainable development has, in essence, subsumed the principle of equitable and reasonable utilization. However, it has been submitted that sustainable development is unsuited to shared watercourses because its application would be vague and it demands cooperation between States with complex legal systems.[33] Despite this charge, sustainable development's central contribution is the call for integration, sustainable utilization, and intergenerational equity. Similarly, the principle of equitable and reasonable utilization provides a rubric for the equitable utilization of a watercourse and avails the concept of 'vital human needs', which decisively and effectively resolves a conflict of uses in a transboundary watercourse. Thus, these two interrelated principles continue to co-exist

[33] M Fitzmaurice 'The Relationship between the law of international watercourses and sustainable development' in M Fitzmaurice, D Ong & P Merkouris (eds) in *Research Handbook on International Environmental law* (2010) 605, 609-611.

because they are complementary and symbiotically intertwined. As I have stated earlier, integration is the *sine qua non* for the 'sustainable' and 'equitable' use of a shared watercourse. Therefore, the pursuit of 'equity' and 'sustainability' hinges on compliance with both the principle of sustainable development and the principle of equitable and reasonable utilization.

However, the pursuit of the goals of 'equitable and reasonable utilization' and 'sustainable development' in a transboundary water resource has significant implications for the principle of 'permanent sovereignty over natural resources'. This is because compliance with these principles *may* require that riparian States cede aspects of their 'permanent sovereignty' and seek the concurrence of other States in the utilization of a shared watercourse. This assertion then necessities an examination of the LHWP's compliance with Lesotho's right to permanent sovereignty over the water in the Orange River.

5.3.3 Chapter 4: To what extent does the LHWP comply with the principle of 'permanent sovereignty over natural resources'?

Permanent sovereignty is an economic enunciation of State sovereignty.[34] Within this framework, Sands argues that 'equitable utilization' of natural resources pivots on the notion of 'shared sovereignty'. This means that the achievement of 'equitable utilization' may require that States have to waive aspects of their permanent sovereignty over their natural resources. Since 'equitable utilization' is a crucial facet of the principle of 'sustainable development' - this invariably means that the achievement of 'sustainable development' may require a limited form of 'permanent sovereignty over natural resources'.[35] The challenge with the waiver of aspects of a State's sovereignty is that it may mean that a State may have to sacrifice some of its economic development and social upliftment projects to 'equitably' share and 'sustainably' use the natural resources in a shared watercourse. These inevitable economic losses may compel States to advocate for an absolute form of 'permanent sovereignty over shared natural resources' to the detriment of the interests of the other riparian States in a shared watercourse. However, absolute 'permanent sovereignty over natural resources' could sometimes hinder the 'equitable and reasonable utilization' and 'sustainable development' of the shared watercourse. In this regard, Sands argues that it is unknown whether a limited form of sovereignty will lead to stronger protection of the environment. This posits the question as to whether the principles

[34] P Gümplová 'Restraining permanent sovereignty over natural resources' (2014) 53 *Enrahonar. Quaderns de Filosofia* 93,102.
[35] N Schrijver 'Sovereignty over natural resources: balancing rights and duties in an interdependent world'. Thesis presented for the degree of PHD at the University of Groningen (1995) 376.

of equitable and reasonable utilization and sustainable development are compatible with the principle of permanent sovereignty over natural resources. Schrijver submits that these resource-controlling principles can work together. Thus, Schrijver asserts that permanent sovereignty over natural resources can serve as the foundation for sustainable development. In this study, it is my view that these principles not only govern resource allocation but also function as tools to prevent and regulate a conflict of uses over shared natural resources. In light of these considerations, the principal object of Chapter 4 was to ascertain whether the LHWP complies with Lesotho's right to permanent sovereignty over the water in the Orange River. This inquiry is particularly significant in light of the fact that the Lesotho Highlands Development Authority Strategic Plan 2008/09-2012/13 claims that the LHWP "entrenches" Lesotho's sovereignty.

At the outset, it is imperative to note that international law suggests that there are two different regimes that apply in respect of water: there is a regime for water that exists wholly within the territorial boundaries of a country, and a separate legislative scheme for water that is shared between countries. In respect of water that exists wholly within the territorial boundary of a country, it is my view that such States have the right to absolute permanent sovereignty over that water. In respect of water that is 'shared' or 'transboundary', four theories exist in respect of the allocation of water resources: permanent (territorial) sovereignty over natural resources; territorial integrity; equitable utilization, and common management. Chapter 4 focused only on the principle of permanent sovereignty over natural resources.

It is also important to state that in this study, permanent sovereignty over natural resources is viewed primarily from the perspective of the right as bestowed on the State and to a minor extent, to indigenous people. In respect of indigenous people, it refers to their right "to manage, govern, or regulate the use of the resources by the indigenous people itself, by individuals, or by others".[36] Thus, I accept the view that permanent sovereignty over natural resources can be accorded separately to both the State, and its indigenous peoples. According to the United Nations, the focus should not be on what the right is named, but rather entrenching the right of indigenous people to permanent sovereignty over their natural resources. There is no conflict between both iterations of this right.

[36] United Nations Economic and Social Council ' Prevention of Discrimination - Prevention of Discrimination and Protection of Indigenous Peoples: Indigenous peoples' permanent sovereignty over natural resources Final report of the Special Rapporteur, Erica-Irene A.Daes' (2004) para 46 <https://digitallibrary.un.org/record/526284>.

Brownlie asserts that 'sovereignty' is the foundation for the rights and obligations of States over natural resources within their own territory. The International Court of Justice (hereafter, ICJ) has confirmed in the *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda)* case, that the right to 'permanent sovereignty over natural resources' is a rule of customary international law. Schrijver submits that various terms have been proffered to convey sovereignty's robust status such as 'absolute', 'full', 'permanent' and 'inalienable'. Within this spectrum, the terms 'full' and 'absolute' are used interchangeably to mean the right operates without any restriction whereas the terms 'permanent' and 'inalienable' operate as synonyms to denote that the right cannot be denied because of unfair arrangements, agreements or indulgences, those that are tainted by, among other things, fraud, and poor bargaining positions.[37] Thus, permanent sovereignty over natural resources can either be 'absolute' (full) or 'limited' and permanent.

On this score, I accept Munyai's view that sovereignty over natural resources is 'permanent' and 'absolute'.[38] According to Atsegbua, this debate on whether sovereignty is 'limited' or 'absolute' was prompted by the intense competition for natural resources between newly independent States and their former colonial powers. Atsegbua opines that the developing countries see permanent sovereignty as 'absolute' so as to afford them the latitude to achieve their development objectives whereas the developed countries argue for sovereignty subject to international law in order to protect their investments in the formerly colonised but now independent States. Thus, the developed countries saw sovereignty as being 'limited'. This underlying philosophical tension has been the cause of many contradictory agreements on the right to permanent sovereignty over natural resources.

More specifically, Resolution 1803 and the PCIJ has confirmed in its decisions in *Iron Rhine*, *Free Zones*, *Memel* and *Wimbledon,* that the right to permanent sovereignty over natural resources can be limited. In the water context, the Helsinki Rules and the UN Watercourses Convention, restrict the principle of absolute sovereignty over natural resources in shared watercourses through the principle of equitable and reasonable utilization.

Despite contradictory provisions in this regard, a holistic reading of the UNDRIPS, the African Charter on Human and Peoples' Rights, the Protocol Against the Illegal Exploitation

[37] Ibid para 47.

[38] A Munyai 'African renaissance: effects of colonialism on Africa's natural resources and the right to development.' (2020) 45 *Journal for Juridical Science* 1, 12.

of Natural Resources and the Revised Protocol shows that they lean towards an absolute form of permanent sovereignty over natural resources.[39] Significantly, Resolution 3201 and the CERDS unambiguously provide for absolute permanent sovereignty over natural resources and reflect the views of developing countries. This approach affirms the dictum of the court in the *Iceland Fisheries*, which implicitly reasoned that in shared watercourses, the principle of absolute permanent sovereignty is applicable if the water is needed to satisfy 'vital human needs'. Significantly, countries continue to assert their right to absolute permanent sovereignty over shared watercourses.[40] It is then my view, that the UN Watercourses Convention is not universally accepted because it failed to provide for this right. Therefore, based on Resolution 3201, the CERDS and the dictum of the court in *Iceland Fisheries*, it is my view that in a conflict of uses, States will treat the shared watercourses in the same manner as they treat natural resources that exist wholly within its territory, i.e. the principle of 'absolute' or 'full' permanent sovereignty will apply. In the same breath, the concept of 'vital human needs' as an incidence of equitable utilization in the manner postulated by Article 10 of the UN Watercourses Convention, implicitly advocates for the principle of absolute permanent sovereignty over natural resources in a conflict of uses. Thus it is my view that vital human needs trump all other uses.

In tandem with this, the indigenous communities in Lesotho can assert their right to development together with their sovereign right to divert or impound the water in the LHWP through sections 5 and 6 of the LWA in a conflict of uses, in line with the dictum of the courts in *Alexkor*, *Gongqose*, and *Baleni*. This right emanates from indigenous/ customary law, which deserves special consideration. Consequently, in light of these considerations, I am of the view that in a conflict of uses, riparian States have the right to absolute permanent sovereignty over shared watercourses. The LHWP was then evaluated against this finding.

To this end, I argue that the inequitable and unfair water supply provisions of the LHWP and the Phase II Agreement contravene Lesotho's right to 'absolute' or 'full' permanent sovereignty over the water in the Orange River in a conflict of uses. Even if Lesotho's sovereignty over its natural resources was regarded as 'limited' on the basis that it voluntarily signed the LHWP and Phase II Agreement, the unfair and unjust provisions of these two

[39] United Nations Declaration on Rights of Indigenous Peoples (adopted 13 December 2007) art 46; African Charter on Human and Peoples Rights (adopted 1 June 1981, entered into force 21 October 1986) art 21.1; Protocol Against the Illegal Exploitation of Natural Resources (adopted 30 November 2006) art 3.1.

[40] See A Rieu-Clarke & C Spray 'Ecosystem services and international water law: towards a more effective determination and implementation of Equity' (2013) 16 *PER/PELJ* 12, 18.

agreements would still be in violation of Lesotho's right to permanent sovereignty over the water in the Orange River if it prevents the supply of water for 'domestic uses' in a conflict of uses. This is because the water required by Lesotho for 'domestic use' constitutes vital human needs, which cannot be deemed "ancillary" to the supply of water to South Africa, particularly in a conflict of uses. A contrary approach would be absurd. Thus, the LHWP violates Lesotho's permanent sovereignty over natural resources, whether it is absolute or limited. This is the essence of hydrocolonisation and thus, this contravention could compel Lesotho to 'expropriate' the LHWP. To this end, I argue that Lesotho has the right to 'expropriate' the LHWP subject to restitution of property or payment in kind, and if need be, the payment of full compensation as an incidence of its right to permanent sovereignty over natural resources.

In this regard, the ZAMCOM Agreement limits the right to 'permanent sovereignty over natural resources' as it is premised on 'equitable and reasonable utilization' and 'sustainable development'.[41] Thus, it has been opined that the ZAMCOM Agreement has made the member States "transfer of some of their sovereignty" to the ZAMCOM.[42] This means that the ZAMCOM Agreement tacitly restricts the principle of 'absolute permanent sovereignty'.

A discussion of 'sovereignty' also requires a discussion of the element of 'power asymmetry'. The principle of 'power asymmetry' explains the unequal bargaining power between 'small' and 'large' States. It can be argued that South Africa has used its military and economic power as a form of "material power" to increase the power asymmetry in the LHWP and eroded Lesotho's right to permanent sovereignty over the water in the Orange River. This is reflected in the inequitable provisions of the LHWP and the Phase II Agreement, which favour the water supply obligations to South Africa over the water needs of Basotho residents.

Significantly, the overall impact of power asymmetry is not only on Lesotho's permanent sovereignty over its natural resources, but it could be argued that South Africa has used this power imbalance to prevent the recognition or incorporation of the underlying environmental law principles of 'equitable and reasonable utilization' and 'sustainable development' of the water in the LHWP. The glaring absence of these superordinate norms of environmental law in the LHWP could have been caused by South Africa's subtle and sometimes, brazen erosion of Lesotho's permanent sovereignty over its water resources through power asymmetry. This

[41] ZAMCOM Agreement arts 12, 13 and 14.

[42] S Schmeier 'The Organizational Structure of River Basin Organizations Lessons Learned and Recommendations for the Mekong River Commission (MRC) Paper Prepared for the Mekong River Commission (MRC)' (2010) 31 <http://www.mrcmekong.org/assets/Publications/governance/MRC-Technical-Paper-Org-Structure-of-RBOs.pdf>.

has resulted in what I deem 'hydrocolonisation' - that is to say, South Africa has unlawfully acquired control of Lesotho's water.

Ironically, this implies that sometimes, absolute 'sovereignty' can be used to facilitate the protection of the environment. Thus, Schrijver submits that the principle of 'permanent sovereignty over natural resources' can sometimes be used to facilitate the recognition of the principles of 'equitable and reasonable utilization' and 'sustainable development'.

In respect of power asymmetry, Khennache argues that the ZAMCOM reflects "low power asymmetries" with no prospects of conflict and minimal power imbalances. This basin reflects how a 'limited' form of permanent sovereignty over natural resources can work to promote equitable and reasonable utilization and sustainable development of a shared watercourse as seen in the projects under the banner of the Zambezi River Authority. Thus, a 'limited' or 'absolute' form of permanent sovereignty over natural resources can be either fatal or crucial for the achievement of sustainable development and equitable utilization depending on the objectives of the parties in question. In simple terms, permanent sovereignty over natural resources can operate to facilitate the realization of the principles of equitable and reasonable utilization and sustainable development particularly in water basins that are characterised by huge power asymmetry between the 'weak' upper riparian State and the 'strong' lower riparian State such as the LHWP. The converse is possible. In this way, the principle of permanent sovereignty over natural resources would operate as a foundation for the principles of equitable and reasonable utilization and sustainable development in the manner contemplated by Schrijver. More specifically, the principle of permanent sovereignty can function to elevate and strengthen the concept of 'vital human needs' which, in my view, offers the most effective mechanism to resolve a conflict of uses in the LHWP. Consequently, it is my recommendation that the LHWP must be amended to provide for the complementary principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources to prevent or address the projected conflict of uses in the LHWP.

5.4 Final Reflections

Finally, it is apposite to state that this thesis did not merely seek to identify the flaws in the LHWP. Rather, the main objective of this study was to suggest legal responses to the anticipated conflict of uses in the LHWP. The unequal bargaining power between Lesotho and South Africa has had an impact on Lesotho's equitable participation in the drafting of the water

allocation provisions of the LHWP. This has resulted in a water allocation regime that regards the 'domestic water uses' of Lesotho in a conflict of uses, as "ancillary" to the supply of water to South Africa. Thus, the LHWP is unjust and inequitable.

While the inequitable water allocation regime in the LHWP could be also be fuelled by the power asymmetry between these two countries, it is my view that in a conflict of uses, Lesotho can assert its right to permanent sovereignty over the water in the LHWP. This approach will be motivated by the fact that the LHWP does not provide for the principles of equitable and reasonable utilization, sustainable development and permanent sovereignty over natural resources. These three principles are what I deem, 'conflict of uses principles' that provide an equitable and sustainable framework on how to prevent and respond to a conflict of uses. This would bring the LHWP into line with the principle of vital human needs as an incidence of equitable and reasonable utilization, and *Ubuntu*. As stated earlier in this discussion, a failure to accord vital human needs 'special regard' or preference in a conflict of uses would be 'inequitable'.

Rather than allow for the ambiguity in the LHWP to be resolved in this way, I recommend that the LHWP and the Phase II Agreement be amended to explicitly provide for these conflict of uses principles to protect the rights of both countries and prevent a conflict of uses. The LHWP and the Phase II Agreement provide for the amendment of both these agreements at any time and for a review of their respective provisions. Thus, the substantive provisions of these agreements are not entrenched and there is room for amendments to prevent a conflict of uses. This is pertinent because continuing with the LHWP in its current form creates the necessary grounds for the charge of 'hydrocolonisation'.

Ultimately, Lesotho's history of volatile and fragile governments can only be an eerie premonition of Lesotho unilaterally revoking the terms of the LHWP. This could hamper South Africa's economic development. Amending the LHWP to explicitly provide for these principles may be unappealing in the interim as it gives Lesotho express rights it may not presently have and it could hamper South Africa's economic development. However, the inequitable and unsustainable water allocation regime of the LHWP may prompt a conflict over the water in the Orange River. "Still waters" may indeed, "run deep" in the LHWP.

6. BIBLIOGRAPHY

6.1 BOOKS, MONOGRAPHS & BOOK CHAPTERS

Anghie A *Imperialism, Sovereignty and the Making of International Law* (Cambridge University Press, Cambridge: 2005).

Birnie P, Boyle A & Redgwell C *International Law and the Environment* 3 ed (Oxford University Press, Oxford: 2009).

Brownlie I *Principles of Public International Law* 6 ed (Oxford University Press, New York: 2003).

Cascao A & Zeitoun M 'Power, hegemony and critical hydropolitics', in Earle A, Jagerskog A & Öjendal J (eds) *Transboundary Water Management: Principles and Practice* (2010) *Transboundary Water Management: Principles and Practice* (Earthscan, Oxon: 2010) 27, 27-42.

Daoudy M 'Transboundary Water Management principles and practice: Getting beyond the environment –conflict trap', in Earle A, Jagerskog A & Öjendal J (eds) *Transboundary Water Management: Principles and Practice* (Earthscan, Oxon: 2010) 43, 43-52.

Dugard J *International Law: A South African Perspective* 2 ed (Juta & Co, Cape Town: 2000).

Dugard J & Du Plessis M *Dugard's International Law: A South African Perspective* 5 ed (Juta & Co, Cape Town: 2018).

Emerson S & Solomon H *African security in the twenty-first century* (Manchester University Press, Manchester: 2018).

Fitzmaurice M 'The Relationship between the law of international watercourses and sustainable development', in Fitzmaurice M, Ong D & Merkouris P (eds) in *Research Handbook on International Environmental Law* (Edward Elgar Publishing Limited, Cheltenham: 2010) 605, 605-611.

Glazewski J *Environmental law in South Africa* Loose Leaf (LexisNexis South Africa, Butterworths: 2018).

Harris DJ *Cases and Materials on International Law* 6 ed (Sweet & Maxwell Ltd, London: 2004).

Hesse S & Wissink H 'Incorporating Indigenous Knowledge Systems into the Field of Development' , in Fox W & Van Rooyen E (eds) *The Quest for Sustainable Development* (Juta & Co Ltd, Cape Town: 2004) 47, 47-61.

Kidd M *Environmental Law* 2 ed (Juta & Co. Ltd, Cape Town: 2011).

Kiss A & Shelton D *International Environmental Law* 3 ed (Transnational Publishers, Inc, New York: 2004).

Lazarus K *Water rights and Social justice in the Mekong Region* 1ed (Earthscan, Oxon: 2011).

Malanczuk P ‘Sustainable development: some critical thoughts in the light of the Rio Conference’, in Ginther K, Denters E & de Waart PJ (eds) *Sustainable Development and Good Governance* (Martinus Nijhoff Publishers, Dordrecht: 1995) 23, 23-52.

McIntyre O ‘International Water Law: Concepts, Evolution and Development’, in Earle A, Jagerskog A & Öjendal J (eds) *Transboundary Water Management: Principles and Practice* (Earthscan, London: 2010) 59, 59-71.

Sands P *Principles of International Environmental Law* 2 ed (Cambridge University Press, Cambridge: 2003).

Sands P & Peel J *et al Principles of International Environmental Law* 4 ed (Cambridge University Press, Cambridge: 2018).

Schrijver N *Sovereignty over Natural Resources: Balancing Rights and Duties* (Cambridge University Press, Cambridge: 1997).

Schrijver N ‘The dynamics of sovereignty in a changing world’, in Ginther K, Denters E & de Waart PJ (eds) *Sustainable Development and Good Governance* (Martinus Nijhoff Publishers, Dordrecht: 1995) 80,80-89.

Tladi D *Sustainable Development in International Law: An analysis of key enviro-economic instruments* (Pretoria University Law Press (PULP), Pretoria: 2008).

Varis O, Tortajada C & Biswas AK (eds) *Management of Transboundary Rivers and Lakes Water Resources Development and Management* (Springer, Berlin: 2008).

6.2 JOURNAL ARTICLES

Abseno M 'Role and relevance of the 1997 UN Watercourses Convention in resolving transboundary water disputes in the Nile.' (2013)11 *International Journal of River Basin Management* 193-203.

Alden C & Soko M 'South Africa's economic relations with Africa: hegemony and its discontents.' (2005)43 *Journal of Modern African Studies* 367-392.

Atsegbua L 'Principle of permanent sovereignty over natural resources and its contribution to modern petroleum development agreements.' (1993)25 *Journal of the Indian Law Institute* 115-126.

Azarva J 'Conflict on the Nile: International Watercourse Law and the Elusive Effort to Create a Transboundary Water Regime in the Nile Basin.' (2011)25 *Temple International and Comparative Law Journal* 457-498.

Beaumont P 'The 1997 UN Convention on the Law of Non-Navigational Uses of International Watercourses: Its Strengths and Weaknesses from a Water Management Perspective and the Need for New Workable Guidelines.' (2000)16 *International Journal of Water Resources Development* 475-495.

Brooks D 'Response to Late developers and the inequity of "equitable utilization" and the harm of "do no harm" by Kai Wegerich and Oliver Olsson, Water International, 35 (6), 707–717 (November 2010).' (2011)36 *Water International* 407-409.

Brunée J & Toope S 'Environmental Security and Freshwater Resources: A Case for International Ecosystem Law.' (1994)5 *Yearbook of International Environmental Law* 41-76.

Chaudry RV 'The Precautionary Principle, Public Health, and Public Health.' (2008)25 *Nursing' Public Health Nursing* 261-268.

Chirwa D 'Privatisation of water in Southern Africa: A human rights perspective African Charter on Human and Peoples Rights.' (2004)4 *African Human Rights Law Journal* 218-241.

Cornell D 'Is there a difference that makes a difference between uBuntu and dignity?' (2010)25 *SA Public Law* 382-399.

Couzens E 'Avoiding *Mazibuko*: Water security and constitutional rights in Southern African case law.' (2015)18 *Potchefstroom Electronic Law Review* 1162-1186.

Couzens E 'Filling Station Jurisprudence: Environmental law in South African courts and the judgment in *Fuel Retailers Association of Southern Africa v Director General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and others*.' (2008)15 *South African Journal of Environmental Law and Policy* 23-56.

Demhardt I ‘Namibia's Orange River Boundary-Origin and Reemerged Effects of an Inattentive Colonial Boundary Delimination Demhardt.’ (1990)22 *GeoJournal* 355-362.

De Villiers G ‘South Africa's Water Resources and the Lesotho Highlands Water Scheme: A Partial Solution to the Country's Water Problems.’ (1996)12 *International Journal of Water Resources Development* 65-78.

Dinar S *et al* ‘Does precipitation and runoff variability affect treaty cooperation between states sharing international bilateral rivers?’ (2010)69 *Ecological Economics* 2568-2581.

Dube Z ’Strengthening the Ubuntu social canopy after the Afrophobic attacks.’ (2016)37 *Verbum et Ecclesia* 1-4.

Dunn G ‘Water Wars a Surprisingly Rare Source of Conflict.’ (2013)35 *Harvard International Review* 46-49.

du Plessis A & Alberts R ‘Cooperative environmental governance: At the coalface of sustainable infrastructure development in South Africa.’ (2014) 29 *SA Public Law* 441-468.

Enyew EL ‘Application of the Right to Permanent Sovereignty over Natural Resources for Indigenous Peoples: Assessment of Current Legal Developments.’ (2017)8 *Arctic Review on Law and Politics* 222-245.

Feris L ‘Sustainable development in practice: *Fuel Retailers Association of Southern Africa v Director-General Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province*.’ (2008)1 *Constitutional Court Review* 235-253.

Feris L ‘The role of good environmental governance in the sustainable development of South Africa.’ (2010)13 *Potchefstroom Electronic Law Journal* 73-99.

Feris L ‘The socio-economic nature of section 24(b) of the Constitution – some thoughts *on HTF Developers (Pty) Ltd v Minister of Environmental Affairs and Tourism (HTF).*’ (2008)23 *SA Public Law* 194-207.

Ferreira-Snyman A ‘Sovereignty and the changing nature of public international law: towards a world law?’ (2007)XL *Comparative and International Law Journal of South Africa* 395-424.

Ferreira-Snyman MP ‘The evolution of state sovereignty: A historical overview.’ (2006)12 *Fundamina* 1-28.

Field TL ‘Sustainable development versus environmentalism: competing paradigms for the South African EIA regime.’ (2006)123 *South African Law Journal* 409-436.

Fjelde H *et al* ‘Climate triggers: Rainfall anomalies, vulnerability and communal conflict in Sub-Saharan Africa.’ (2012)31 *Political Geography* 444-453.

Flemes D 'Regional power South Africa: Co-operative hegemony constrained by historical legacy.' (2009)27 *Journal of Contemporary African Studies* 135-157.

Fuo O 'The Right of Access to Sufficient Water in South Africa: Comments on *Federation for Sustainable Environment and Others v Minister of Water Affairs* [2012] ZAGPPHC 128.' (2013)20 *Murdoch University Law Review* 21-37.

Fuo O 'The Transformative potential of the constitutional environmental right overlooked in *Grootboom*.' (2013) 34 *Obiter* 77-95.

Glazewski J & Plit L 'Towards the Application of the Precautionary Principle in South African Law.' (2015)26 *Stellenbosch Law Review* 190-219.

Gray K 'Human property rights: the politics of expropriation.' (2005)16 *Stellenbosch Law Review* 398-412.

Gümplová P 'Restraining permanent sovereignty over natural resources.' (2014)53 *Enrahonar. Quaderns de Filosofia* 93-114.

Hall J 'Building the Ethical Dimension of the Environmental Right: The Contribution of the *South African Predator Breeders Association v the Minister of Environmental Affairs and Tourism*.' (2010)17 *South African Journal of Environmental Law and Policy* 1-21.

Heyns P, Patrick M & Turton A 'Transboundary Water Resource Management in Southern Africa: Meeting the Challenge of Joint Planning and Management in the Orange River Basin.' (2008)24 *International Journal of Water Resources Development* 371-383.

Hitchcock R 'The Lesotho Highlands Water Project: Dams, Development, and the World Bank.' (2015)3 *Sociology and Anthropology* 526-538.

Humby TL 'The right to development-in-environment and its ecological and developmental thresholds.' (2016)32 *South African Journal on Human Rights* 219-247.

Igbinedion SI 'Finding value for the right to development in international law.' (2019)19 *African Human Rights Law Journal* 395-417.

Kamga SA 'A call for a 'right to development' -informed pan-Africanism in the twenty-first century.' (2019)19 *African Human Rights Law Journal* 418-444.

Kamga SA 'The right to development in the African human rights system: The *Endorois* case.' (2011)23 *De Jure* 381-391.

Kaniaru W 'From scarcity to security: Water as a potential factor for conflict and cooperation in Southern Africa.' (2015)22 *South African Journal of International Affairs* 381-396.

Kerwin G 'The Role of United Nations General Assembly Resolutions in Determining Principles of International Law in United States Courts.' (1983) *Duke Law Journal* 876-899.

Kistin JE & Ashton PJ 'Adapting to Change in Transboundary Rivers: An Analysis of Treaty Flexibility on the Orange-Senqu River Basin.' (2008)24 *International Journal of Water Resources Development* 385-400.

Kotze L 'Improving Unsustainable Environmental Governance in South Africa: The case for Holistic Governance.' (2006)9 *Potchefstroom Electronic Law Journal* 1-44.

Kotze L 'Phiri, the plight of the poor and the perils of climate change: time to rethink environmental and socio-economic rights in South Africa?' (2010)1 *Journal of Human Rights and the Environment* 135–160.

Kotze L 'The Constitutional Court's contribution to sustainable development in South Africa.' (2003)6 *Potchefstroom Electronic Law Journal* 81-95.

Kreamer D 'The Past, Present and Future of Water Conflict and International Security.' (2012) 149 *Journal of Contemporary Water Research & Education* Issue 88-96.

Ladan M 'SDGs Framework as the blueprint for climate change action and sustainable development in Africa: role of Law and Parliaments.' (2016)22 *South African Journal of Environmental Law and Policy* 159-207.

Lankford B 'Does Article 6 (Factors Relevant to Equitable and Reasonable Utilization) in the UN Watercourses Convention misdirect riparian countries?' (2013)38 *Water International* 130-145.

Lau H 'Rethinking the Persistent Objector Doctrine in International Human Rights Law.' (2005)6 *Chicago Journal of International Law* 495-510.

Leb C 'The right to water in a transboundary context: emergence of seminal trends.' (2012)37 *Water International* 640-653.

Leb C 'The UN Watercourses Convention: the éminence grise behind cooperation on transboundary water resources.' (2013)38 *Water International* 146-155.

Likoti F 'The 1998 Military Intervention in Lesotho: SADC Peace Mission or Resource War?' (2007)14 *International Peacekeeping* 251-263.

Mabovula N 'The erosion of African communal values: a reappraisal of the African Ubuntu philosophy.' (2011)3 *Inkanyiso Journal of Humanities & Social Science* 38-47.

Mafuta C 'Benefit sharing in the Zambezi River Basin – myth or reality?' (2006)7 *The Zambezi* 3.

Mahlakeng M & Solomon H 'Internal and External Political Dynamics Influencing Lesotho's Foreign Policy.' (2013)5 *Insight on Africa* 35-53.

Majinge C 'The Doctrine of Permanent Sovereignty over Natural Resources in international law and its application in developing countries: The case of the mining sector in Tanzania.' (2008)16 *African Yearbook of International Law* 235-268.

Mangena F 'Towards a hunhu/ubuntu dialogical moral theory'. (2012)13 *Phronimon* 1-17.

Marais E 'When does State Interference with Property (Now) Amount to Expropriation? An Analysis of the Agri SA Court's State Acquisition Requirement (Part I).' (2015)3 *Potchefstroom Electronic Law Journal* 2983-3031.

Marais W 'When does State Interference with Property (Now) Amount to Expropriation? An Analysis of the Agri SA Court's State Acquisition Requirement (Part II).' (2015)7 *Potchefstroom Electronic Law Journal* 3033-3069.

Marks S 'The human right to development: between rhetoric and reality.' (2004)17 *Harvard Human Rights Journal* 137- 168.

Matlosa K 'Conflict and Conflict Management: Lesotho's Political Crisis After the 1998 Election.' (1999)5 *Lesotho Social Science Review* 163-196.

Mbengue M 'A Model for African Shared Water Resources: The Senegal River Legal System.' (2014)23 *Review of European Community & International Environmental Law* 59-66.

Mboya T 'Conflict between State Sovereignty and the Right of Intervention under the Constitutive Act of the African Union.' (2009)39 *Africa Insight* 77-89.

McCaffrey S 'A human right to water: domestic and international implications.' (1992)5 *Georgetown International Environmental Law Review* 1-24.

McCaffrey S 'The contribution of the UN Watercourses Convention on the law of the non-navigational use of international watercourses.' (2001)1 *International Journal of Global Environmental Issues* 250-263.

McIntyre O 'Benefit-sharing and upstream/downstream cooperation for ecological protection of transboundary waters: opportunities for China as an upstream state.' (2015)40 *Water International* 48-70.

McIntyre O 'The Protection of Freshwater Ecosystems Revisited: Towards a Common Understanding of the 'Ecosystems Approach' to the Protection of Transboundary Water Resources.' (2014)23 *Review of European Community & International Environmental Law* 88-95.

McIntyre O 'The Role of Customary Rules and Principles of International Environmental Law in the Protection of Shared International Freshwater Resources.' (2006)46 *Natural Resources Journal* 157-210.

McIntyre O 'The World Court's Ongoing Contribution to International Water Law: The Pulp Mills Case Between Argentina and Uruguay.' (2011)4 *Water Alternatives* 124-144.

McIntyre O 'Utilization of shared international freshwater resources – the meaning and role of "equity" in international water law.' (2013)38 *Water International* 112-129.

Mirumachi N ‘The politics of water transfer between South Africa and Lesotho: Bilateral cooperation in the Lesotho Highlands water project.’ (2007)32 *Water International* 558-570.

Molomo M ‘External Military Intervention in Lesotho’s Recent Political Crisis.’ (1999)5 *Lesotho Social Science Review* 133-162.

Mulaudzi C ‘New Regionalism in Southern Africa? Between South African Hegemony and Globalisation.’ (2009)XVI *Lusotopie* 47-65.

Munyai A ‘African renaissance: effects of colonialism on Africa’s natural resources and the right to development.’ (2020)45 *Journal for Juridical Science* 1-27.

Murombo T ‘Beyond Public Participation: The disjuncture between South Africa's Environmental Impact Assessment (EIA) Law and Sustainable Development.’ (2008)18 *Potchefstroom Electronic Law Journal* 1-32.

Murombo T ‘From Crude Environmentalism to Sustainable Development: Fuel Retailers South.’ (2008)3 *South African Law Journal* 488-504.

Murombo T ‘The utility of environmental rights to sustainable development in Zimbabwe: A contribution to the constitutional reform debate.’ (2011)11 *South African Journal on Human Rights* 120-146.

Ngang CC ‘Right to development in Africa and the common heritage entitlement.’ (2020)45 *Journal for Juridical Science*’ 28-50.

Ngang CC ‘Towards a right-to-development governance in Africa.’ (2018)17 *Journal of Human Rights* 107-122.

Ng'ambi S ‘Permanent Sovereignty Over Natural Resources and the Sanctity of Contracts, From the Angle of Lucrum Cessans.’ (2015)12 *Loyola University Chicago International Law Review* 153-172.

Nkongolo J ‘International solidarity and permanent sovereignty over natural resources: antagonism or peaceful coexistence? The case of oil in the Virunga National Park.’ (2015)2 *African Journal of Democracy and Governance* 77-98.

Öberg M ‘The Legal Effects of Resolutions of the UN Security Council and General Assembly in the Jurisprudence of the ICJ.’ (2005)16 *The European Journal of International Law* 879–906.

Ogunnubi O & Isike C ‘Regional hegemonic contention and the asymmetry of soft power: A comparative analysis of South Africa and Nigeria.’ (2015)37 *Strategic Review for Southern Africa* 152-177.

Ogunnubi O & Okeke-Uzodike U ‘South Africa's foreign policy and the strategy of soft power.’ (2015)22 *South African Journal of International Affairs* 23-41.

Olowu D ‘Access to safe water and the Human Development Quandary in Africa: Implications of a rights based approach.’ (2014)35 *Obiter* 205-223.

Owosuyi IL ‘The pursuit of sustainable development through cultural law and governance frameworks: A South African perspective.’ (2015)18 *Potchefstroom Electronic Law Journal* 2012- 2059.

Paterson A ‘Fuelling the sustainable development debate in South Africa.’ (2006)123 *South African Law Journal* 53-62.

Paterson A & Mkhulisi M ‘Traversing South Africa's conservation and land reform objectives — lessons from the Dwesa-Cwebe Nature Reserve.’ (2014)131 *South African Law Journal* 365-407.

Pfetsch F & Landau A ‘Symmetry and Asymmetry in International Negotiations.’ (2000)5 *International Negotiation* 21-42.

Phooko M & Radebe S ‘Ubuntu and the law in South Africa: Exploring and understanding the substantive content of Ubuntu.’ (2017)36 *South African Journal of Philosophy* 239-251.

Qumba MF ‘Safeguarding foreign direct investment in South Africa: Does the Protection of Investments Act live up to its name?’ (2018)25 *South African Journal of International Affairs* 341-364.

Ramaili L & Cloete F ‘The Role of the Lesotho Highlands Water Project in Poverty Alleviation in Lesotho.’ (2008)37 *Africa Insight* 117-136.

Rieu-Clarke A ‘Reflections on the Normative Prescription of Sustainable Development in Recent Transboundary Water Treaty Practice.’ (2000)25 *Water International* 572-579.

Rieu-Clarke A & Gooch A ‘Governing the Tributaries of the Mekong—The Contribution of International Law and Institutions to Enhancing Equitable Cooperation Over the Sesan.’ (2010)22 *Global Business & Development Law Journal* 193-224.

Rieu Clarke A & Spray C ‘Ecosystem Services and International Water Law: towards a more effective determination and implementation of Equity?’ (2013)16 *Potchefstroom Electronic Law Journal* 12-65.

Rudman A ‘The Value of the Persistent Objector Doctrine in International Human Rights Law.’ (2019)22 *Potchefstroom Electronic Law Journal* 1-38.

Salman SMA ‘Downstream riparians can also harm upstream riparians: the concept of foreclosure of future uses.’ (2011)35 *Water International* 350–364.

Salman SMA ‘Legal Regime for Use and Protection of International Watercourses in the Southern African Region: Evolution and Context.’ (2001)41 *Natural Resources Journal* 981-1012.

Salman SMA 'The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law.' (2007)23 *International Journal of Water Resources Development* 625-640.

Salman SMA 'The United Nations Watercourses Convention Ten Years Later: Why Has its Entry into Force Proven Difficult?' (2007)32 *Water International* 1-15.

Sanchez N & Gupta J 'Recent changes in the Nile Region may create an opportunity for a more equitable sharing the Nile River Waters.' (2011)58 *Netherlands International Law Review* 363-385.

Sands P 'International Courts and the Application of the Concept of "Sustainable Development".' (1999)3 *Yearbook of UN Law* 389-405.

Scholtz W 'The Anthropocentric Approach to Sustainable Development in the National Environmental Management Act and the Constitution of South Africa.' (2005)1 *Journal of South African Law* 69-85.

Scholtz W 'The Precautionary principle in international trade: Conflict or reconciliation?' (2002)9 *South African Journal of Environmental Law and Policy* 163-175.

Schwebel S 'The Effect of Resolutions of the U.N. General Assembly on Customary International Law.' (1979)73 *Proceedings of the Annual Meeting (American Society of International Law* 301-309.

Shai I 'Rupturing International Law to Realise the Right to Development.' (2019)LII *Comparative and International Law Journal of South Africa* 151-168.

Shlomi D 'Power Asymmetry and Negotiations in International River Basins International Negotiation.' (2009)14 *International Negotiation* 329-360.

Shlomi D 'Scarcity and Cooperation along International Rivers: An Empirical Assessment of Bilateral Treaties.' (2011)55 *International Studies Quarterly* 809-833.

Slade B 'Public purpose or public interest and third party transfers.' (2014)17 *Potchefstroom Electronic Law Journal* 167-206.

Soyapi B 'Water Security and the Right to Water in Southern Africa: An Overview.' (2017)20 *Potchefstroom Electronic Law Journal* 1-26.

Stein T 'The Approach of the Different Drummer: The Principle of the Persistent Objector in International Law.' 1985 *Harvard International Law Journal* 457-482.

Sucker F 'Approval of an International Treaty in Parliament: How Does Section 231(2) 'Bind the Republic'?' (2013)V *Constitutional Court Review* 417-434.

Tarlock D 'Mexico and the United States Assume a Legal Duty to Provide Colorado River Delta Restoration Flows: An Important International Environmental and Water Law Precedent.' (2014)23 *Review of European Community & International Environmental Law* 76-87.

Thabane M ‘Shifts from Old to New Social and Ecological Environments in the Lesotho Highlands Water Scheme; Relocating Residents of the Mohale Dam Area.’ (2000)26 *Journal of Southern African Studies* 633-654.

Tladi D ‘Of Course for Humans: A Contextual Defence of Intergenerational Equity.’ (2002)9 *South African Journal of Environmental Law and Policy* 177-186.

Tladi D ‘Strong sustainable development, weak sustainable development and the earth charter: towards a more nuanced framework of analysis.’ (2004)11 *South African Journal of Environmental Law and Policy* 17-29.

Tladi D ‘Sustainable development, integration and international law and policy: sombre reflections on World Bank efforts.’ (2004)29 *South African Yearbook of International Law* 164-192.

Tladi D ‘The Biosafety Protocol and the promotion of sustainable development: with one hand it giveth, with the Savings Clause it taketh away?’ (2006)39 *Comparative and International Law Journal of Southern Africa* 83-101.

Tolentino Jr A ‘Sovereignty over Natural Resources - Change of Concept or Change of Perception?’ (2014)44 *Environmental Policy and Law* 300-309.

Turton A, Schultz C & Buckle H *et al* ‘Gold, Scorched Earth and Water: The Hydropolitics of Johannesburg.’ (2006)22 *International Journal of Water Resources Development* 313-335.

van Reenen T ‘Rudiments of a Jurisprudential Methodology of Sustainable Development: the Judgment of Ngcobo in *Fuel Retailers Association of Southern Africa Pty Ltd v Director General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga and* 2007 (6) SA 4 CC.’ (2008)15 *South African Journal of Environmental Law and Policy* 169-182.

Vick M ‘The Law of International Waters: Reasonable Utilization.’ (2012)12 *Chicago-Kent Journal of International and Comparative Law* 141-178.

Vink K ‘Transboundary water law and vulnerable people: legal interpretations of the ‘equitable use’ principle.’ (2014)39 *Water International* 743-754.

Vinti C ‘A Spring without Water: The Conundrum of Anti-Dumping Duties in South African Law.’ (2016)19 *Potchefstroom Electronic Law Journal* 1-25.

Vinti C ‘The power to declare a prohibition or restriction on prospecting or mining to protect the environment: a critical assessment of section 49 of the Mineral and Petroleum Resources Development Act 28 of 2002 and section 24(2A) of the National Environmental Management Act 107 of 1998.’ (2018)36 *Journal of Energy & Natural Resources* 1-22.

Vinti C ‘The right to mine in a ‘protected area’ in South Africa: *Mining and Environmental Justice Community Network of South Africa v Minister of Environmental Affairs*.’ (2019)35 *South African Journal on Human Rights* 311-322.

Visser F 'The principle of permanent sovereignty over natural resources and the nationalization of foreign interests.' (1988)XXI *Comparative and International Law Journal of Southern Africa* 76-91.

Wegerich K & Olsson O 'Late developers and the inequity of "equitable utilization" and the harm of "do no harm".' (2010)35 *Water International* 707-717.

Wouters P 'An Assessment of Recent Developments- in International Watercourse Law through the Prism of the Substantive Rules Governing Use Allocation.' (1996)36 *Natural Resources Journal* 417-439.

Wouters P 'Legal responses to water scarcity and water conflict: The UN Watercourses Convention and Beyond'. Paper presented at Summer Conference 'Allocating and Managing Water for a Sustainable Future: Lessons from Around the World' (11-14 June 2002).

Wouters P & Salman SMA *et al* 'The Legal Response to the World's Water Crisis: What Legacy from the Hague? What Future in Kyoto?' (2001)4 *University of Denver Water Law Review* 418-425.

Wouters P 'The Yin and Yang of International Water Law: China's Transboundary Water Practice and the Changing Contours of State Sovereignty.' (2014)23 *Review of European Community & International Environmental Law* 67-75.

6.3 GOVERNMENT PUBLICATIONS

Department of Environmental Affairs 'Public Participation guideline in terms of NEMA EIA Regulations, Department of Environmental Affairs' (2017) <https://www.environment.gov.za/sites/default/files/docs/publicparticipationguideline_intermsofnemaEIAregulations.pdf>.

Department of Water Affairs 'Water Quality and Effluent Re-Use Report (2013) <http://www.dwa.gov.za/Projects/Orange%20Recon/Docs/final/8%20Water%20Quality.pdf>.

Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River - Current and Future Water Requirements' (2013) <http://www.dwa.gov.za/Projects/Orange%20Recon/Docs/final/4%20Current%20and%20future%20Water%20Requirements2.pdf>.

Department of Water and Sanitation 'Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligations' (2013) <http://www.dwaf.gov.za>.

Department of Water and Sanitation Media Release 'Tripartite Permanent Technical Committee between the Republic of Mozambique, the Republic of South Africa and the Kingdom of Swaziland (2002) <http://www.dwa.gov.za/Communications/PressReleases/2002/Press%20release%20IncoMaputo%20signing%2029%20Aug%2002%20WSSD.pdf>.

Department of Water and Sanitation 'Minister Lindiwe Sisulu announces urgent measures to address water challenges: Rapid intervention in water scarce areas' (23 October 2019) <https://www.gov.za/speeches/minister-lindiwe-sisulu-announces-urgent-measures-address-water-challenges-23-oct-2019-0000>.

Draft National Water and Sanitation Master Plan Ready for the future and ahead of the curve (8 December 2017) <http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/Documents/28228_171208_NWSMP%20Report%20Draft2.6.pdf>.

Lesotho Climate Change Handbook <http://lesmet.org.ls/publications/climate-change-handbook>.

Lesotho Long Term Water and Sanitation Strategy (2014) <https://www.water.org.ls/download/lesotho-long-term-water-and-sanitation-strategy/>.

Lesotho National Environment Policy 1998 <https://www.liportal.de/fileadmin/user_upload/oeffentlich/Lesotho/30_wirtschaft-entw/National_Environmental_Policy_1998.pdf>.

Lesotho National Strategic Development Plan 2012/13 – 2016/17 - Growth and Development Strategic Framework: "Towards an accelerated and sustainable economic and social transformation" (2012) <http://www.gov.ls/gov_webportal/important%20documents/na

tional%20strategic%20development%20plan%20201213- 201617/national%20strategic%20development%20plan%20201213-201617.pdf>.

National Water and Sanitation Master Plan: Volume 2- Plan to Action Version 4.2 Ready for the Future and Ahead of the Curve (2018) <http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/Documents/NWSMP_Plan%20to%20Action_Reduced%20(00000002).pdf>.

National Water Resource Strategy: Water for an Equitable and Sustainable Future 2013 <http://www.dwa.gov.za/documents/Other/Strategic%20Plan/NWRS2-Final-email-version.pdf>.

People, Planet, Prosperity: A National Framework for Sustainable Development in South Africa (2008) <https://www.environment.gov.za/documents/strategicdocuments/nfsd>.

South Africa National Development Plan 2030 Our Future: Make it Work <https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf>.

South Africa National Policy on Food and Nutrition Security <https://www.nda.agric.za/docs/media/NATIONAL%20POLICYon%20food%20and%20nutririon%20security.pdf>.

The Kingdom of Lesotho National Climate Change Policy 2017-2027 <https://www.gov.ls/documents/national-climate-change-policy/>.

The National Strategic Development Plan 2012/13 – 2016/17 Growth and Development Strategic Framework "Towards an accelerated and sustainable economic and social transformation" <https://www.africanbondmarkets.org/fileadmin/uploads/afdb/Countries/Lesotho/Lesotho_Min_Finances/Lesotho_Nat.Strat_Dvpt_Plan-2013-17.pdf>.

White Paper: 'A Mineral and Mining Policy for South Africa' (October 1998) <www.dmr.gov.za/publications/summary/125-white-papers/335-white-paper-minerals-and-mining-policy-for-sa-1998.html>.

6.4 PUBLISHED & UNPUBLISHED THESIS

Likoti F ‘African Military Intervention in African Conflicts: An Analysis of Military Intervention in Rwanda, the DRC and Lesotho.’ Thesis presented for the degree of PHD at the University of the Western Cape (2006).

Mahao L ‘The Power of Hegemonic Theory in Southern Africa: Why Lesotho Cannot Develop an Independent Foreign Policy.’ Thesis presented for the degree of Master of Arts at Rhodes University (2006).

Mahlakeng M ‘An analysis of regime capacity and a nascent environmental conflict in the Orange-Senqu, the Nile and the Niger River basins.’ Thesis presented for the degree of PHD at the University of the Free State (2017).

Murombo T ‘Law, Regulation, and the Promotion of Renewable Energy in South Africa.’ Thesis presented for the degree of PHD at the University of Witwatersrand (2016).

Ngang CC ‘The right to development in Africa and the requirement of development cooperation for its realisation.’ Thesis presented for the degree of PHD at the University of the Pretoria (2017).

Ramaili L ‘Impact of the Lesotho Highlands Water Project in Poverty Alleviation in Lesotho.’ Thesis presented for the degree of Master of Arts in Public and Development Management at the University of Stellenbosch (2006).

Schrijver N ‘Sovereignty over natural resources: balancing rights and duties in an interdependent world.’ Thesis presented for the degree of PHD at the University of Groningen (1995).

6.5 TREATIES & INTERNATIONAL INSTRUMENTS

African Charter on Human and Peoples Rights (1981).

African Convention on the Conservation of Natural Resources (1968).

African Nature Convention (1946).

Agenda 21 (1992).

Agreement between the Government of the Republic of South Africa and the Government of the Republic of Namibia on the Establishment of a Permanent Water Commission (1992).

Agreement between the Governments of the Republic of Botswana, Kingdom of Lesotho, Republic of Namibia and the Republic of South Africa on the establishment of the Orange-Senqu River Commission Agreement (2000).

Agreement between the Republic of South Africa and the Interim Government of the National entity of Southwest-Africa/Namibia concerning the control development and utilization of the water of the Orange River (1987).

Agreement between the Republic of Zambia and the Republic of Zimbabwe Concerning the Utilization of the Zambezi River (1987).

Agreement Governing the Activities of States on the Moon and other Celestial Bodies (1979).

Agreement on Phase II of the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (2011).

Agreement on the action plan for the environmentally sound management of the Common Zambezi River system (1987).

Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (1995).

Agreement on the Establishment of the Zambezi Water Commission (2004).

Agreement on the Nile River Basin Cooperative Framework (2010).

Agreement on the Provision of Hydrological Information of the Lancang/Mekong River in Flood Season by the People's Republic of China to the MRC (2008).

Agreement on the Vioolsdrift and Noordoewer Joint Irrigation Scheme Between the Government of the Republic of Namibia and The Government of the Republic of South Africa (1992).

American Convention on Human Rights (1969).

Association of Southeast Asian Nations Comprehensive Investment Agreement (2009).

Charter of Fundamental Rights of the European Union (2000).

Committee on Economic, Social and Cultural Rights, General Comment 15: The Right to Water (Arts. 11 and 12 of the Covenant) (Twenty-ninth session, 2003), U.N. Doc. E/C.12/2002/11 (2002).

Consolidated Treaty of the Southern African Development Community (1992).

Constitutive Act of the African Union (2002).

Convention between the United States and Mexico concerning the Equitable Distribution of the waters of the Rio Grande for Irrigation purposes (1906).

Convention Concerning the Protection of the World Cultural and Natural Heritage (1972).

Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (1998).

Convention on Biological Diversity (1992).

Convention on Environmental Impact Assessment in a Transboundary Context (1991).

Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992).

Convention Relative to the Preservation of Fauna and Flora in their Natural State (1933).

Dublin Statement on Water and Sustainable Development (1992).

Economic and Social Council Resolution 847 (XXXII): Report of the Commission on Permanent Sovereignty over Natural Resources of 3 August 1961 <http://legal.un.org/avl/ha/ga_1803/ga_1803.html>.

Five-Year Plan of Action on Lancang-Mekong Cooperation (2018-2022) <http://www.lmcchina.org/eng/hzdt_1/t1525364.htm>.

Fourth ACP-EC Convention of Lomé (1989).

Guarini Aquifer Agreement (2010).

Harare Commonwealth Declaration (1991).

Integrated Water Resources Management Strategy and Implementation plan on the Zambezi River Basin (2008) <http://www.zambezicommission.org/publication/integrated-water-resources-management-strategy-and-implementation-plan-zambezi-river-1>.

Inter-American Democratic Charter (2001).

Intergovernmental Panel on Climate Change '5th Assessment Report: Climate Change 2014: Impacts, Adaptation, and Vulnerability' (2014) <http://www.ipcc.ch/report/ar5/syr/>.

International Convention for the Regulation of Whaling (1946).

International Covenant on Civil and Political Rights (1966).

International Covenant on Economic, Social and Cultural Rights (1966).

International Law Association Berlin Rules on Water Resources (2004).

International Law Association New Delhi Declaration of Principles of International Law Relating to Sustainable Development (2002).

International Law Commission Draft Articles on the Law of Transboundary Aquifers (2008).

Johannesburg Declaration on Sustainable Development A/CONF.199/20 (2002).

Lancang-Mekong Cooperation Mechanism (10 August 2017) <http://www.lmcchina.org/eng/>.

Lancang-Mekong Environmental Cooperation Strategy 2018-2022 <http://www.chinaaseanenv.org/lmecc/strategy_and_mechanism/environmental_cooperation_strategy/201711/W020190412545577768077.pdf>.

Lesotho Highlands Development Authority Annual Report 2000/01 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Annual_Reports/Annual_Report_2000_01.pdf>.

Lesotho Highlands Development Authority Final Report Summary of Main Findings for Phase 1 Development Report No. LHDA 678-F-001 (2002).

Lesotho Highlands Development Authority Strategic Plan 2008/09-2012/13 <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Strategic_Plan/Strategic_plan_2008-2013.pdf>.

Lesotho Highlands Water Project Compensation Regulations (2017) <http://www.lhda.org.ls/lhdaweb/documents/documents>.

Lesotho Highlands Water Project Phase II Compensation Policy (2017) <http://www.lhda.org.ls/lhdaweb/Uploads/documents/Governance/LHWP%20Phase%20II%20Compensation%20Policy%20(v8%201)%20Approved.pdf>.

Lesotho's National Adaptation Programme of Action on Climate Change Under the United Nations Framework Convention on Climate Change (2015) <https://unfccc.int/resource/docs/napa/lso01.pdf>.

LHWP Anti-Corruption Policy - 2019 <http://www.lhda.org.ls/lhdaweb/Uploads/Documents/Governance/LHWP_Anti-Corruption_Policy_January_2019.pdf>.

Marrakesh Agreement Establishing the World Trade Organization (1994).

Memorandum of Understanding between the Government of the Republic of South Africa and the Government of the Republic of Namibia on co-operation in the field of the environment and wildlife (2016).

Memorandum of Understanding for Feasibility Study to Transfer Water from Lesotho to Botswana (2013).

Ministerial Declaration of The Hague on Water Security in the 21st Century (2000).

ORASECOM Integrated Water Resource Management Plan for the Orange- Senqu River Bas in (2014) <http://wis.orasecom.org/content/study/GIZ/The%20IWRMP/Documents/019_2014_IWRM-Plan-Main-Report.pdf>.

Paris Agreement (2016).

Peace of Westphalia 1648: comprising (A) Peace Treaty of Osnabrück between Emperor Ferdinand III and Queen Christina of Sweden and their respective allies, Osnabrück (October 14/24, 1648) and (B) Treaty between Emperor Ferdinand III and the King of France, Louis XIV, and their respective allies, Münster (October 14/24, 1648) <http://germanhistorydocs.ghi-dc.org/pdf/eng/87.%20PeaceWestphalia_en.pdf>.

Phnom Penh Declaration of the Second Mekong –Lancang cooperation leaders Meeting 'Our River of peace and Sustainable Development' (2018) <http://pressocm.gov.kh/en/archives/21699>.

Protocol Against the Illegal Exploitation of Natural Resources (2006).

Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms (1952).

Protocol VI System of Governance to the Treaty on the Lesotho Highlands Water Project: Supplementary Arrangements Regarding the Systems of Governance for the Project (1999).

Rio Declaration on Environment and Development (1992).

Sanya Declaration of the First Lancang-Mekong Cooperation (LMC) Leaders' Meeting--For a Community of Shared Future of Peace and Prosperity among Lancang-Mekong Countries (2016) <http://www.china.org.cn/china/Off_the_Wire/2016-03/23/content_38096975.htm>.

Southern African Customs Union (SACU) Agreement (2002).

Southern African Development Community Regional Strategic Action Plan on Integrated Water Resources Development and Management (2011-2015) RSAP III <https://www.sadc.int/files/6613/5293/3526/Regional_Strategic_Action_Plan_-IWRM_III.pdf>.

Southern African Development Community Regional Strategic Action Plan on Integrated Water Resources Development and Management (2016-2020) Phase IV <https://www.sadc.int/files/9914/6823/9107/SADC_Water_4th_Regional_Strategic_Action_Plan_English_version.pdf>.

Southern African Development Community Regional Water Policy (2005) <https://www.sadc.int/documents-publications/regional-codes-policies/>.

Southern African Development Community Revised Protocol on Shared Watercourses (2000).

Southern African Development Community Southern African Vision for Water, Life and Environment in the 21st Century (2009) <https://www.sadc.int/documents-publications/show/Southern%20African%20Vision%20For%20Water%20Life%20and%20Environment%20In%20the%2021st%20Century>.

Stockholm Declaration on the United Nations Conference on the Human Environment (1972).

Sustainable Development Goals; Millennium Development Goals: Transforming our world: the 2030 Agenda for Sustainable Development 2016-2030.

The Charter of the United Nations (1945).

The Helsinki Rules on the Uses of the Waters of International Rivers (1966).

Treaty between the United States and Mexico Relating to the Utilization of the Waters of the Colorado, Tijuana, and Rio Grande Rivers; Agreement on the Permanent and Definitive Solution of the international Problem of the Salinity of the Colorado River (1944).

Treaty of Augsburg (1555) and the Peace of Westphalia (1648).

Treaty on the Lesotho Highlands Water Project between the Government of the Kingdom of Lesotho and the Government of the Republic of South Africa (1986).

Tripartite Interim Agreement between the Republic of Mozambique and the Republic of South Africa and the Kingdom of Lesotho for Co-operation on the protection and sustainable utilisation of the water resources of the Incomati and Maputo Watercourses (2002).

Universal Declaration on Human Rights (1948).

United Nations Convention on the Law of the Non-navigational Uses of International Watercourses (1997).

United Nations Convention on the Law of the Sea (1982).

United Nations Declaration on the Rights of Indigenous Peoples (2007).

United Nations Environmental Programme Principles of Conduct in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States (1978).

United Nations General Assembly Resolution 637C (VII): The right of Peoples and Nations to self-determination of 16 December 1952.

United Nations General Assembly Resolution 1314 (XIII): Recommendations concerning international respect for the right of peoples and nations to self-determination of 12 December 1958.

United Nations General Assembly Resolution 1514 (XV): Declaration on the Granting of Independence to Colonial Countries and Peoples of 14 December 1960.

United Nations General Assembly Resolution 1515 (XV): "Concerted action for economic development of economically less developed countries" of 15 December 1960.

United Nations General Assembly Resolution 1803 (XVII):"Permanent sovereignty over natural resources" of 14 December 1962.

United Nations General Assembly Resolution 2625 (XXV): Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations of 24 October 1970.

United Nations General Assembly Resolution 2849(XXVI): Development and Environment of 20 December 1971.

United Nations General Assembly Resolution 3129 (XXVIII): Co-operation in the field of the Environment concerning Natural Resources Shared by Two or More States of 13 December 1973.

United Nations General Assembly 3201 (S-VI): Declaration on the Establishment of a New International Economic Order UNGA Res 3201 (S-VI) of 1 May 1974.

United Nations General Assembly Resolution 3202 (S-VI): Programme of Action on the Establishment of a New International Economic Order of 1 May 1974.

United Nations General Assembly Resolution 3281 (XXIX): Charter of Economic Rights and Duties of States of 12 December 1974.

United Nations General Assembly Resolution 34/186: Co-operation in the field of the Environment concerning Natural Resources Shared by Two or More States of 18 December 1979.

United Nations General Assembly Resolution 41/128: Declaration on the Right to Development of 4 December 1986.

United Nations General Assembly Resolution 55/2: United Nations Millennium Declaration of 8 September 2000.

United Nations General Assembly Resolution 64/292: The human right to water and sanitation of 28 July 2010.

United Nations General Assembly Resolution 70/1: Transforming our world: The 2030 Agenda for Sustainable Development of 25 September 2015.

United Nations Human Rights Council Resolution 16/2: The human right to safe drinking water and sanitation of 24 March 2011.

United Nations Human Rights Council Resolution 18/1: The future we want« – Outcome document of the United Nations Conference on Sustainable Development (Rio +20), June 2012 of 28 September 2011.

United Nations Human Rights Council Resolution 24/18: The human right to safe drinking water and sanitation of 23 September 2013.

United Nations Human Rights Council Resolution 27/7: The human right to safe drinking water and sanitation of 25 September 2014.

World Bank Guidelines on the Treatment of Foreign Direct Investment (1993).

World Health Assembly Resolution 64/24: Drinking-water, sanitation and health of 24 May 2011.

World Heritage Convention (1972).

ZAMCOM Integrated Water Resources Management Strategy and Implementation Plan for the Zambezi River Basin (2008) <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/Zambezi%20River_Basin_IWRM_Strategy_ZAMSTRAT.pdf>.

ZAMCOM Procedures for Notification of Planned Measures (2017) <http://www.zambezicommission.org/publication/zamcom-procedures-notification-planned-measures-2017>.

ZAMCOM Rules and Procedures for Sharing of information and Data Related to the Management and Development of the Zambezi Watercourse (2016) <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/16.07.28-Rules_ProceduresForDataSharing_Adopted-by-Council_FinalEditing_Ver10_FINAL.pdf>.

6.6 INTERNET & OTHER MEDIA ARTICLES

Barbieri M 'Developing Countries and their Natural Resources. From the elaboration of the principle of Permanent Sovereignty over natural resources to the creation of sovereign wealth funds' (2009) <https://vi.unctad.org/resources-mainmenu-64/digital-library?view=browse&by=browse-by-author&cl=2.2.4>.

Bastos F 'A Southern African Approach to the Permanent Sovereignty over Natural Resources and Common Resource Management Systems' Working Paper 3 (2013) <https://www.uni-siegen.de/fokos/publikationen/veroeffentlichungen/fokos_-_working_paper_2013-01_-_bastos.pdf>.

Development of the Batoka Gorge Hydro-Electric Scheme Project Overview Document (2017) <http://www.zambezira.org/sites/default/files/BGHES_Project%20Overview%20Document.pdf>.

Donnenfeld Z, Crookes C & Hedden S 'A Delicate balance: water scarcity in South Africa' (2018) <https://issafrica.s3.amazonaws.com/site/uploads/sar13-2.pdf>.

Earle A 'The Impact and Implications of the Adoption of the 1997 UN Watercourse Convention for Countries in Southern Africa' (2008) <http://www.acwr.co.za/pdf_files/WWF_RA_UN%20Convention.pdf>.

Egre D 'United Nations Environment Programme Dams and Development Project Compendium on Relevant Practices - 2nd Stage: Revised Final Report Benefit Sharing Issue' (2007) <file:///C:/Users/vintic/Downloads/Egre_2007_UNEPCompendiumBS.pdf>.

Flemes D 'Conceptualising Regional Power in International Relations: Lessons from the South African Case' GIGA Working Papers (2007) <https://www.giga-hamburg.de/en/publication/conceptualising-regional-power-in-international-relations-lessons-from-the-south-african>.

Haas LJ, Mazzei L & O'Leary D 'United Nations Environment Programme Dams and Development Project Compendium on Relevant Practices - 2nd Stage: Revised Final Report Benefit Sharing 'Lesotho Highlands Water Project : communication practices for governance and sustainability improvement (English)' World Bank working paper; no.200 (2010) <http://documents.worldbank.org/curated/en/672401468056329045/Lesotho-Highlands-Water-Project-communication-practices-for-governance-and-sustainability-improvement>.

Institute for Security Studies 'A Delicate balance: water scarcity in South Africa' (2018) <https://issafrica.org/research/southern-africa-report/a-delicate-balance-water-scarcity-in-south-africa>.

International Boundaries Research Unit 'South Africa-Namibia boundary working group established' <http://www.informante.web.na/south-border-dispute.15089>.

International Law Association Commentary on the Berlin Rules on Water (2004) <https://www.unece.org/fileadmin/DAM/env/water/meetings/legal_board/2010/annexes_groundwater_paper/Annex_IV_Berlin_Rules_on_Water_Resources_ILA.pdf>.

Jägerskog A 'Getting Transboundary Water Right: Theory and Practice for Effective Cooperation' (2009) <https://www.uea.ac.uk/polopoly_fs/1.147024!ZeitounJagerskog_SIWI_TB_Report.pdf>.

Khennache L 'Power analysis among riparian countries to improve river basin organisation implementation in transboundary waters' (2015) <http://digitool.library.mcgill.ca/webclient/StreamGate?folder_id=0&dvs=1541661057044~600>.

Kings S 'Southern Africa can avoid climate strife with water agreements' *Mail and Guardian* (5 December 2016) <https://mg.co.za/article/2016-12-05-00-southern-africa-can-avoid-climate-strife-with-water-agreements>.

Lesotho: El Niño-related Drought Office of the Resident Coordinator Situation Update. (as of 19 Jan 2016) <http://ls.one.un.org/content/dam/unct/lesotho/docs/Humanitarian%20efforts/Home%20page/Lesotho%20El%20Ni%C3%B1o%20-%20related%20Drought%20Situation%20Update%20No.%2001%20(as%20of%2019%20Jan%202016).pdf>.

Lesotho Highlands Development Authority <http://www.lhda.org.ls/phase2/environmentalimpactcomponents.php>.

Lesotho Highlands Development Authority EIA Executive Summary: Lesotho Highlands Water Project Phase IB (1997) <http://documents.worldbank.org/curated/en/503161468772479396/pdf/multi-page.pdf>.

Lesotho Highlands Development Authority Final Report Summary of Main Findings for Phase 1 Development (2002).

Lesotho Highlands Development Authority 'Public Disclosure of Phase II Environmental and Social Management Programme' (2014) <http://www.lhda.org.ls/phase2/documents/Compensation_Policies/ES%20background%20document_Final12Dec2014.pdf>.

Lesotho Highlands Development Authority Requirements of Aquaculture Applications within the LHWP Dams Schedule 1: Regulation 11(2) <http://www.lhda.org.ls/lhda/documents/Requirements%20for%20Aquaculture%20Application.pdf>.

Lesotho Highlands Development Authority 'Sustainable development: Lesotho Highland Water Project' <http://www.lhda.org.ls/phase2/environmentalimpactcomponents.php>.

Lesotho Highlands Development Authority 'Water and Sanitation (WATSAN) Programme in Phases IA and IB of the Lesotho Highlands Water Project'

<http://www.lhda.org.ls/lhdaweb/Uploads/documents/Social_Impact/Water_and_Sanitation.pdf>.

Lesotho Highlands Development Authrority 'Water Sales' <http://www.lhda.org.ls/lhdaweb/Uploads/documents/royalties/Water%20Royalties.pdf>.

Lesotho Highlands Water Project Further Phases (2 July 2004) <http://www.lhda.org.ls/Phase1/Reports/PDF/LHWP%20Further%20Phases.pdf>.

Lesotho Highlands Water Project Report of the Panel of Environmental Experts 2014 <http://www.lhda.org.ls/lhda/reports/poes/PoE%20Report%2069%20-%20rev2.pdf>.

Lesotho Highlands Water Project Report of the Panel of Environmental Experts 2015 <http://www.lhda.org.ls>.

Lesotho Highlands Water Project Report of the Panel of Environmental Experts 2016 <http://www.lhda.org.ls>.

Lesotho Meteorological Services Ministry of Natural Resources 'Climate Change in Lesotho: A Handbook for Practitioners' (2001) <http://lesmet.org.ls/publications/climate-change-handbook>.

LHWP Phase II 'Environmental Impact' <http://www.lhda.org.ls/phase2/environmentalimpactcomponents.php>.

Mabula R 'Whose Water is it Anyway? South Africa's Hydrocolonization of Lesotho' (2018) 4 *Curiosity Magazine* 26-27 <https://issuu.com/witscommunications/docs/curiosity_issue_4>.

Media release: South African-led Assembly, Integration and Verification (AIV) Consortium completes planning work for SKA' (10 July 2019) <https://www.ska.ac.za/media-releases/south-african-led-assembly-integration-and-verification-aiv-consortium-completes-planning-work-for-ska/>.

Mekong River Commission Knowledge Base on Benefit Sharing (2011) <http://www.mrcmekong.org/assets/Publications/Manuals-and-Toolkits/knowledge-base-benefit-sharing-vol1-of-5-Jan-2012.pdf>.

Ministry of Natural Resources: Lesotho Meteorological Services 'Climate Change in Lesotho: A handbook for Practitioners' (2001) <http://www.lesmet.org.ls/sites/default/files/publications/cchandbook.pdf>.

Mutizwa G 'Lesotho's 'green drought' pushes thousands deeper into hunger' *The Guardian* (18 February 2016) <https://www.theguardian.com/global-development/2016/feb/18/lesotho-green-drought-hunger-rain-malnutrition-disease>.

Ndhlovu A 'Strategic plan development for the Zambezi Basin on course' *Zambezi Today* February (2018) 2(1) <http://www.zambezicommission.org/sites/default/files/newsletter/zambezi_today_vol._2_no._1_february_2018.pdf>.

Nengomasha N & Chibuye H 'ZAMCOM rolls out water resources decision support system' *Zambezi Today* February (2018) 2(1) <http://www.zambezicommission.org/sites/default/files/newsletter/zambezi_today_vol._2_no._1_february_2018.pdf>.

News Afrika 'As SADC we can't and shall not be in Lesotho forever' *News24* (16 September 2017) <https://www.news24.com/Africa/News/zuma-as-sadc-we-cant-and-shall-not-be-in-lesotho-forever-20170916>.

News24 'Regional force ends Lesotho mission' *News24* (28 November 2018) <https://www.news24.com/Africa/News/regional-sadc-force-ends-lesotho-mission-20181128>.

Nkandabbwe Irrigation Scheme Sinazongwe – Zambia Zambezi Valley Development Fund Projects Brochure <http://www.zaraho.org.zm/sites/default/files/Nkandabbwe%20Brochure-min.pdf>.

Orange Senqu River Basin preliminary transboundary diagnostic analysis (2008) <http://www.orasecom.org/_system/writable/DMSStorage/651orange-senqu-river-basin-preliminary-transboundary-diagnostic-analysis.pdf>.

Parliamentary Monitory Group 'Lesotho Highlands Water Project Phase 2: Progress Report with the Minister' (26 October 2016) <https://pmg.org.za/committee-meeting/23524/>.

Petrie B 'Cooperative Water Governance for Climate Resilience: Are Institutional Arrangements in Southern Africa Fit for Purpose' Occasional Paper 268 (2017) <http://www.saiia.org.za/re'rch/cooperative-water-governance-for-climate-resilience-are-institutional-arrangements-in-southern-africa-fit-for-purpose/>.

Porter Jr G & Hodges J 'Drought dries up Kariba power output' *Business Day* (24 June 2019) <https://www.businesslive.co.za/bd/world/africa/2019-06-24-drought-dries-up-kariba-power-output/>.

Reliefweb 'Dam- building continues despite controversy' (11 November 2011) <https://reliefweb.int/report/lesotho/dam-building-continues-despite-controversy>.

Report of the Secretary-General Climate change and its possible security implications (2009) <https://digitallibrary.un.org/record/667264?ln=en>.

Report of the World Commission on Environment and Development: Our Common Future (1987): Our Common Future, Chapter 2: Towards Sustainable Development <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>.

Rieu-Clarke A, Moynihan R & Magsig B 'United Nations Watercourses User's Guide' (2012) <https://www.iucn.org/sites/dev/files/un_watercourses_convention_-_users_guide.pdf>.

Schmeier S 'The Organizational Structure of River Basin Organizations Lessons Learned and Recommendations for the Mekong River Commission (MRC) Paper Prepared for the

Mekong River Commission (MRC)' (2010) <http://www.mrcmekong.org/assets/Publications/governance/MRC-Technical-Paper-Org-Structure-of-RBOs.pdf>.

Shlomi D, Katz D & De Stefano L *et al* 'Climate change, conflict, and cooperation: global analysis of the resilience of international river treaties to increased water variability' Policy Research working paper; no.WPS 6916;12 (2014) <http://documents.worldbank.org/curated/en/2014/06/19646108/climate-change-conflict-cooperation-global-analysis-resilience-international-river-treaties-increased-water-variability>.

Skinner J, Krauss J & Newborne P 'Redistribution of revenues from hydropower dams Review of benefit-sharing mechanisms and local control' (2014) <https://pubs.iied.org/pdfs/G03770.pdf>.

Soils Incorporated (Pty) Ltd and Chalo Environmental and Sustainable Development Consultants 'Kariba Dam Case Study, prepared as an input to the World Commission on Dams' (2000) <www.dams.org>.

Southern African Development Community 'Climate Change Adaptation in SADC: A strategy for the Water Sector' (2011) <https://www.sadc.int/files/2213/5293/3544/SADC_Climate_Change_Adaptation_for_the_Water_Sector_booklet.pdf>.

Southern African Development Community Concept Paper on Benefit Sharing in the Context of Transboundary Water Resources Management and Development <http://www.orangesenqurak.org/UserFiles/File/SADC/SADC%20concept%20paper_benefit%20sharing.pdf>.

South African Institute of International Affairs 'Cooperative Water Governance for Climate Resilience: Are Institutional Arrangements in Southern Africa Fit for Purpose?' Occasional Paper 268 (2017) <https://saiia.org.za/research/cooperative-water-governance-for-climate-resilience-are-institutional-arrangements-in-southern-africa-fit-for-purpose/>.

Statement of Understanding accompanying the United Nations Convention on the Law of Non-Navigational Uses of Watercourses (A/51/869 of 11 April 1997) <http://www.un.org/law/cod/watere.htm>.

The Department of International Relations and Co-operation of South Africa 'Government Media Statement on the unfolding situation in Lesotho available' (2014) <http://www.dirco.gov.za/docs/2014/leso0619.html>.

The Kingdom of Lesotho National Climate Change Policy 2017 - 2027 <https://www.gov.ls/documents/national-climate-change-policy/>.

Tlali C 'Water deal irks Lesotho's new rulers' *Mail & Guardian* (7 December 2012) <http://mg.co.za/article/2012-12-07-00-water-deal-irks-lesothos-new-rulers>.

Turton A 'Hydro Hegemony in the Context of the Orange River Basin' Workshop on Hydro Hegemony (20-21 May 2005)

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.586.34&rep=rep1&type=pdf>.

Turton A 'Water and State Sovereignty: The Hydropolitical challenge for States in Arid Regions' MEWRE W Occasional Paper No. 5 Water Issues Study Group (1999) <https://www.soas.ac.uk/water/publications/papers/>.

Turton A & Meissner R *et al* 'A Hydropolitical History of South Africa's International River Basins' WRC Report No. 1220/1/04 (2004) <https://pdfs.semanticscholar.org/c512/03a494b1ad21f2b784aa23913e7fa3c127b4.pdf?_ga=2.96093401.410769908.1581147628-259359838.1581147628>.

United Nations Conference on Trade Development 'Expropriation. UNCTAD Series on Issues in International Investment Agreements II' (2012) <https://unctad.org/en/Docs/unctaddiaeia2011d7_en.pdf>.

United Nations Development Programme 'Development and adoption of a Strategic Action Programme for balancing water uses and sustainable natural resource management in the Orange-Senqu River trans-boundary basin'(PIMS: 3243)' (2010) <https://info.undp.org/docs/pdc/Documents/ZAF/ORASECOM%20prodoc%204June2009.doc>.

United Nations Economic and Social Council ' Prevention of Discrimination - Prevention of Discrimination and Protection of Indigenous Peoples: Indigenous peoples' permanent sovereignty over natural resources Final report of the Special Rapporteur, Erica-Irene A. Daes' (2004) <https://digitallibrary.un.org/record/526284>.

United Nations Educational, Scientific and Cultural Organization World Water Development Report: Water for a Sustainable World 2015 <http://www.unesco.org/new/en/loginarea/natural-sciences/environment/water/wwap/wwdr/2015-water-for-a-sustainable-world/>.

United Nations General Assembly, Verbatim records of plenary meeting No. 99 of 21 May 1997 (A/51/PV.99) <https://legal.un.org/avl/ha/clnuiw/clnuiw.html>.

United Nations 'Procedural History of Resolution 1803 (XVII) Permanent Sovereignty over Natural Resources' (2012) <http://legal.un.org/avl/ha/ga_1803/ga_1803.html>.

Water Research Council 'Assessing the State of the Water-Energy-Food (WEF) Nexus in South Africa' WRC Report No KV 365/18 (2018) <http://www.wrc.org.za/mdocs-posts/kv-365-18/kv-365-18-2/>.

Windhoek Observer 'Namibia favours SACU status quo' *Windhoek Observer* (19 July 2019) <https://www.observer.com.na/index.php/national/item/11312-namibia-favours-sacu-status-quo>.

World Bank 'Involuntary resettlement sourcebook - planning and implementation in development projects (English)' (2004) <http://documents.worldbank.org/curated/en/206671468782373680/Involuntary-resettlement-sourcebook-planning-and-implementation-in-development-projects>.

World Bank ‘Lesotho - Phase 1B of the Highlands Water Project, and Community Development Support Project (English)’ (2010) <http://documents.worldbank.org/curated/en/529741468054547515/Lesotho-Phase-1B-of-the-Highlands-Water-Project-and-Community-Development-Support-Project>.

World Bank ‘Lesotho Water Security and Climate Change Assessment 6’ (2016) <https://openknowledge.worldbank.org/handle/10986/24905>.

World Bank Report no. 46456 Africa Region Water Resources Unit Working Paper 1: Benefit Sharing in International Rivers: Findings from the Senegal River Basin, the Columbia River Basin, and the Lesotho Highlands Water Project WB Benefit sharing (2008) <http://documents.worldbank.org/curated/en/159191468193140438/pdf/464560NWP0P1121g0AFTWR0YU301PUBLIC1.pdf>.

Word Commission on Dams WCD Case Study Kariba Dam Zambia and Zimbabwe - Final Report (2000) <www.dams.org>.

Wouters P & Rieu-Clarke A ‘The Role of International Water Law in Promoting Sustainable Development’ (2001) <https://www.researchgate.net/publication/43920099_The_role_of_international_water_law_in_promoting_sustainable_development>.

Yamada C ‘Special Rapporteur Third report on shared natural resources: transboundary groundwaters to the United Nations General Assembly’ (2005) A/CN.4/551 <http://legal.un.org/ilc/documentation/english/a_cn4_551.pdf>.

Zambezi Valley Development Fund (ZVDF) (1997) <http://www.zambezira.org/index.php>.

ZAMCOM Integrated Water Resources Management Strategy and Implementation plan or the Zambezi River Basin: At a Glance (2016) <http://www.zambezicommission.org/publication/integrated-water-resources-management-strategy-and-implementation-plan-zambezi-river-0>.

ZAMCOM Stakeholders Participation, Partnership and Instruments for Basin-Wide Cooperation <http://www.zambezicommission.org/sites/default/files/clusters_pdfs/Stakeholder-Participation_NASCs_BASCs.pdf>.

ZAMCOM ‘The Zambezi River Basin A Multi-Sector Investment Opportunities Analysis: Volume 1 Summary Report’ (2010) <http://www.zambezicommission.org/sites/default/files/publication_downloads/a-multi-sector-investment-opportunities-analysis-vol.1-summary-report.pdf>.

ZAMCOM Zambezi Environment Outlook (2015) <http://www.zambezicommission.org/sites/default/files/publication_downloads/zeo_zambezi_environment_outlook.pdf>.

ZAMCOM ‘Zambezi River Basin Atlas of the Changing Environment’ (2014) <http://zambezicommission.org/publication/zambezi-river-basin-%E2%80%93-atlas-changing-environment-2014>.

ZAMCOM ‘Zambezi stakeholders discuss basin-wide planning’ *Zambezi Today* February (2018) 2(1) <http://www.zambezicommission.org/sites/default/files/newsletter/zambezi_today_vol._2_no._1_february_2018.pdf>.

Zibi S ‘Southern African Customs Union: in danger of collapse’ *Financial Mail* (2 August 2013) <http://www.financialmail.co.za/fm/Features/2013/08/22/southern-african-customs-union-in-danger-of-collapse>.

7. TABLE OF CASES

Affordable Medicines Trust v Minister of Health 2006 (3) SA 247 (CC).

Alexkor Ltd v Richtersveld Community 2004 (5) SA 460 (CC).

Anglo-Iranian Oil Co., U.K. v. Iran, Judgment, 1952 I.C.J. 93 (July 22) 13.

Appeal Decision of the Water Tribunal groundWork vs Acting DG Water and ACWA Khanyisa Power WT02/18/ MP (21 July 2020).

Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda) Judgment I.C.J. Reports 2005, p. 168.

Arun Property Development (Pty) Ltd v City of Cape Town [2014] ZACC 37.

Attorney-General of Lesotho v 'Mopa 2002 (6) BCLR 645 (LAC).

*Award between the United States and the United Kingdom relating to the rights of jurisdiction of United States in the Bering's sea and the preservation of fur seals :*15 August 1893 Report of International Arbitral Awards Volume XXVIII pp. 263-276.

Award in the Arbitration regarding the Indus Waters Kishenganga between Pakistan and India 20 December 2013 - 20 décembre 2013 Volume XXXI pp.1-358.

Award in the Arbitration regarding the Iron Rhine ("Ijzeren Rijn") Railway between the Kingdom of Belgium and the Kingdom of the Netherlands, decision of 24 May 2005.

Baleni v Minister of Mineral Resources (73768/2016) [2018] ZAGPPHC 829 (22 November 2018).

Barcelona -Traction, Light and Power Company, Limited, Preliminary Objections, Judgment. I.C. J. Reports 1964, p. 6.

BP Southern Africa (Pty) Ltd v MEC for Agriculture, Conservation, Environment & Land Affairs (03/16337) [2004] ZAGPHC 18 (31 March 2004).

Case of Free Zones of Upper Savoy and the District of Gex C.I.J., Series A/B, No. 46 (1932) at p. 166).

Case of the S.S. Wimbledon (P.C.I. J. Series A, No. 1 (1923).

Case relating to the Territorial Jurisdiction of the International Commission of the River Order 1929 P.C.I.J. (ser. A) No. 23 (Sept. 10).

Centre for Minority Rights Development (Kenya) & Minority Rights Group International on behalf of Endorois Welfare Council v Kenya Comm 276/2003 (2009) AHRLR 75 (ACHPR 2009).

Christian Education South Africa v Minister of Education 2000 (4) SA 757 (CC).

City of Cape Town v Helderberg Park Development (Pty) Ltd 2007 (1) SA 1 (SCA).

Company Secretary of Arcelormittal South Africa v Vaal Environmental Justice Alliance 2015 (1) SA 515 (SCA).

Continental Shelf (Libyan Arab Jarnahiriya/Malta), Judgment, I. C.J. Reports 1985, p. 13.

Continental Shelf (Tunisia/Libyan Arab Jamahiriya), Judgment, I.C.J. Reports 1982.

De Beers Consolidated Mines Ltd v Ataqua Mining (Pty) Ltd (3215/06) [2007] ZAFSHC 74 (13 December 2007).

Democratic Republic of Congo v Burundi, Rwanda and Uganda (2009) AHRLR 9 (ACHPR 2009).

Delimitation of the Maritime Boundary in the Gulf of Maine Area, Judgment, 1. C.J. Reports 1984, p. 246.

Diversion of Water from Meuse (Neth. v. Belg.), 1937 P.C.I.J. (ser. A/B) No. 70 (June 28).

Doctors for Life International v Speaker of the National Assembly 2006 (6) SA 416 (CC).

Du Toit v Minister of Transport 2006 (1) SA 297 (CC).

Earthlife Africa Johannesburg v Minister of Environmental Affairs [2017] 2 All SA 519 (GP) (8 March 2017).

Ebrahimi v. *Iran* (1994), Iran-US Claims Tribunal, 12 October 1994, The Hague.

Endangered Wildlife Trust v Director General of the Department of Water and Sanitation WT 03/17/MP.

EThekwini Municipality v Haffejee NO; Haffejee NO v eThekwini Municipality [2010] 2 All SA 358 (KZD).

Factory at Chorzów (Germ. v. Pol.), 1928 P.C.I.J. (ser. A) No. 17 (Sept. 13).

First National Bank of SA Limited t/a Wesbank v Commissioner for the South African Revenue Services; First National Bank of SA Limited t/a Wesbank v Minister of Finance 2002 (4) SA 768.

Fisheries case, Judgment of December 18th, I95I:I.C. J. Reports 1951, p 116.

Fisheries Jurisdiction (United Kingdom v. Iceland), Jurisdiction of the Court, Judgment, I.C.J. Reports 1973, p. 34.

Fisheries Jurisdiction (United Kingdom v. Iceland), Merits, Judgment, I.C.J. Reports 1974, p. 3.

Former Highlands Residents, in re: Ash v Department of Land Affairs [2000] 2 All SA 26 (LCC).

Frontier Dispute, Judgment, I.C.J. Reports 1986, p. 554.

Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province 2007 (6) SA 4 (CC) (7 June 2007).

Gabcikovo-Nagymaros Project (Hungary/Slovakia), Judgment, 1.C.J. Reports 1997, p. 7.

Gongqose v Minister of Agriculture, Forestry & Fisheries; Gongqose v State (1340/16 & 287/17) [2018] ZASCA 87 (01 June 2018).

Haffejee NO v eThekwini Municipality 2011 (12) BCLR 1225 (CC) (25 August 2011).

Harksen v Lane NO 1998 (1) SA 300 (7 October 1997).

International Trade Administration Commission v SCAW South Africa (Pty) Ltd 2012 4 SA 618 (CC).

Interpretation of the Statute of the Memel Territory (P.C.I.J., Series A/B, No. 49 (1932).

Iran-US Claims Tribunal, Amoco Int'l Finance Corp. v. Iran, 15 IRAN-U.S. C.T.R., at 189 et seq.

Island of Palmas (Netherlands, USA) 4 April 1928 VOLUME II pp. 829-871 838.

Kasikili/Sedudu Island (Botswana / Namibia,) Judgment, I. C. J. Report 1999, p. 1045.

Kaunda v President of the Republic of South Africa 2005 (4) SA 235 (CC).

King v Dykes 1971 (3) SA 540 (RA).

Lac Lanoux Arbitration (France v. Spain) (1957) 12 R.I.A.A. 281; 24 I.L.R. 101 (1 November 16, 1957).

Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1. C.J. Reports 1996, p. 226.

Lesbian and Gay Equality Project v Minister of Home Affairs 2006 (1) SA 524 (CC) (1 December 2005).

Lesotho College of Education Staff Union v Lesotho College of Education (LC 35/14) [2015] LSLC 20 (18 March 2015).

Libyan American Oil Co. ("LIAMCO") v. Libya, 17 I.L.M. 3 (1978), 4 Y.B. COM. ARB. 177 (1979).

Maledu v Itereleng Bakgatla Mineral Resources (Pty) Limited (CCT265/17) [2018] ZACC 41 (25 October 2018).

Maritime Delimitation in the Area between Greenland and Jan Mayen, Judgment, I.C.J. Reports 1993, p. 38.

Mazibuko v City of Johannesburg 2010 (4) SA 1 (CC).

Minister of Environmental Affairs and Tourism v Phambili Fisheries (Pty) Ltd [2003] 2 All SA 616 (SCA) (16 May 2003).

Minister of Minerals and Energy v Agri South Africa 2012 (9) BCLR 958 (SCA) (31 May 2012).

Mochebelele v Director of Public Prosecutions, Gauteng (377/2018) [2019] ZASCA 82 (31 May 2019).

Molefi Ts'epe v Independent Electoral Commission (C of A (Civ) No. 11/05 CC 135/05) (NULL) [2005] LSHC 93 (20 April 2005).

Moletsane v Attorney General (CIV/APN/163/2001) (CIV/APN/163/2001) [2004] LSHC 123 (18 October 2004).

Msiza v Director-General for the Department of Rural Development And Land Reform 2016 (5) SA 513 (LCC) (5 July 2016).

North Sea Continental Shelf, Judgment, I.C.J. Reports 1969, p. 3.

Progress Office Machines CC v South African Revenue Services 2008 (2) SA 13 (SCA).

Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010, p. 14.

Ralekoala v Minister of Justice, Human Rights, Law and Constitutional Affairs (C OF A CIV/16/2012) [2012] LSCA 38 (19 October 2012).

Request for Advisory Opinion submitted by the Sub-Regional Fisheries Commission, Advisory Opinion, 2 April 2015, ITLOS Reports 2015, p. 4.

R v Oakes (1986) 19 CRR 308.

Sedco (Second Interlocutory Award) (1986)10 Iran-US. CTR 634.

Staufen Investments (Pty) Ltd v Minister of Public Works (756/2017) [2018] ZAECPEHC 51 (25 September 2018).

Sudan Human Rights Organisation & Another v Sudan (2009) AHRLR 153 (ACHPR 2009).

S v Makwanyane 1995 3 SA 391 (CC).

S v Manamela (Director-General of Justice Intervening) 2000 (3) SA 1.

Telstra Corporation Limited v Hornsby Shire Council [2006] NSWLEC 133.

Territorial Jurisdiction of Int'l Comm'n of River Oder (U.K. v. Pol.), 1929 P.C.I.J. (ser. A) No. 23 (Sept. 10).

Texaco Overseas Protection Co. and California Asiatic Oil Co. v Libya (1977) 53 ILR 389.

The Factory at Chorzów (Claim for Indemnity) (The Merits), Germany v. Poland, Permanent Court of International Justice. Judgment, 13 September 1929, 1928 P.C.I.J. (ser. A) No. 17, p. 47.

The Government of the State of Kuwait v. The American Independent Oil Company (AMINOIL), YCA 1984, at 71 et seq.

Trail smelter case (United States, Canada) 16 April 1938 and 11 March 1941 Volume III pp. 1905-1982.

Tsenoli v Lesotho Revenue Authority (CC5/2009) [2011] LSHC 51 (20 April 2011).

Ts'epe v Independent Electoral Commission (C of A (Civ) No. 11/05 CC 135/05) (NULL) [2005] LSHC 93 (20 April 2005).

Union of Refugee Women v Director, Private Security Industry Regulatory Authority 2007 (4) SA 395 (CC) (12 December 2006).

Van Zyl v Government of the Republic of South Africa (20320/02) [2005] ZAGPHC 70 (20 July 2005).

WTO Appellate Body Report, *Import Prohibition of Certain Shrimp and Shrimp Products WT/DS58/AB/R*, adopted on 6 November 1998.

WWF South Africa v Minister of Agriculture, Forestry and Fisheries 2019 (2) SA 403 (WCC).

155/96: Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) / Nigeria case (Communication No. 155/96).

8. TABLE OF STATUTES AND REGULATIONS

Constitution of Lesotho 1993 <https://lesotholii.org/ls/legislation/num-act/1993/1>.

Constitution of the Republic of Namibia (1990) <https://laws.parliament.na/namibian-constitution/>.

Constitution of the Republic of South Africa, 1996.

Employment Equity Act 55 of 1998.

Interim Protection of Informal Land Rights Act 31 of 1996.

Lesotho Environment Act 10 of 2008 <https://lesotholii.org/ls/legislation/num-act/2008/10>.

Lesotho Highlands Development Authority Order, 1986 <https://www.ecolex.org/details/legislation/lesotho-highlands-development-authority-order-no-23-of-1986-lex-faoc128641/>.

Lesotho Land Act 8 of 2010 <https://lesotholii.org/ls/legislation/num-act/2010/8>.

Lesotho Water Act 15 of 2008 <https://www.water.org.ls/download/lesotho-water-act-no-15-of-2008/>.

Marine Living Resources Act 18 of 1998.

Minerals and Petroleum Resources Development Act 28 of 2002.

National Environmental Management Act 107 of 1998.

National Water Act 36 of 1998.

NEMA Environmental Impact Assessment Regulations, 2014 GN R.982 in GG 38282 of 4 December 2014.

Protection of Investment Act 22 of 2015.

Water Resources Management Act 11 of 2013 of Namibia <https://laws.parliament.na/cms_documents/water-resources-management-a6c63808b7.pdf>.

Water Services Act 108 of 1997.

Zambezi River Authority Act (Chapter 467 of the Laws of Zambia 1987) <http://extwprlegs1.fao.org/docs/pdf/zam2611.pdf>.

Zimbabwe Water Act (Chapter 20:24) 1998 <https://zimlii.org/zw/legislation/act/1998/31>.