
The Treaty on the Lesotho Highlands Water Project and the principle of “equitable and reasonable utilisation”

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SUMMARY

The principle of “equitable and reasonable utilisation” has been proposed as a tool to resolve a conflict of uses since it advocates for fair and sustainable utilisation of shared water resources. This paper examines this proposition with a specific focus on the Treaty on the Lesotho Highlands Water Project, which regulates the use of the Orange River. To this end, it is my view that the principle of “vital human needs” as an incidence of the principle of “equitable and reasonable utilisation”, proffers the most effective tool to resolve the anticipated conflict of uses in the Orange River basin.

1 The factual and legal framework of the Treaty on the Lesotho Highlands Water Project

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) ensures the supply of water by Lesotho to South Africa from the Orange River in return for royalties, which are used to construct dams that produce electricity.¹ The Orange River originates in the Maluti mountains of Lesotho and is South Africa’s largest river.² It has tributaries in Botswana, Namibia and South Africa.³ Therefore, the Orange River is a “shared” or “transboundary” or “international” watercourse, which means rivers, lakes, or groundwater sources that are shared by two or more countries.⁴ These “watercourses” will either “form or straddle an international boundary, or in the case of

1 See Art 4.1 read with Art 12 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 1986.

2 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> (accessed 2020-06-14).

3 Department of Water Affairs “Development of Reconciliation Strategies for Large Bulk Water Supply Systems Orange River: Quality and Effluent Re-Use Report” 3.

4 See Birnie, Boyle and Redgwell *International Law and the Environment* (2009) 536.

rivers, they may flow through a succession of states”.⁵ Thus the Orange River is a “shared” or “transboundary” or an “international” watercourse.

In this regard, the LHWP is managed through the Lesotho Highlands Development Authority (LHDA) based in Lesotho and the Trans-Caledon Tunnel Authority (TCTA), which is located in South Africa as stipulated by Article 6 of the LHWP. The LHDA has the duty supply precise quantities of water to South Africa.⁶ The TCTA has the duty to administer facets of the project in South Africa.⁷ The LHWP is divided into four phases.⁸ Phase I had two sub-phases: Phase I led to the construction of the Katse and Mohale dams and the Muela hydropower plant.⁹ Phases II, III and IV will encompass the building of the Mashai, Tsoelike and Ntoahae reservoirs.¹⁰ Phase I was completed in 1997 with the provision of water to South Africa commencing in 1998.¹¹

Subsequently, 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) has been concluded, which manages Phase II as well as the maintenance of both Phase I and Phase II of the Project.¹² The construal of a term in the Phase II Agreement does not apply to the interpretation of the LHWP.¹³ However, the provisions of the LHWP remain applicable unless amended by the Phase II Agreement.¹⁴ Thus, the LHWP is the umbrella treaty regulating the project and the Phase II Agreement constitutes a protocol to the LHWP. This means that any meaning attached to provisions of the LHWP invariably applies to the Phase II Agreement, to the extent that they are not amended by the latter agreement as stated by Article 3 of the Phase II Agreement.

5 Birnie, Boyle and Redgwell 536.

6 Art 7.1 read with Art 7.2 of the LHWP and Art of the Protocol VI System of Governance to the Treaty on the Lesotho Highlands Water Project: Supplementary Arrangements Regarding the Systems of Governance for the Project, 4 June 1999 (hereafter, Protocol VI); See 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/> (accessed 2020-06-14).

7 See Art 8.1 and Art 8.2 of the LHWP. Art 4 read with Art 8 and Art 8A of the Protocol VI.

8 Art 5 of the LHWP read with LHWP: Annexure I: Project Description. Thabane “Shifts from Old to New Social and Ecological Environments in the Lesotho Highlands Water Scheme; Relocating Residents of the Mohale Dam Area” 2000 *Journal of Southern African Studies* 635.

9 LHWP: Annexure I: Project Description, par 2.

10 LHWP: Annexure I: Project Description.

11 LHWP: Annexure I: Project Description.

12 Art 2 of 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, 11 August 2011.

13 Art 1.3 of the Phase II Agreement.

14 Art 3 of the Phase II Agreement.

The LHWP transfers water from the Katse Dam in Lesotho to the Vaal River in South Africa.¹⁵ The transfer capacity has already reached its peak transfer quantity as agreed to by the signatories to the LHWP.¹⁶ Phase II is projected to begin providing water to South Africa by 2022.¹⁷ Water is Lesotho's largest source of non-tax revenue, contributing ten per cent to the overall Gross Domestic Product (GDP).¹⁸

However, 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 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.¹⁹ Lesotho and Botswana also concluded an agreement to evaluate the feasibility of the transfer of water from Lesotho to complement water supply to Botswana.²⁰ Evaluating the probability of developing Lesotho's water resources for supply to the lowlands and other riparian countries could address water security for the southern African region.²¹

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 (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

15 Department of Water and Sanitation "Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – Current and Future Water Requirements" (2013) 27 <http://www.dwa.gov.za/Projects/Orange%20Recon/Docs/final/4%20Current%20and%20future%20Water%20Requirements2.pdf> (accessed 2020-06-11).

16 Department of Water and Sanitation "Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligation" 27.

17 Department of Water and Sanitation "Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligation" 28.

18 The Kingdom of Lesotho National Climate Change Policy 2017-2027 <https://www.gov.ls/documents/national-climate-change-policy/> (accessed 2020-05-04).

19 Department of Water and Sanitation "Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligation" vii.

20 Lesotho Long Term Water and Sanitation Strategy (2017) 151 <https://www.water.org.ls/download/lesotho-long-term-water-and-sanitation-strategy/> (accessed 2020-11-14); See Memorandum of Understanding for Feasibility Study to Transfer Water from Lesotho to Botswana (2013).

21 Department of Water and Sanitation "Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligation" vii.

agreements between any of the watercourse states.²² 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.²³ According to Article 1.3 of the ORASECOM Agreement, 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.

Within this framework, the ORASECOM Agreement appears to partly be a concession by South Africa in respect to the dispute it has with Namibia over the boundary of the Orange River.²⁴ This augments the Agreement between the government of the Republic of Namibia and the government of the Republic of South Africa on the creation of a Permanent Water Commission, whose purpose is to regulate the allocation and utilisation of the Orange River.²⁵ In this regard, the Constitution of the Republic of Namibia states that the national territory of Namibia extends to the “middle of the Orange River”.²⁶ On the contrary, South Africa argues that the “northern high-water mark” is the boundary as was agreed between Britain and Germany in an 1890 agreement.²⁷ This could lead to conflict between these two countries.²⁸ To this end, 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 utilisation of the water sources in the Orange River to ensure sustainable development in the territory of

22 Mahlakeng *An analysis of regime capacity and a nascent environmental conflict in the Orange-Senqu, the Nile and the Niger River basins* (PhD thesis 2017 University of the Free State) 130.

23 Mahlakeng 130.

24 Kistin and Ashton “Adapting to Change in Transboundary Rivers: An Analysis of Treaty Flexibility on the Orange-Senqu River Basin” 2008 *International Journal of Water Resources Development* 393; Demhardt “Namibia’s Orange River Boundary-Origin and Reemerged Effects of an Inattentive Colonial Boundary Delimitation Demhardt” 1990 *GeoJournal* 359; See also, Agreement between the Republic of South Africa and the Interim Government of the National entity of Southwest-Africa/Namibia concerning the control development and utilisation 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, 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, 14 September 1992.

25 Art 1(a) of the 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.

26 Art 1.4 of the Constitution of the Republic of Namibia 1990 <https://laws.parliament.na/namibian-constitution/> (accessed 2020-06-14).

27 International Boundaries Research Unit “South Africa-Namibia boundary working group established” <http://www.informante.web.na/south-border-dispute.15089> (accessed 2020-02-12).

28 Mahlakeng 116.

each party.²⁹ In the same breath, the ORASECOM Agreement advocates for the optimal use of water in the river by demanding a “long term safe yield”.

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”.³⁰ This means that the ORASECOM Members may deviate from the prior notification procedures if the need requires and this avenue is broad such that any ground may be employed provided that it is “equally important” as public health or safety. This implies that the ORASECOM Agreement allows Lesotho in a conflict of uses, to divert water from the Orange River without giving prior notification to protect public health and safety. On the whole, the ORASECOM Agreement is significant in that it confirms that South Africa and Lesotho accept that they are bound by the principle of “equitable and reasonable utilisation” in respect of the Orange River. The ORASECOM Agreement also illustrates the pressure that the Orange River is under, to provide water for all these different riparian states.

Apart from the projected and current water uses, it is my view that climate change will also compound the pressure on the water in the LHWP to satisfy the needs of both South Africa and Lesotho. To this end, in 2017, Lesotho promulgated its National Climate Change Policy, which ensures a coherent response to the vulnerabilities posed by climate change.³¹ The 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.³² This implies that at the present population growth rate and levels of service, pressure on water availability may occur earlier.³³ Thus, the government of Lesotho has stated that climate change models project that Lesotho will suffer from elevated temperatures and more unreliable rainfall trends in future and it is likely that current mitigation instruments are inadequate to address environmental degradation and to revive the delicate mountain ecosystems.³⁴ Already catchment yields have reduced

29 Arts 5.2.1, 5.2.2 and 7.2 of the ORASECOM Agreement, 3 November 2000.

30 Art 7.7 of the ORASECOM Agreement.

31 See The Kingdom of Lesotho National Climate Change Policy 2017-2027.

32 The Kingdom of Lesotho National Climate Change Policy 2017-2027 15.

33 The Kingdom of Lesotho National Climate Change Policy 2017-2027 15.

34 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 (hereafter, NAPA) (accessed 2020-08-14).

to the extent that springs that used to be continuous, have run dry, and the once large rivers have severely dissipated.³⁵ The government of Lesotho has conceded that there are widespread water shortages in Lesotho.³⁶ Thus, it has been argued that climate change in the policy-making processes of the Orange River basin has not been given due consideration.³⁷ The utilisation of water resources has thus become a significant problem for the economic development of Lesotho.³⁸ It had been estimated that Lesotho would suffer water stress by 2019 and a period of water scarcity by 2062.³⁹ The commencement of climate change could accelerate this process.⁴⁰ 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.⁴¹ On the basis of current data, it is possible that Lesotho’s ability to comply with its water supply obligations under the LHWP will probably become an even bigger legal and resource-utilisation challenge than it is currently, and will lead to increased competition for water resources.⁴² This implies that Lesotho may be unable to meet its water supply obligations to South Africa under the LHWP. This is termed 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.⁴³ This means that climate change, droughts and the current and projected uses of water 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.

35 NAPA 3.

36 Mutizwa “Lesotho’s ‘green drought’ pushes thousands deeper into hunger” *The Guardian* (2016-02-18) <https://www.theguardian.com/global-development/2016/feb/18/lesotho-green-drought-hunger-rain-malnutrition-disease> (accessed 2020-06-14).

37 Mahlakeng 134.

38 NAPA 3.

39 NAPA 3.

40 NAPA 3.

41 World Bank “Lesotho Water Security and Climate Change Assessment 6” (2016) 4-6 <https://openknowledge.worldbank.org/handle/10986/24905> (accessed 2020-06-01).

42 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 transboundary basin (PIMS: 3243)” (2010) pars 36 and 45 <https://info.undp.org/docs/pdc/Documents/ZAF/ORASECOM%20prodoc%204June2009.doc> (accessed 2020-04-24).

43 Rieu-Clarke, Moynihan and 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 (accessed 2020-05-14).

More specifically, section 5(2) of the LWA provides that “domestic use” prevails over other uses in a conflict of uses. “Domestic use” under section 5 of the LWA includes the “taking”, “impounding” and “diversion” of water from a watercourse as well as “altering” its course. In this respect, section 1 of the LWA defines “domestic water use” narrowly to mean water for “personal and household needs”. In my view, “domestic use” and “domestic water use” should be used interchangeably because sections 1 and 5 of the LWA are complementary and must be read together. This is further justified by the fact that section 5 of the LWA does not 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 denotes a conflict of uses. This resembles 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.

However, this right of election is nullified by the LHWP, which 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 specific water quantities in exchange for royalties and there shall be no unilateral variation of the terms of these agreements. This is bolstered by the Phase II Agreement which states that there must not be any impediment to the implementation of the project and that the domestic legislation of Lesotho and South Africa must align with this agreement and the LHWP.⁴⁴ This essentially nullifies Lesotho’s discretion 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. Thus, in my view, 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.⁴⁵ 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”.

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

44 Art 18.2 of the Phase II Agreement.

45 See C. Vinti in R. Mabula “Whose Water is it Anyway? South Africa’s Hydrocolonisation of Lesotho” (2018) 4 *Curiosity Magazine* 27 https://issuu.com/witscommunications/docs/curiosity_issue_4 (accessed 2020-05-14).

benefit of all of the watercourse states.⁴⁶ 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 utilisation”. It is with this proposition in mind that this paper assesses whether the principle of “equitable and reasonable utilisation” can address the anticipated conflict of uses in the LHWP.

2 The principle of equitable and reasonable utilisation as an instrument to address the “conflict of uses” in the LHWP

The Helsinki Rules constitute the earliest written pronouncement of transboundary water law.⁴⁷ 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”.⁴⁸ It is submitted that a comprehensive assessment of these elements requires cooperation between the riparian states.⁴⁹ This means that cooperation is a *sine qua non* of the fulfilment of “equitable and reasonable utilisation”. Factors and circumstances are not fixed, and they may vary over time.⁵⁰ This is not a prerogative of a single state, as many will hinge on the understanding of the whole basin.⁵¹ 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.

Nevertheless, it must be noted that the Helsinki Rules have no legal consequences.⁵² However, until the advent of the UN Watercourses Convention, the Helsinki encapsulated the single most fundamental rules

46 Department of Water and Sanitation “Development of Reconciliation Strategies for Large Bulk Water Supply Systems: Orange River – International Obligation” (2013) 36 <http://www.dwaf.gov.za> (accessed 2020-06-14).

47 Salman “The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law” 2007 *International Journal of Water Resources Development* 630. The Helsinki Rules on the Uses of the Waters of International Rivers 1966.

48 Arts IV and V.II of the Helsinki Rules.

49 Rieu-Clarke and Gooch “Governing the Tributaries of the Mekong—The Contribution of International Law and Institutions to Enhancing Equitable Cooperation Over the Sesan” 2010 *Global Business & Development Law Journal* 211.

50 Rieu-Clarke and Gooch 2010 *Global Business & Development Law Journal* 211.

51 Rieu-Clarke and Gooch 2010 *Global Business & Development Law Journal* 211.

52 Salman 2007 *International Journal of Water Resources Development* 630.

in respect of the utilisation of shared watercourses.⁵³ 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.⁵⁴ 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 utilisation”, 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 utilisation” and provides for a list of elements that are relevant for this determination.⁵⁵ These factors include, *inter alia*:

- 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;
- f Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect.⁵⁶

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.

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 comparison with the other factors, and this determination must be made holistically.⁵⁷ Some commentators have suggested that this method of the UN Watercourses Convention affords the latitude to be flexible in its application.⁵⁸ 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

53 Salman 2007 *International Journal of Water Resources Development* 630; United Nations Convention on the Law of the Non-navigational Uses of International Watercourses 1997.

54 Art VI of the Helsinki Rules.

55 Art 5.1 read with Art 6 of the UN Watercourses Convention.

56 Art 6 of the UN Watercourses Convention.

57 Art 6.3 of the UN Watercourses Convention.

58 Leb “The UN Watercourses Convention: the éminence grise behind cooperation on transboundary water resources” 2013 *Water International* 151.

UN Watercourses Convention's regime on "equitable and reasonable utilisation" is operationalised by the requirement to ensure the regular exchange of information.⁵⁹ 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.⁶⁰ This cooperation paradigm, which ensures the regular exchange of data that is crucial to the achievement of "equitable and reasonable utilisation".

However, the formulation of the principle of "equitable and reasonable utilisation" 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 utilisation" and thus, does not assist in resolving a conflict of uses.⁶¹ 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.⁶² In the same vein, due to its normative ambiguity, some commentators have doubts about the utility of the principle despite its procedural value.⁶³ 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.⁶⁴ Indeed, it is argued one would struggle to find mutual ground on what the relevant factors are likely to be.⁶⁵ This constrains negotiations.⁶⁶ 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.⁶⁷ In short, the UN Watercourses Convention 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

59 Art 9 of the UN Watercourses Convention.

60 Arts 11 and 12 of the UN Watercourses Convention.

61 McIntyre "Utilisation of shared international freshwater resources – the meaning and role of 'equity' in international water law" 2013 *Water International* 120.

62 Vink "Transboundary water law and vulnerable people: legal interpretations of the 'equitable use' principle" 2014 *Water International* 749-752.

63 McIntyre 2013 *Water International* 120.

64 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 *International Journal of Water Resources Development* 482.

65 Beaumont 2000 *International Journal of Water Resources Development* 482.

66 Beaumont 2000 *International Journal of Water Resources Development* 482.

67 Lankford "Does Article 6 (Factors Relevant to Equitable and Reasonable Utilisation) in the UN Watercourses Convention misdirect riparian countries?" 2013 *Water International* 141.

water for environmental integrity.⁶⁸ 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.⁶⁹ 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.⁷⁰ Commentators have commended the fair and holistic nature of the language in Articles 5 and 6 of the UN Watercourses Convention.⁷¹ However, the principle of “equitable and reasonable utilisation” assumes the propensity of riparian states to unite and work together to determine what constitutes “equitable” or “reasonable” use.⁷² 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”, which denotes power imbalance is beyond the scope of this study. At this juncture, it is apposite to posit that the very absence of the principle of “equitable and reasonable utilisation” in the LHWP might be a consequence of this normative ambiguity.

The UN Watercourses Convention also requires that international watercourse states must utilise 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.⁷³ Thus, the UN Watercourses Convention regards “sustainable use” as an inherent component of “equitable and reasonable utilisation”. “Equitable utilisation” and “sustainable utilisation” differ because a water use could be “equitable” between riparian states but still be deemed “unsustainable”.⁷⁴

The principle of equitable and reasonable utilisation has also received judicial endorsement. It has been submitted that the principle was implicitly accepted in the *River Oder* case and in the *Lac Lanoux* arbitration.⁷⁵ Firstly, 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

68 Lankford 2013 *Water International* 140.

69 Lankford 2013 *Water International* 139.

70 Birnie, Boyle and Redgwell 543; Salman “Downstream riparians can also harm upstream riparians: the concept of foreclosure of future uses” 2011 *Water International* 350–364.

71 Azarva “Conflict on the Nile: International Watercourse Law and the Elusive Effort to Create a Transboundary Water Regime in the Nile Basin” 2011 *Temple International and Comparative Law Journal* 478.

72 Azarva 2011 *Temple International and Comparative Law Journal* 478.

73 Art 5.1 of the UN Watercourses Convention.

74 Wouters “Legal responses to water scarcity and water conflict: The UN Watercourses Convention and Beyond”, Paper presented at Summer Conference 2002 *Allocating and Managing Water for a Sustainable Future: Lessons from Around the World* 37.

75 Birnie, Boyle and Redgwell 542-543.

interest”.⁷⁶ The “community of interests” connotes the “perfect equality of all riparian States in the user of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to the others”.⁷⁷ 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.⁷⁸ In simple terms, the “community of interests” encapsulates absolute “equality” between riparians and a prohibition of “preferential treatment”.

Secondly, in *Lac Lanoux*, it was held that riparian states that share a watercourse must consider adverse interests and afford “reasonable” accommodation of all riparian states.⁷⁹ 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.⁸⁰ Similarly, the International Court of Justice (ICJ) in the *Pulp Mills on the River Uruguay* held that the realisation of “optimum and rational utilisation” requires integrating the right to use the shared watercourse for economic activities with environmental protection.⁸¹ “Optimal and reasonable utilisation” denotes the principle of equitable and reasonable utilisation.

By the same token, the ICJ in the *Case Concerning Gabcikovo-Nagymaros* explicitly affirmed the principle of “equitable and reasonable utilisation” in shared watercourses.⁸² 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.⁸³ McCaffrey opines that the findings of the court in *Gabcikovo* effectively rejects the Harmon Doctrine, which propagates the principle of absolute sovereignty over water.⁸⁴ This decision is also seen as confirming the rights of all states in a water basin.⁸⁵ Thus, this decision is regarded as an authoritative affirmation of the principle of “equitable and reasonable utilisation” as a norm of customary international law.⁸⁶ Salman reiterates this view, and he submits that the seminal principles of the UN Watercourses Convention embody

76 *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*) par 74.

77 *River Oder supra*, par 74.

78 *River Oder supra*, par 74.

79 *Lake Lanoux Arbitration (France v Spain)* (1957) 12 R.I.A.A. 281; 24 I.L.R. 101 (hereafter, *Lac Lanoux*) 34.

80 *Lac Lanoux supra*, 34.

81 *Pulp Mills on the River Uruguay (Argentina v Uruguay)*, Judgment, I.C.J. Reports 2010, p. 14 (hereafter, *Pulp Mills*) par 175.

82 *Gabcikovo-Nagymaros Project (Hungary/Slovakia)*, Judgment, 1. C. J. Reports 1997, p. 7 (*Case Concerning Gabcikovo Nagymaros*) par 85.

83 *Case concerning Gabcikovo Nagymaros supra*, par 85.

84 McCaffrey “The contribution of the UN Convention on the law of non-navigational uses of international watercourses” 2001 *International Journal of Global Environmental Issues* 260.

85 McCaffrey 2001 *International Journal of Global Environmental Issues* 260.

86 McCaffrey 2001 *International Journal of Global Environmental Issues* 260.

customary international law.⁸⁷ Salman also submits that the ruling of the ICJ in this matter entrenched the principle of “equitable and reasonable utilisation” as the dominant instructional principle in transboundary water law.⁸⁸ 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 utilisation” although by that time the treaty did not enjoy any state support.⁸⁹ Nevertheless, this finding of the ICJ is significant for the LHWP in that it invalidates provisions that provide for “unilateral” and “preferential” utilisation 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 utilisation” as part of the corpus of international law.⁹⁰ In the same vein, the court also expressly affirmed the principle of equitable and reasonable utilisation as stipulated by the ratio of the court in *River Oder*.⁹¹ 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 a party to it if it is a rule of customary international law.⁹² 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 utilisation, are now part of customary international law.⁹³

Kooijmans J further held that countries must be “guided” by the principles as provided by the UN Watercourses Convention and the Helsinki Rules.⁹⁴ Thus, Kooijmans J also held that countries that share a transboundary water resource must remember that the principle of equitable and reasonable utilisation is based on a cogent foundation and facilitates the equitable and reasonable participation of riparian states.⁹⁵

87 Salman “The United Nations Watercourses Convention Ten Years Later: Why Has its Entry into Force Proven Difficult?” 2007 *Water International* 14.

88 Salman “Legal Regime for Use and Protection of International Watercourses in the Southern African Region: Evolution and Context” 2001 *Natural Resources Journal* 1009.

89 Wouters 37; McCaffrey 2001 *International Journal of Global Environmental Issues* 260 in which he asserts that the ICJ’s decision in this regard, effectively rejected the Harmon doctrine.

90 *Kasikili/ Sedudu Island (Botswana/Namibia)* Judgment, I. C. J. Report 1999, p. 1045 par 31-33.

91 *Kasikili/ Sedudu Island (Botswana/Namibia)* *supra*, par 27.

92 *Kasikili/ Sedudu Island (Botswana/Namibia)* *supra*, par 31.

93 *Kasikili/ Sedudu Island (Botswana/Namibia)* *supra*, par 32.

94 *Kasikili/ Sedudu Island (Botswana/Namibia)* *supra*, par 36.

95 *Kasikili/ Sedudu Island (Botswana/Namibia)* *supra*, par 36.

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.⁹⁶ This view is shared by commentators who opine that the key principle of the UN Watercourses Convention: that of equitable and reasonable utilisation, is accepted as customary international law.⁹⁷ These submissions endorse the view of McCaffrey that the principle of equitable and reasonable utilisation “repudiates” the Harmon Doctrine.

However, as stated above, equitable and reasonable utilisation as espoused in international water law does not provide an adequate mechanism to resolve a conflict of uses. The solution can be found in the principle of vital human needs as an incidence of the principle of equitable and reasonable utilisation. In this regard, 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 utilisation 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 utilisation” 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 utilisation”. Thus, Article 10.2 requires that a conflict of uses must firstly be resolved according to the principle of “equitable and reasonable utilisation”. 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

96 *Kasikili/ Sedudu Island (Botswana/Namibia) supra*, par 33.

97 Heyns, Patrick and Turton “Transboundary Water Resource Management in Southern Africa: Meeting the Challenge of Joint Planning and Management in the Orange River Basin” 2008 *International Journal of Water Resources Development* 374.

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 accords more weight to the “vital human needs” criteria in the event of a conflict of uses. 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.⁹⁸ 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”.⁹⁹ It is submitted that judicial pronouncements have long accorded primacy in domestic law to “vital human needs”.¹⁰⁰ In this regard, the Revised Protocol provides that “domestic use” means “use of water for drinking, washing, cooking, bathing, sanitation and stock watering purposes”.¹⁰¹ “Vital human needs” must be uses that meet “natural wants” or “ordinary uses” instead of “artificial uses” or “extraordinary uses” on the other.¹⁰² 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.¹⁰³ All other uses, including using water for business enterprises such as mining or manufacturing, fall

98 User’s Guide 129.

99 Art 3.20 of the International Law Association Berlin Rules on Water Resources 2004.

100 International Law Association Berlin Rules Commentary on Water Resources (2004) 12 and 22 https://www.unece.org/fileadmin/DAM/env/water/meetings/legal_board/2010/annexes_groundwater_paper/Annex_IV_Berlin_Rules_on_Water_Resources_ILA.pdf (accessed 2020-01-13); McCaffrey “A human right to water: domestic and international implications” 1992 *Georgetown International Environmental Law Review* 22.

101 Art 1 of the Southern African Development Community Revised Protocol on Shared Watercourses 2000.

102 International Law Association Berlin Rules Commentary on Water Resources 12.

103 International Law Association Berlin Rules Commentary on Water Resources 12.

outside of the concept of “vital human needs”.¹⁰⁴ Thus, it seems sound to presume that “vital human needs” prioritise the most critical uses to avoid death by way of dehydration or famine.¹⁰⁵ The term “special regard” in Article 10.2 connotes that water for vital human needs enjoys primacy over other water uses.¹⁰⁶ 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 human needs” refers to providing adequate water to “sustain human life, including both drinking water and water required for production of food in order to prevent starvation”.¹⁰⁷ 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.¹⁰⁸

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 utilisation 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.¹⁰⁹ It is then submitted that Article 14 of the Berlin Rules clarifies what was implied in the Helsinki Rules.¹¹⁰ 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”.¹¹¹ Thus, the Berlin Rules resolve the ambiguity borne out of the tentative approach of the UN Watercourses Convention.¹¹² Regardless, it would be inconceivable to see how some uses will be regarded as “equitable” if they fail to prioritise vital human needs.¹¹³

This approach is emphatically buttressed by the Guidelines on the Right to Water in Africa which provide that states may export domestic

104 International Law Association Berlin Rules Commentary on Water Resources 12.

105 User’s Guide 129.

106 User’s Guide 130.

107 Statement of Understanding accompanying the United Nations Convention on the Law of Non-Navigational Uses of Watercourses (A/51/869 of 11 April 1997) par 8 <http://www.un.org/law/cod/watere.htm> (accessed 2020-06-14).

108 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) par 31 https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf (accessed 2020-09-14).

109 Art 17.1 of the Berlin Rules.

110 International Law Association Berlin Rules Commentary on Water Resources 22.

111 User’s Guide 130.

112 User’s Guide 130.

113 User’s Guide 130.

water resources only if the right to water is fully enjoyed within the country.¹¹⁴ These guidelines also provide that states shall adopt measures to ensure that an undisturbed supply of water is available for the personal and domestic needs of each individual.¹¹⁵ States must also ensure the equitable and reasonable use of water resources through the allocation of and distribution of water resources to meet, as a priority, the vital human needs of the populations concerned, in particular equitable access to safe and clean drinking water in sufficient quantity and of good quality for personal and domestic uses, subsistence agriculture and other means of subsistence.¹¹⁶ Thus these guidelines endorse the concept of vital human needs as taking priority, particularly in a conflict of uses in Africa.

There is also a view 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.¹¹⁷ On this score, Agenda 21 provides that in utilising water resources, basic needs and environmental protection must be given priority.¹¹⁸ 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. Whilst Agenda 21 is not a binding agreement; 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 implies that water for domestic uses and to preserve the ecosystem, 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 Africa 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.¹¹⁹ Ironically, it is argued that the “vital human needs” does not include the water required to augment traditional economic activity despite arguments to

114 African Commission on Human and Peoples’ Rights Guidelines on the Right to Water in Africa 2019 par 13.5.

115 African Commission on Human and Peoples’ Rights Guidelines on the Right to Water in Africa par 13.4.

116 African Commission on Human and Peoples’ Rights Guidelines on the Right to Water in Africa par 13.1.

117 User’s Guide 130.

118 Agenda 21 1992 par 18.8.

119 Lesotho Long-term Water and Sanitation Strategy (2014) 151 <https://www.water.org.ls/download/lesotho-long-term-water-and-sanitation-strategy/> (accessed 2020-06-02).

the contrary.¹²⁰ 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.¹²¹ 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 (NWA) provides that the “Basic Human Needs Reserve” comprises water for basic potable use, personal hygiene, and food preparation.¹²² By the same token, the Basic Human Needs Reserve also enjoys primacy together with Ecological Reserve in the Lesotho Water Act 15 of 2008 (LWA).¹²³ “Vital human needs” criteria could also include the “Ecological Reserve”, which guarantees water to sustain the integrity of the aquatic water system, much like the broader concept of the “Reserve”.¹²⁴ This approach is sound because, without water in the aquatic ecosystem, there would be no water to guarantee the Basic Human Needs Reserve.

Consequently, in this paper, 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. As argued above, 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 or at least, be accorded the same weight.

3 Conclusion

This paper has argued that the anticipated conflict of uses in the LHWP can be adequately addressed by the concept of “vital human needs” as an incidence of the principle of equitable and reasonable utilisation. The “vital human needs” concept refers to the water for potable uses, personal hygiene and for food preparation as well as preserving an ecosystem. This concept provides an equitable mechanism to resolve a conflict of uses in the LHWP that caters to the needs of both countries, thereby nullifying the unfair preferential access to water of one riparian over another.

120 International Law Association Berlin Rules Commentary on Water Resources 22.

121 International Law Association Berlin Rules Commentary on Water Resources 22.

122 S 16 of the NWA <https://www.mylexisnexis.co.za/Index.aspx> (accessed 2020-12-21).

123 S 13(2)(a) of the LWA <https://www.water.org.ls/download/lesotho-water-act-no-15-of-2008/> (accessed 2020-12-14).

124 Ss 1 and 16 of the NWA, which encapsulate both the Human Needs Reserve and the Ecological Reserve.