

their utilisation of market exchanges and incentives to encourage environmental compliance.⁸⁴²

Governance across scales is understood more as linkages between various levels of governing bodies, local, national, and global, that is used to further their own interests.⁸⁴³ These are among the most important emerging trends that are shaping environmental governance. They are generating pressures for innovative ways to address environmental and natural resource crises and challenging existing forms of governance.⁸⁴⁴ Institutional interplay at different levels can be highly asymmetric or relatively balanced.⁸⁴⁵ In terms of cross-scale environmental governance, cross-scale environmental problems affect and are affected by institutionalized decision making at local, sub-national, national, and transnational levels. A common prescription to address the multilevel character of environmental problems is to design governance mechanisms across levels of social and institutional aggregation.⁸⁴⁶ In essence, the effective realisation of SDG6 as a whole would require a form of governance across various scales which include various actors as well. Thus, the philosophy of co-operative governance is instrumental in the achievement of most, if not all, global goals. However, this form of governance should not be confused with the principle of ‘good-neighbourliness’ and the principle of co-operation. The principle of ‘good-neighbourliness’ places a responsibility on States not to harm the environment and it places an obligation on States to prohibit activities within the State’s territory that are contrary to the rights of other States and which could harm other States and their inhabitants.⁸⁴⁷ The principle of co-operation is enunciated in Article 74 of the United Nations Charter in relation to social, economic and commercial matters has been translated into the development and application of rules promoting international environmental co-operation.⁸⁴⁸ Principle 27 of the Rio Declaration states that States and people shall co-operate in good faith and in a spirit of

⁸⁴² Cashore B., (2002), Legitimacy and the Privatization of Environmental Governance: How Non-State Market Driven (NSMD) Governance Systems Gain Rule-Making Authority, *Governance* Vol. 15, Page 503.

⁸⁴³ Adger W., Brown K. and Tompkins E.L., (2005), The Political Economy of Cross-scale Networks in E-Source Co-management, *Ecology and Society Journal*, Vol. 10(2), Page 9.

⁸⁴⁴ Lemos M. and Agarwal A., (2006), Environmental Governance, School of Natural Resources and Environment, University of Michigan, Page 299.

⁸⁴⁵ Adger W., Brown K. and Tompkins E.L., (2005), The Political Economy of Cross-scale Networks in E-Source Co-management, *Ecology and Society*, Page 9.

⁸⁴⁶ Adger W., Brown K. and Tompkins E.L., (2005), The Political Economy of Cross-scale Networks in E-Source Co-management, *Ecology and Society*, Page 10.

⁸⁴⁷ Soto MV., (1996), General Principles of International Environmental Law, *ILSA Journal of International and Comparative Law*, Vol. 3(1), Page 197.

⁸⁴⁸ Sands P. and Peel J., (2012), *Principles of International Environmental Law*, 3rd Edition, Cambridge University Press, United Kingdom, Page 203.

partnership in the fulfilment of the principles embodied within the Rio Declaration and in the further development of international law in the field of sustainable development.⁸⁴⁹ The principle of co-operation and the obligation to co-operate is affirmed in virtually all international environmental agreements of bilateral and regional application and its practical significance is reflected just the same.⁸⁵⁰ The duty to co-operate can be extended into investigating, identifying and avoiding environmental harm and this exchange of general information can be critical in monitoring the domestic implementation of international obligations.⁸⁵¹ The idea of global cohesion is idealistic, but it is indeed optimistic to say the least. However, it should be remembered that global uniformity can be a ‘work-in-progress,’ much like the SDGs themselves and the attainment of the targets set out. It is thus important to pay attention to the last of the SDGs, SDG17. This goal in many ways is attached to the achievement of all of the other SDGs that exist. SDG17 aims to strengthen the means of implementation and revitalize the global partnership for sustainable development.⁸⁵² The Global Partnership for Sustainable Data is a global network of governments, NGOs and businesses working together to strengthen the inclusivity, trust and innovation in the way that data is used to address the world’s sustainable development efforts. It works to bring the resources of national governments, independent non-profits, and private companies to bear on the world’s development data poverty. Official statistical systems are the building block for understanding poverty and how to address it. The global partnership seeks to map data gaps at a national level, the channel funding to strengthen those systems. Thus, the partnership aims to bring the best data, analytical skills and ideas to solve data problems from using satellites capture to monitor agriculture efforts, to citizen engagement tools to understand sanitation requirements in villages in remote parts of the world. It works to ensure that governments are given the tools they need to ensure they leave no-one behind in these development efforts.⁸⁵³ It is indeed evident through this that the ideal of a global partnership is essential to the realisation of the goals. A global partnership is essential when trying to attend to a global cause and cooperation between actors is essential for overall success to be achieved. Therefore, overall environmental governance should be re-examined to include a

⁸⁴⁹ The Rio Declaration, UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992), Principle 27.

⁸⁵⁰ Sands P. and Peel J., (2012), *Principles of International Environmental Law*, 3rd Edition, Cambridge University Press (United Kingdom), Page 204.

⁸⁵¹ Soto MV., (1996), *General Principles of International Environmental Law*, *ILSA Journal of International and Comparative Law*, Vol. 3 : Issue, Page 198.

⁸⁵² United Nations Development Programme: Sustainable Development Goals, available at <http://www.un.org/sustainabledevelopment/water-and-sanitation/>, (last accessed 19/02/18).

⁸⁵³ United Nations Development Programme: Sustainable Development Goals, available at <http://www.un.org/sustainabledevelopment/water-and-sanitation/>, (last accessed 19/02/18).

more co-operative model. Water governance, which is a subset of environmental governance, will then automatically require re-examination as well.

7.3. Global Water Governance

Water plays a pivotal role in sustainable development, including poverty reduction. The use and abuse of increasingly precious water resources has intensified dramatically over the past decades, reaching a point where water shortages, water quality degradation and aquatic ecosystem destruction are seriously affecting prospects for economic and social development, political stability and ecosystem integrity.⁸⁵⁴ Given the importance of water to poverty alleviation, human and ecosystem health, the management of the water resources becomes of central importance.⁸⁵⁵ The regulation of freshwater systems requires an exploration of water governance. As stated by Rieu-Clarke, the effective implementation of a flexible substantive rule which takes into account all relevant factors and circumstances will only be possible if a sound framework for governance is established.⁸⁵⁶ Water governance relates to the range of political, social, economic and administrative systems that are in place to develop and manage water resources and the delivery of water services at different levels of society.⁸⁵⁷ It is thus concerned with the manner in which water-related decisions are made as it allows for a system that controls decision-making with regard to water resource development and management.⁸⁵⁸ Water governance covers the manner in which regulatory politics are exercised in the management of water and other natural resources and broadly embraces the formal and informal institutions by which authority is exercised. There is a profoundly political element to water governance and as such systems of water governance usually reflect the political realities at international, national, provincial and local levels.⁸⁵⁹ The fact that proper water governance can be used in order to effectively manage global water is

⁸⁵⁴ UNDP. 2007, *Effective Water Governance: The Key to Sustainable Water Management and Poverty Eradication*, <http://www.undp.org/water/>, (last accessed 19/02/18).

⁸⁵⁵ Batchelor C., (2007), *Water Governance Literature Assessment*, International Institute for Environment and Development, Page 1.

⁸⁵⁶ Rieu-Clarke A., (2005), *International Law and Sustainable Development: Lessons from the Law of International Watercourses*, Water Law and Policy Series, IWA Publishing, London, Page 159.

⁸⁵⁷ Rogers P. and Hall A.W., (2003), *Effective Water Governance*, TEC Background Papers No.7, Global Water Partnership, Stockholm, Pages 15 – 16.

⁸⁵⁸ Hoekstra A.Y., (2006), *The Global Dimension of Water Governance: Nine Reasons for Global Arrangements in Order to Cope with Local Water Problems*, Value of Water Research Report Series No. 20, Page 9.

⁸⁵⁹ Hoekstra A.Y., (2006), *The Global Dimension of Water Governance: Nine Reasons for Global Arrangements in Order to Cope with Local Water Problems*, Value of Water Research Report Series No. 20, Page 10.

indeed cemented by the link between environmental governance and sustainable development. The connection between environmental governance and sustainable development is regarded as a management process executed by institutions and individuals in the public and private sector to holistically regulate human activities and the effects of human activities on the total environment (including all environmental media, and biological, chemical, aesthetic and socio-economic processes and conditions) at international, regional, national and local levels; by means of formal and informal institutions, processes and mechanisms embedded in and mandated by law, so as to promote the present and future interests human beings hold in the environment.⁸⁶⁰ When looking at international watercourses, the link between the law of international watercourses and sustainable development becomes apparent, mainly due to the common-thread of focussing on economic, social and environmental issues.⁸⁶¹ The world's finite and renewable supply of water resources is fundamental to social and economic development, ecological sustenance and poverty alleviation.⁸⁶² Although water is renewable, regional variability, increased demand and misuse have placed significant stress on this finite resource. All types of economic and ecological development requires the use of water, be it from agriculture, mining, energy production; to the maintenance of biodiversity, fisheries and soil fertility.⁸⁶³ Thus, the link between effective water governance and sustainable development becomes more and more apparent, as water is essential for the continuation of human life on earth and the earth in general for present and future generations. The unique nature of water ensures overall sustainability for humankind. Indeed, water governance is rooted in the fundamentals of environmental governance which adheres to values such as transparency, accountability, public participation in decision-making and freedom of association. These are values that are indispensable in implementing and enforcing substantive environmental law as they ensure that citizens are aware and involved in the abovementioned decision-making processes and have the ability to effectively advocate for environmental protection.⁸⁶⁴

⁸⁶⁰ Kotzé L., (2009), in Paterson and Kotzé (eds) *Environmental Compliance and Enforcement in South Africa Legal Perspectives*, Juta Cape Town, Pages 107 - 108.

⁸⁶¹ Rieu-Clarke A., (2005), *International Law and Sustainable Development: Lessons from the Law of International Watercourses*, Water Law and Policy Series, IWA Publishing, London, Pages 5 – 6.

⁸⁶² United Nations, Report of the Secretary-General, (2001), *Water: A Key Resource for Sustainable Development*, UN Commission on Sustainable Development, UN Doc. A/CN.17/2001/PC/17.

⁸⁶³ Rieu-Clarke A., (2005), *International Law and Sustainable Development: Lessons from the Law of International Watercourses*, Water Law and Policy Series, IWA Publishing, London, Page 6.

⁸⁶⁴ Feris L.A., (2010), *The Role of Good Environmental Governance in the Sustainable Development of South Africa*, Potchefstroom Electronic Law Journal, Vol. (13)1, Page 76.

7.3.1. Issues Surrounding Global Water Governance

Global water governance is currently diffuse and web-like in character. A lack of strong motivation on the part of United Nations agencies and states to push water management has encouraged the rise of pluralistic bodies that try to deal with these issues. However, it is not clear that these polycentric governance frameworks can be more successful in generating the necessary political will for global action.⁸⁶⁵ It is important to note that there is a difference between water management and water governance. Where government is more about actions (decisions) of a single organisation in charge of a part of the water challenge, governance is about the interactions between a variety of actions and whether these interactions lead to future-proof water protections. This ‘multitude of everything’ illustrates that complexity is a key notion when it comes to water governance. Where government is often about creating *one* policy, *one* organisational structure (often a bureaucratic one) and *one* order, governance is more about understanding the complex interactions between a variety of governments and other organisations active in a joint domain.⁸⁶⁶ Water management is about achieving goals, preferably in a functionally and socially responsive and efficient manner, with given means, and largely within given conditions and constraints. Water governance is about identifying, choosing or adhering to values and translating these values (water, safety, agriculture, urban space, natural beauty or artistic design) into goals, standards and institutional structures and processes. These are achieved in a context of public external accountability. Governance is about establishing the appropriate means and setting limits and constraints within which operational action in terms of water management can take place.⁸⁶⁷ At the global level, outputs of these systems include framing policy, setting standards, and mobilizing, allocating, and coordinating resources and responsibilities.⁸⁶⁸

It is important to keep in mind that the intrinsic multilevel character of governance implies that the global level does not act independently and cannot be studied separately from the

⁸⁶⁵ Pahl-Wostl C., Gupta J. and Petry D., (2008), Governance and the Global Water System: A Theoretical Exploration, *Global Governance* Vol. 14, Pages 419 – 435.

⁸⁶⁶ Teisman G., van Buuren A. and Gerrits L., (2009), *Managing Complex Governance Systems, Dynamics, Self-organisation and Coevolution in Public Investments*, Routledge, London.

⁸⁶⁷ Toonen T., (2011), *The (Changing) Role of National Government in Multilevel (Water) Governance, Principles of Good Governance at Different Water Governance Levels Workshop Document*, Page 14.

⁸⁶⁸ Conca K., (2005), *Governing Water: Contentious Transnational Politics and Global Institution Building*, MIT Press, Cambridge, Massachusetts, USA.

lower levels, as it is enacted through the interplay of actors working on all levels across the local–global spectrum.⁸⁶⁹ Also, the scope of the global governance of water cannot be limited to water in a narrow sense. Global water governance frameworks must be adaptive and create links across policy fields such as energy, trade, and agriculture; given that water challenges cannot be addressed by remaining within the ‘water box.’⁸⁷⁰ Thus, the SDGs should be seen as a network of targets and goals that are not completely separate from each other, but rather inter-connected to each other in order to achieve the overall goal at hand. Thus, a governance mechanism that is able to deliver on the targets or at least ensure its implementation can go a long way in actually achieving the goals.

It is evident that water governance is complex because of the nature of the subject itself. Water is not confined to borders, water flows freely through borders and hemispheres. Water flows freely through different counties, past and below different governments and legislation. The fact that water is to be controlled or governed in a sense is quite a difficult task to achieve. Relations between all actors need to be redefined and strengthened for the common-good and the common purpose of the achievements of the SDGs. However, the problem with global water governance is the lack of will and commitment from all actors. Once again referring to the fact that some commentators have referred to the SDGs as soft-law at best, it then becomes tough to govern something where normative consequences exist or something that is not seen as hard-law and thus has no sanctions or consequences. Developed countries lack political will, not finance, to tackle environmental issues.⁸⁷¹ Politicians who almost universally claim to be so well-informed that they can run countries, cannot also claim to be so ill-informed that they do not appreciate the gravity of the unfolding environmental crisis threatening the safety, security and economy of every nation on the planet.⁸⁷² If the reasons for non-performance lie primarily in the lack of collective political will to effectively address environment challenges, including that of water management, then institutional design will not of itself solve the problems. At the same time, lack of political will is no good excuse for non-action as it is not a given factor but one that can be influenced. It can indeed be

⁸⁶⁹ Urueña R., (2009), Expertise and Global Water Governance: How to Start Thinking about Power Over Water Resources? *Anuario Mexicano de Derecho Internacional*, Vol. 9, Pages 117 – 152.

⁸⁷⁰ Baumgartner, T., and Pahl-Wostl C., (2013), UN–Water and its Role in Global Water Governance, *Ecology and Society*, Vol. 18(3), Page 1.

⁸⁷¹ Newmarch J., (2012), ‘COP-17’ Lack of ‘Political Will’ to Tackle Climate Change, Business Day Live at <http://www.bdlive.co.za/articles/2011/12/01/cop-17-lack-of-political-will-to-tackle-climate-change;jsessionid=73E3EA3E95096890DF01F6F26C7B41EB.present1.bdfm>, (last accessed 3/03/18).

⁸⁷² Grigg R., (2013), Climate Change a Failure of Political will, *The Common-Sense Canadian* at <http://commonsensecanadian.ca/climate-change-a-failure-of-political-will/>, (last accessed 3/03/18).

influenced by those in charge of the political institutions itself, especially when they are trying to implement their own agendas not even related to environmental matters. Urgency is required when dealing with environmental protection on a political level, and elected officials of political organisations that run countries must ensure that they place environmental protection on their agendas of concern. All these factors pose a fundamental challenge to the effectiveness and efficiency of the current international environmental regime when it comes to water governance. This leads to a lack of coordination, cooperation and synergies among relevant international actors. It also leads to duplications, overlaps, inefficiencies, turf battles, inconsistencies, contradictions and conflicts; to a lack of an overarching vision, of a common orientation and strategy, and of coherence and focus; to a lack of visibility; and finally to inadequate goals and measures.⁸⁷³ As a result, the traditional approach to governance (and water governance) reform often overlooks the tremendous contribution and increasing involvement of civil society actors and the private sector in international policy-making, capacity building and implementation.⁸⁷⁴ Non-Governmental Organisations (NGOs) are playing an increasingly large role, not just as stakeholders, but as ‘motors’ of international environmental policy-making through setting agendas, drafting treaties, providing scientific information and monitoring implementation.⁸⁷⁵ Local and international NGOs also engage in implementation and capacity building. In addition to the achievements of civil society, great strides have been made in engaging the private sector as partners in development and environmental protection rather than as culprits of environmental degradation.⁸⁷⁶ Commitment is imperative in ensuring effective global water governance and the realisation of SDG6. It can be opined that SDG6 can act as a catalyst to ensure that governance policies are reformed, or at least, re-looked at in order to ensure that it can act as a vehicle to allow for the realisation of the global goals and targets. Unfortunately, the ‘soft-law’ status of these goals is a hindering factor. The idealistic nature of the goals is hard to ignore. It not only requires change within a specific sector, but it requires changes within a myriad of sectors in order for actual achievement to take place. This creates a sort of ‘domino-effect,’ which can leave many actors reluctant to pursue the said goals.

⁸⁷³ Roy J. and Ivanova M., (2007), *The Architecture of Global Environmental Governance: Pros and Cons of Multiplicity*, available at: <http://www.centerforunreform.org/system/files/Ivanova+and+Roy+GEG.pdf>, (last accessed 3/03/18).

⁸⁷⁴ Banuri T. and Najam A., (2002) *Civic Entrepreneurship: A Civil Society Perspective on Sustainable Development*.

⁸⁷⁵ Najam A., (1999), *Citizen Organizations as Policy Entrepreneurs*, *International Perspectives on Voluntary Action: Reshaping the Third World*, edited by David Lewis, London, Earthscan, Pages 142 – 181.

⁸⁷⁶ Najam A., (1999), *Citizen Organizations as Policy Entrepreneurs*, *International Perspectives on Voluntary Action: Reshaping the Third World*, edited by David Lewis, London, Earthscan, Pages 142 – 181.

7.4. Implementation of SDG6 through Global Environmental Governance

It is important to explore the issue of there not being a centralised agency to properly facilitate SDG6. There seems to be major missing links between knowledge generation and policy framing and between knowledge generation and rulemaking. There seems to be a clear role for flexible global multi-actor networks for issue integration, agenda setting, and open (re)framing processes. But for rulemaking in governance settings, it is important to move from mobilizing action to formalizing commitments.⁸⁷⁷ United Nations Environment (UN-Environment)⁸⁷⁸ is intended to be regarded as the focal centre of environmental governance on a global scale. UN-Environment was in essence the result of a negotiation process in which Sweden and the United States took the lead and largely designed the blueprint for the organizational structure and functions. The key premise of the institutional negotiations was that the work in the field of environment needed a common outlook and direction.⁸⁷⁹ What was necessary was a central co-ordinating mechanism in the United Nations to provide political and conceptual leadership in the United Nations system, to contemplate methods of avoiding or reducing global environmental risks, methods of working out joint norms, where there is agreement that such are needed, and methods of avoiding or settling conflicts between states on environmental matters. Such a mechanism should be given enough authority and resources to ensure effective co-ordination of ongoing and planned activities.⁸⁸⁰

In relation to water, the United Nations has its own sector dealing with water and sanitation, referred to as UN-Water.⁸⁸¹ UN-Water is the United Nations inter-agency coordination mechanism for all freshwater related matters, including sanitation. Building on a long history of coordination in the UN system, UN-Water was formalized in 2003 by the UN System Chief Executives Board for Coordination. It provides the platform to address the cross-cutting nature of water and maximize system-wide coordinated action and coherence.⁸⁸² UN-Water was created as an interagency mechanism to coordinate action for achieving water-

⁸⁷⁷ Pahl-Wostl C., Conca K., Kramer A., Maestu J., and Schmidt F., (2013), Missing Links in Global Water Governance: A Processes-Oriented Analysis, *Ecology and Society*, Vol. 18(2), <http://dx.doi.org/10.5751/ES-05554-180233>.

⁸⁷⁸ Formerly known as the United Nations Environment Programme – UNEP.

⁸⁷⁹ Ivanova M., (2005) Assessing UNEP as Anchor Institution for the Global Environment: Lessons for the UNEO Debate, Yale Center for Environmental Law and Policy, Yale University, Page 4.

⁸⁸⁰ Ivanova M., (2005) Assessing UNEP as Anchor Institution for the Global Environment: Lessons for the UNEO Debate, Yale Center for Environmental Law and Policy, Yale University, Page 5.

⁸⁸¹ <http://www.unwater.org/>, (last accessed 19/02/18).

⁸⁸² <http://www.unwater.org/about-unwater/governance/>, (last accessed 19/02/18).

related targets set by the UN Millennium Declaration, specifically, Target 7.C of the Millennium Development Goals.⁸⁸³ It was also to be a mechanism for implementing decisions concerning water from the 2002 World Summit on Sustainable Development in Johannesburg in particular concerning four major objectives contained in the Johannesburg Plan of Implementation.⁸⁸⁴ These included halving, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water and the proportion of people who do not have access to basic sanitation, to develop integrated water resources management and water efficiency plans by 2005, to develop programs for mitigating the effects of extreme water-related events and to establish and/or develop national monitoring networks and water-related databases.⁸⁸⁵

The creation of UN–Water reflects a kind of paradigm shift in global water governance and ushered in the era of partnerships so to speak. The partnership approach was seen by many as a blueprint solution for addressing duplication issues resulting from institutional and organizational overlap within the multilateral system. They advocated heavily for the establishment of UN–internal partnerships, which also inspired the setup of several interagency coordination mechanisms, including UN–Water, UN–Oceans, UN–Energy, the UN Environment Management Group (EMG), and the UN Development Group (UNDG).⁸⁸⁶ Despite these various outreach efforts, UN–Water has just started to scratch on the surface of the issue and its direct influence on the discourse is still minimal. Within the UN system, the responsibilities and competencies relating to freshwater governance are highly fragmented among different organizations, programs, and funds. Consequently, coordination among the different actors is difficult, but all the more essential.⁸⁸⁷ Fragmentation of international law, treaties and policies has moved from the periphery to the centre of international legal debate over the past few decades.⁸⁸⁸ It emphasises the isolation and disconnect between regimes and institutions and has particular resonance within international environmental law. International

⁸⁸³ ‘Halve by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation,’ MDG7.C.

⁸⁸⁴ United Nations Chief Executives Board for Coordination (UNSCEB), (2003), Report of the High-Level Committee on Programmes on its Fifth Session, United Nations, New York, New York, USA.

⁸⁸⁵ United Nations Chief Executives Board for Coordination (UNSCEB), (2003), Report of the High-Level Committee on Programmes on its Fifth Session, United Nations, New York, New York, USA.

⁸⁸⁶ Baumgartner T., and Pahl-Wostl., (2013), UN–Water and its Role in Global Water Governance, Ecology and Society, Vol. 18(3), Page 3.

⁸⁸⁷ Baumgartner T., and Pahl-Wostl., (2013), UN–Water and its Role in Global Water Governance, Ecology and Society, Vol. 18(3), Page 3.

⁸⁸⁸ Van Asselt H., (2011), Managing the Fragmentation of International Environmental Law: Forests at the Intersection of the Climate and Biodiversity Regimes, New York University Journal of International Law and Politics (JILP), Vol. 44 (4), Page 1207.

environmental law is a complex regulatory field comprising multiple regimes and institutions giving rise to overlapping and, occasionally, conflicting legal and policy mandates.⁸⁸⁹ There has been a growing fragmentation of the international regulatory order as an ever-increasing number of regulatory institutions with overlapping jurisdictions compete for influence. Progress in connection with the democratisation of international institutions has been all but negligible.⁸⁹⁰ Fragmentation is more serious than it is commonly assumed to be because it functions to maintain and even extend the disproportionate influence of a handful of powerful states and the domestic interests that shape their foreign policies on the international regulatory order, and it tends to undermine the operation of the decentralized processes of the governing of international environmental law.⁸⁹¹ It is clear that UN–Water, as an interagency coordination mechanism that lacks direct control by an intergovernmental governing body and, thus, lacks formal decision-making power, is constrained to operate in the background of global water governance. It is recognised that output of foreground politics are regimes, laws, ministerial events, and new organizations, the UN-Water organisation mainly produces discourses, norms, and values that influence foreground decisions which is not enough to influence proper water governance.⁸⁹² As a result, UN–Water might rather act like a kind of ‘bridging organization’ between background and foreground.⁸⁹³ There is indeed a great need for clarification, and many participants expect UN–Water to be providing some leadership and helping to create coherence and build understanding around this discourse. However, once again the mechanism's direct influence is limited by a number of internal and external barriers. Therefore, UN–Water does not play a powerful role as a leader and reformer of the global water governance system but, rather, that it operates in the background where it exerts indirect influence, mainly through its member organizations and their member states. UN–Water does not shape the substance of global water governance so much either. UN-Water primarily influences the procedural aspects of global water governance such as legitimacy, accountability, efficiency, awareness, but it largely fails to improve the output of the global

⁸⁸⁹ Scott K.N., (2011), *International Environmental Governance: Managing Fragmentation through Institutional Connection*, Melbourne Journal of International Law, Vol. 12, Page 3.

⁸⁹⁰ Benvenisti V. and Downs G.W., (2007), *The Empire's New Clothes: Political Economy and the Fragmentation of International Law*, The Berkeley Electronic Press, Page 2.

⁸⁹¹ Benvenisti V. and Downs G.W., (2007), *The Empire's New Clothes: Political Economy and the Fragmentation of International Law*, The Berkeley Electronic Press, Page 2.

⁸⁹² Baumgartner T., and Pahl-Wostl C., (2013), *UN–Water and its Role in Global Water Governance*, *Ecology and Society* 18(3), Page 5.

⁸⁹³ Baumgartner T., and Pahl-Wostl C., (2013), *UN–Water and its Role in Global Water Governance*, *Ecology and Society* 18(3), Page 5.

water governance system, which is, foreground institutions and financial resources.⁸⁹⁴ Although all experts in principle approve of an integrated-management approach, some have also pointed out that there are a lot of people challenging the whole concept of integrated water resources management and questioning its practicability. Thus, it can be stated that international organisations have transformed from pure transaction mechanisms assisting countries in achieving collective goals to autonomous entities shaping preferences and delivering results.⁸⁹⁵ However, their legitimacy is being openly challenged as they are increasingly seen as unelected elites with no sense of common peoplehood and trust.⁸⁹⁶ In the absence of direct elections at the international level, legitimacy cannot be granted through the traditional democratic representation channel. It is instead attained through expertise and the ability to generate ‘right answers,’ through a systemic design of checks and balances, or through fair and transparent rulemaking procedures that instil confidence in the process and subsequent acceptance of the decision.⁸⁹⁷ International organizations are therefore likely to regain their legitimacy when they begin to effectively deliver results and to enact transparent, accountable and participatory rules and processes. To this end, five root causes of institutional dysfunction need to be addressed.⁸⁹⁸

7.4.1. SDG6, Co-operation and Global Environmental Governance

It is noted that the SDG process emphasises the importance of public participation in water governance at all levels, be it local, national or even global.⁸⁹⁹ This would infer that there is at least some level of awareness of global trends in international environmental law. UN-Water suggested that ‘all countries must strengthen equitable, participatory and accountable water

⁸⁹⁴ Baumgartner T., and Pahl-Wostl C., (2013), UN–Water and its Role in Global Water Governance, *Ecology and Society* 18(3), Page 10.

⁸⁹⁵ Barnett M. and Finnemore M., (2004), *Rules for the World: International Organizations in Global Politics*, Ithaca, Cornell University Press.

⁸⁹⁶ Barnett M. and Finnemore M., (2004), *Rules for the World: International Organizations in Global Politics*, Ithaca, Cornell University Press.

⁸⁹⁷ Barnett M. and Finnemore M., (2004), *Rules for the World: International Organizations in Global Politics*, Ithaca, Cornell University Press.

⁸⁹⁸ Ivanova M., (2005) *Assessing UNEP as Anchor Institution for the Global Environment: Lessons for the UNEO Debate*, Yale Center for Environmental Law and Policy, Yale University, Page 14.

⁸⁹⁹ Spijkers, O., (2015), *The Sustainable Development Goals as Catalyst for the Sustainable Management of Water Resources*, *Journal of Water Law*, Vol. 24, Page 125.

governance.⁹⁰⁰ In the view of UN-Water, any system of water management should include ‘participatory decision-making’. At least, including the public in the decision-making will make the public at large more aware of the urgency of the problem, and it will make them feel jointly responsible for meeting the challenge of developing water resources in a ‘greener’ fashion.⁹⁰¹ There are far too many issues regarding co-ordination, transparency and legitimacy when it comes to global water governance and actors that are seen as key role-players in this field. The United Nations provides idealistic solutions however a lot is left to be desired when it comes to the realistic scale of achieving these solutions. SDG6 can revive the discourse in global water governance, and the SDGs can revive the discourse in global environmental governance itself, however, it is very unlikely that proper solutions can be met on a governance level, given all the issues presented previously. SDG6 and its targets provide an opportune moment for legal reform, as it can guide water policy to deal with the core issues related to water currently and globally. Thus, the targets of SDG6 can serve as the path to ensuring that policy becomes aligned with the most important water-related matters and this can surely be good guiding principles in ensuring that water-related matters are dealt with. Unfortunately, the many issues in global water governance and global environmental governance can cause some hindrance to achieving the targets. As mentioned before, the multi co-operative approach required in realising SDG6 requires role-players from across the globe to work in unison and harmonise their policies and goals so to speak. In essence, a centralised body dealing with these issues could be a better idea, one that would reap better results and be more productive in general. However, that would then entail and open up the long-standing debate for a centralised global environmental agency, which too comes with its own set of issues as well. It must be remembered that the SDGs as a whole can only be properly achieved if there is some sort of co-ordination, co-operation and partnership, and this can only take place when the relevant actors are willing to ‘give-and-take’ in this process, especially since it is for the ‘greater-good.’ In essence, the true realisation of SDG6 would require a ‘multiple actors model’ to be created. This model argues that the system of governance is made up of multiple actors whose actions need to be mutually reinforcing and better co-ordinated in order to ensure coherence and structure in global environmental governance. Without better integration of these multiple actors, organisational re-

⁹⁰⁰ Proposed Goal, detailed illustrative targets and associated indicators, annexed to UN-Water A Post-2015 Global Goal for Water: Synthesis of Key Findings and Recommendations from UN-Water (2014), Page 7.

⁹⁰¹ Spijkers, O., (2015), The Sustainable Development Goals as Catalyst for the Sustainable Management of Water Resources, *Journal of Water Law*, Vol. 24, Page 125.

arrangement cannot resolve institutional problems.⁹⁰² A multiplicity of actors and interactions form a multi-dimensional system of global environmental governance. It includes states, international environmental organizations, related international organizations, civil society organizations, and public concern and action.⁹⁰³ Focus on organisations as a single dimension of governance distracts attention from the fact that institutional will is required to affect decision-making procedures and change institutional boundaries.⁹⁰⁴ One must also be cognisant of the fact that various actors play various roles in global environmental governance. It would therefore be of the best interest to not exclude them, but to rather include their points of view in the global spectrum of environmental governance. The multiple actors model mainly calls for the co-operation of all the relevant parties involved in global environmental law and governance. If all parties are on the same page, it will then allow for better coherence and structure in the global system as a whole because all the relevant actors will be aware of what the other is thinking and how they can move forward together. This model calls for the interaction and transaction of all the various actors' involved in global environmental governance as well as global water governance. It calls for the integration of the environment into the larger context of sustainable development and also calls for allowing multiple organisations to flourish together. This model also calls for the creation of multiple channels of implementation, which has been shown to be a major issue with regard to the SDGs. Indeed the quality of global water governance will be determined by the interaction of the various actors involved.⁹⁰⁵ Parties would be tackling the same issues at the same time and differences in opinion can be easily sorted out if the parties get together and discuss their various views. Co-operation by all the actors is of the utmost importance in order to achieve the goal of global environmental protection and global water governance. This model however cannot stand on its own. It can be regarded as an aspect or facet that must be integrated into a much larger regime-changing model for global environmental governance. The ideologies envisaged in this model must be used in order to achieve total co-

⁹⁰² Sanwal, M., (2004), Trends in Global Environmental Governance: The Emergence of a Mutual Supportiveness Approach to Achieve Sustainable Development, *Global Environmental Politics*, Vol. 4, Number 4, November, Pages 16 – 22.

⁹⁰³ Najam A., (2004), Neither Necessary, Nor Sufficient: Why Organizational Tinkering Will Not Improve Environmental Governance, in Biermann F. and Bauer S., (2004), *A World Environment Organization: Solution or Threat for Effective International Environmental Governance?* London, Ashgate, Page 223.

⁹⁰⁴ Oberthur S. and Gehring T., (2005), Reforming International Environmental Governance, in Biermann F. and Bauer S., (2004), *A World Environment Organization: Solution or Threat for Effective International Environmental Governance?* London, Ashgate, Page 203.

⁹⁰⁵ Najam A., (2004), Neither Necessary, Nor Sufficient: Why Organizational Tinkering Will Not Improve Environmental Governance, in Biermann F. and Bauer S., (2004), *A World Environment Organization: Solution or Threat for Effective International Environmental Governance?* London, Ashgate, Page 223.

operation and structure for global water governance. There should be a realisation that there are indeed many actors involved in global environmental law and global water governance. This is something that will not change as the environment is the concern of every human being. The fact that so many actors exist in global environmental law makes it quite challenging to keep track of what every single actor is doing at any given time. There must be some balance, conformity and uniformity in global environmental law and global environmental governance. Current disunity must be converted into future unity, in order to ensure the future of the environment as we know it. If all actors work together under one authoritative body, global water governance can only become better and more efficient, and this in turn will combat pressing water issues that we are currently faced with today. This will also ensure that the pathway to achieving SDG6 is smoothed and an actual legitimate effort can be made in relation to the achievement of specific global goals. This model also enforces the call of SDG17, which aims to strengthen the means of implementation and revitalize the global partnership for sustainable development.

7.5. Environmental Governance and Water Governing In South Africa: An Example of Practical Implementation



It is important to take into consideration how certain countries have implemented environmental policy within their local levels. This is done so that an understanding is created as to the various facets global environmental governance comprises of. The call for harmonisation in global environmental governance is important as most countries will then be on a similar plain when tackling environmental issues and trying to achieve environmental goals on a global level. However, this realisation must start on a national level as well. Countries will be more inclined to be part of an international environmental agenda and governance structure if they themselves have environmental policy and governance structures at a local level. Thus, a country with sound environmental policy or environmental policy at all, can be of a benefit on the global scale.

South Africa, for example, has a comprehensive governance framework underpinned by an extensive array of environmental laws.⁹⁰⁶ However, the issue in South Africa is the need to balance competing socio-economic needs with pressing environmental imperatives,⁹⁰⁷ given the history of oppression and poverty within the country. The Constitution (1996)⁹⁰⁸ is the supreme law of South Africa and it contains South Africa's environmental right⁹⁰⁹ as well as a right to water.⁹¹⁰ The Constitution (1996) is particularly relevant to environmental governance as it entrenches an environmental right together with an array of associated rights, it determines the status of various sources of law; and it prescribed governance mandates and entrenches the dictate of co-operative governance.⁹¹¹ South Africa also gives due regard to international environmental law and gives high priority to enforcing commitments under these agreements.⁹¹² In terms of governance, the governance system mandates a form of co-operative governance, and the government itself is divided into three separate but interdependent spheres, namely national, provincial and local.⁹¹³ These spheres must ensure that policy is enforced within their designations and that it conforms throughout the country. In terms of environmental governance policy, South Africa is not only governed by section 24 of the Constitution, but by framework legislation as well. The National Environmental Management Act⁹¹⁴ (NEMA) is the core framework for environmental law in South Africa, and governs this facet of law within the country. NEMA is extremely broad and includes national environmental management principles with which the actions of all organs of State must comply.⁹¹⁵ It also includes institutions, mechanisms and procedures for facilitating co-operative environmental governance and fair decision-making and conflict-management procedures.⁹¹⁶ NEMA is further complimented by many national laws which seek to regulate sector-specific environmental issue. For the purposes of water, the National

⁹⁰⁶ Kidd M., (2011), *Environmental Law*, 2nd Edition, Juta and Company, Pages 3 – 4.

⁹⁰⁷ Kotze LJ. and Paterson A., (2009), South Africa, in Kotze LJ. And Paterson A., *The Role of the Judiciary in Environmental Governance: Comparative Perspectives*, Kluwer Law International, Wolters Kluwer International Books, The Netherlands, Page 558.

⁹⁰⁸ The Constitution of the Republic of South Africa (1996), Section 2.

⁹⁰⁹ The Constitution of the Republic of South Africa (1996), Section 24, discussed in Chapter 4 of this dissertation.

⁹¹⁰ The Constitution of the Republic of South Africa (1996), Section 27, discussed in Chapter 4 of this dissertation.

⁹¹¹ Kotze LJ. and Paterson A., (2009), South Africa, in Kotze LJ. And Paterson A., *The Role of the Judiciary in Environmental Governance: Comparative Perspectives*, Kluwer Law International, Wolters Kluwer International Books, The Netherlands, Page 560.

⁹¹² Glazewski J., (2005), *Environmental Law in South Africa*, 2nd Edition, Durban: LexisNexis Butterworths, Pages 67 – 70.

⁹¹³ Kidd M., (2011), *Environmental Law*, 2nd Edition, Juta and Company, Pages 26 – 27.

⁹¹⁴ 107 of 1998.

⁹¹⁵ NEMA, Section 2.

⁹¹⁶ NEMA, Chapters 2 – 4.

Water Act 36 of 1998 (NWA) and the Water Services Act 108 of 1997 (WSA) are used. Thus, environmental issues in terms of water are governed through the various pieces of law and frameworks that have been implemented in South Africa. Therefore, in terms of water governance in South Africa, the Constitution of the Republic of South Africa is the point of departure, and this right is then linked to the framework legislation of NEMA, which is then further promulgated under the NWA and the WSA, which provides a comprehensive legislative framework for water issues within the country. The effective implementation of these laws however requires proper interpretation and analysis by the courts, should disputes arise. The governance structure on water law in South Africa requires that a court (judiciary) make necessary judgements in line with these principles, and interpretation of these laws is where issues can arise. However, it must be noted that the judiciary has embarked on the road to becoming an integral role-player in the promotion of environmental governance for sustainability in South Africa. There have been many environmental cases that have been adjudged by the courts in South Africa⁹¹⁷ but the judiciary still remains chequered in its application of environmental laws in the courts.⁹¹⁸ This would suggest that there is room for improvement, but it must be noted that since dispute resolution falls to the ‘ordinary’ courts of South Africa, the judges presiding over these courts are traditionally generalists.⁹¹⁹ However, several initiatives have been undertaken to allow for environmental legal training,⁹²⁰ which seems to be a step in the right direction for effective implementation and governance of environmental laws in South Africa. What is impressive about the South African governance system in terms of environmental law is that it includes an environmental right and a right to water within its highest and most authoritative piece of legislation, the Constitution (1996), and this status gives these rights an extremely high standing within the country, especially in terms of its governance.

⁹¹⁷ Most notably the *Mazibuko and Others v City of Johannesburg and Others* (CCT 39/09) (2009) ZACC 28; 2010 (3) BCLR 239 (CC) ; 2010 (4) SA 1 (CC) (8 October 2009) case in terms of water law, as dealt with in Chapter 4 of this dissertation.

⁹¹⁸ Kidd MA., (2006), *Greening the Judiciary*, Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad (PER/PELJ), Vol. 3, Page 1.

⁹¹⁹ Kotze LJ. and Paterson A., (2009), *South Africa*, in Kotze LJ. And Paterson A., *The Role of the Judiciary in Environmental Governance: Comparative Perspectives*, Kluwer Law International, Wolters Kluwer International Books, The Netherlands, Page 594.

⁹²⁰ Kotze LJ. and Paterson A., (2009), *South Africa*, in Kotze LJ. And Paterson A., *The Role of the Judiciary in Environmental Governance: Comparative Perspectives*, Kluwer Law International, Wolters Kluwer International Books, The Netherlands, Page 594.

7.6. Governance through Goals and the Way Forward

It has been noted that there exists many long-standing issues with global environmental governance as well as global water governance. Sometimes, there are even issues with the implementation of legal environmental policy at a national level, as the critique in the South African cases of the manner in which environmental cases are dealt with indicates. However, this begs the question as to how exactly implementation and governance of SDG6 and the goals in general can properly and progressively be realised. Biermann and others suggest that the global goals actually feature a built-in governance mechanism and this mechanism should be used in order to implement and achieve the SDGs. It is stated that governance through goals, are indeed exemplified by the SDGs, and it is new and unique for a number of characteristics such as the inclusive goal-setting process which has set targets, the non-binding nature of the goals which allow for some form of flexibility, the reliance on weak institutional arrangements, and the extensive leeway that States enjoy. While the SDGs hold a great potential, their collective success will depend on a number of institutional factors such as the extent to which states formalize their commitments, strengthen related global governance arrangements, translate the global ambitions into national contexts, integrate sectoral policies, and maintain flexibility in governance mechanisms. Research communities also have an important role to play, especially with regard to measuring genuine progress, aligning the goals with existing governance arrangements, and integrating the economic, social, and environmental dimensions.⁹²¹ This seems to be an embrace of the soft-law non-binding nature of the goals, and it seems to be an interpretation that uses the status of the goals as not being a hindrance, but rather an advantage due to the flexibility it provides. While past global governance efforts have relied largely on regulation or market-based approaches and the use of rigid principles, the SDGs promise a novel type of governance that make use of non-legally binding, global goals set by the United Nations member States. The approach of governance through goals is marked by a number of key characteristics, none of which is specific to this type of governance. These characteristics amount to a unique and novel way of steering a distinct type of institutional arrangement in global governance.⁹²²

⁹²¹ Biermann F., Kanie N. and Kim R.E., (2017), Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals, *Current Opinion in Environmental Sustainability*, Vol. 26, Page 26.

⁹²² Kanie N., Bernstein S., Biermann F., Haas P.M., (2017), Introduction: Global Governance Through Goal Setting, in *Governing Through Goals: Sustainable Development Goals as Governance Innovation*, edited by Kanie N. and Biermann F., MIT Press.

However, the issue at hand with this ideology is that the status of the SDGs could in fact prove to be an issue as governments are under no legal obligation to formally transfer the goals into their national legal systems.⁹²³ Also, governance through goals functions through weak institutional arrangements at the intergovernmental level.⁹²⁴ However, Biermann and other believe that the new approach of governance through goals works through global inclusion and comprehensiveness of the global goal-setting process and it provides much leeway to national choices and preferences for governments to determine their own ambitions in implementing the goals.⁹²⁵ It is believed that the success of governance through goals depends on the increasing formalization of commitments, the establishment of clear benchmarks, and the issuance of measurable pledges by governments, all of which may cause embarrassment or loss of face in case of non-compliance.⁹²⁶ Hence, it is this paradigm shift that provides the legal legitimacy to the SDGs as per this manner of thinking. The more commitment to the goals would mean more implementation taking place, which would mean that oversight and reporting initiatives are put into place in order to ensure that the SDGs are actually being properly implemented and that there is progress being made. It seems fair to deduce that if there is more widespread commitment to the SDGs, then indeed there will be governance mechanisms put into place, because countries will not utilise that much effort and that much money in activities that would not yield results or be of no significance. Also, since the goals have built-in targets, governance mechanisms would or should automatically be built around these said targets. Hence, in order to achieve SDG6.1, mechanisms would have to be put into place in order to allow for its realisation, with proper compliance and monitoring mechanisms initiated as well. Thus, these targets have inherent governance mechanisms within it so to speak. Biermann and other are of the view that the strengthening of global governance arrangements by devising effective procedures to track the goals; ensuring effective policy integration in implementation; adapting global ambitions to national circumstances and priorities; and improving the adaptability of governance mechanisms can all go a long way in ensuring that the success of governance through goals is realised. Indeed, a final condition for the successful implementation of the SDGs is the adaptability of the

⁹²³ Biermann F., Kanie N. and Kim R.E., (2017), Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals, *Current Opinion in Environmental Sustainability*, Vol. 26, Page 26.

⁹²⁴ Biermann F., Kanie N. and Kim R.E., (2017), Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals, *Current Opinion in Environmental Sustainability*, Vol. 26, Page 26.

⁹²⁵ Biermann F., Kanie N. and Kim R.E., (2017), Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals, *Current Opinion in Environmental Sustainability*, Vol. 26, Page 26.

⁹²⁶ Young O.R., (2017), Conceptualization: Goal-Setting as a Strategy for Earth System Governance, in *Governing Through Goals: Sustainable Development Goals as Governance Innovation*, edited by Kanie N, Biermann F., MIT Press.

related governance arrangements to deal with social-ecological changes that are likely to take place over the next fifteen years. Governance through goals in this regard will have to be flexible enough to adjust to changing conditions.⁹²⁷ Yet the character of the SDGs as non-binding global aspirations with weak institutional oversight arrangements and high levels of national discretion does not imply an outright negative, pessimistic assessment. Instead, there is potential for a global governance strategy through goals, as represented by the SDGs, to advance public policy and private efforts towards an ambitious sustainability agenda.⁹²⁸ Indeed, this novel way of looking at the implementation and governance of the SDGs seems ambitious, especially because of the hard and fast rule that law is law and anything that is not hard law is not 'real' law. However, one must consider the changing of the times and accept that the issues being faced currently were issues that were not faced even ten to fifteen years ago. Thus, the law must adapt and with it governance too must adapt. The SDGs provide a good platform for this to take place and it places the global community at a point where it has the ability to fast-track and put into motion this new way of thinking in order to achieve goals that are pertinent to human development and sustainability. In essence, the SDGs have at its core the human being and joint environment at heart, whereby it aims to resolve matters that can prolong and ensure human life and sustainability for current and future generation. One must take into consideration that the principles of global environmental governance as a basis can allow for the actual governance of the SDGs to take place, and that the principles of global water governance can allow for the governance of SDG6 to take place. However, the many issues within these spheres could fuel the debate of a centralised environmental agency for the SDGs or an SDG-specific agency only dealing with one particular SDG. This would seem costly and time-consuming to set-up, but the results can ensure actual progressive realisation of the SDGs. For example, if there was a central international agency dealing solely with SDG6, this agency can serve as a point of departure and a point of reference for member States, it can collate the various data given by member States and it can ensure effective reporting by member States. The United Nations as a governing body for and of the SDGs cannot deal with the SDGs alone, as it has many other commitments and issues to deal with as well. If there are SDG-specific agencies created through the auspices of the United Nations, it can ensure that data, updates, issues, progress and implementations are centralised to one agency, and assistance can be sought from one agency. In essence, an approach like

⁹²⁷ Biermann F., Kanie N. and Kim R.E., (2017), *Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals*, *Current Opinion in Environmental Sustainability*, Vol. 26, Page 29.

⁹²⁸ Stevens C. and Kanie N., (2016), *The Transformative Potential of the Sustainable Development Goals (SDGs)*, *International Environmental Agreement* 2016, Vol. 16, Pages 393 – 396.

this can allow for better tracking of SDG6 and can ensure that each State is pulling its weight in terms of its commitments. It can also ensure that SDG6 is progressively being realised. This could also allow for the better development of SDG17, which calls for the strengthening of the global partnership and this could indeed allow for an effective way of governing the SDGs and their separate targets as a whole. Hence, the set targets built within the SDGs provides a good platform for the creation of governance mechanisms in order to achieve those said targets. In essence, the SDGs ambitious goals and targets are indeed worth pursuing, especially since it has the current and future good of mankind at heart.

7.7 Concluding Remarks

It is indeed evident that global environmental governance has an integral role to play in the progressive realisation of the SDGs as a whole. In terms of SDG6, the principles of global water governance must be looked at and adapted for the purposes of the targets the SDG seeks to achieve. The unfortunate reality is that there remain many flaws with the global governance system and the global water governance system, and these flaws will inevitably serve as a hindrance, especially when taking into account the legal nature of the SDGs. It seems somewhat idealistic to infer that the SDGs and SDG6 can be progressively achieved through the current structures, but there has been novel ideas coming through for its proper implementation, especially by way of governance through the goals itself as opined by Biermann. Novel approaches to global environmental governance and global water governance should indeed be sought and this can allow for the international community to come together and decide on the best way to move forward. This should be done because the purposes of the SDGs are inherently good and are beneficial to the sustenance of humankind, as well as the earth itself. Thus, existing governance structures can be adapted to move with the times and to combat current issues. As stated by DiMento and Hickman, although idealistic, it is important for policymakers, academics, the media and other leaders to act to change the understanding that the regional seas are something inexhaustible, exotic, out there, unknown, controlled by others.⁹²⁹ This is indeed important as the perception surrounding the abundance of water and water reserves must change. As a result, better awareness can ensure

⁹²⁹ DiMento J.F.C. and Hickman A.J., (2012), Environmental Governance of the Great Seas - Law and Effect, New Horizons in Environmental and Energy Law, Edward Elgar Publishing UK, Page 181.

better mobilization of ideas and mechanisms in order to allow for the efficient management of water resources. This shares the same sentiments of global co-operation in order to achieve these SDGs. Global participation and co-operation fundamentally allows for the international community to come together in order to invent new ways to overcome these current issues. To have the seas recover, that understanding must be one quite different: a resource owned in common, by communities, something we can manage, something shared by the people of the region, something we steward and that can provide for sustainable natural and human life. International law can help to channel this change, in promoting public participation, sustainable development, and in articulating the responsibilities of government.⁹³⁰ Indeed, governance remains the core component of the proper functioning and implementation of any law, and since this is the case, it is pertinent that global governance structures accommodate for the implementation of the SDGs, because the purpose and achievement of these goals carry a fair amount of weight in overall human development and sustainability. Therefore, realising these goals would require a conforming of current governance structures to facilitate the current global environmental needs, especially when it comes to water access, management and conservation. In essence, the idealistic approach would be for each SDG to have a designated global base, which can allow for better coherency, transparency and tracking. Indeed, this will require a lot of co-ordinated effort and resources however sight of the bigger picture should not be lost. A water governance institution solely focussed on SDG6 and the achievement of the SDG6 targets can go a long way in ensuring that the targets are given due attention and are met timeously. Global water governance is at a stage where evolution is required to keep up with the increase in demand of water and the decrease in supply of water. If this trend continues, the global water crisis will be here all too soon. The best way to ensure that this does not happen is to allow for co-ordinated efforts in management and conservation of water, through new governance structures; structures that take the goals and targets of SDG6 to heart.

⁹³⁰ DiMento J.F.C. and Hickman A.J., (2012), *Environmental Governance of the Great Seas - Law and Effect*, New Horizons in Environmental and Energy Law, Edward Elgar Publishing UK, Page 181.

CHAPTER EIGHT – CONCLUSION AND RECOMMENDATIONS

Throughout human history, in any great endeavour requiring the common effort of many nations and men and women everywhere, we have learned - it is only through seriousness of purpose and persistence that we ultimately carry the day. We might liken it to riding a bicycle. You stay upright and move forward so long as you keep up the momentum.⁹³¹

8.1. General

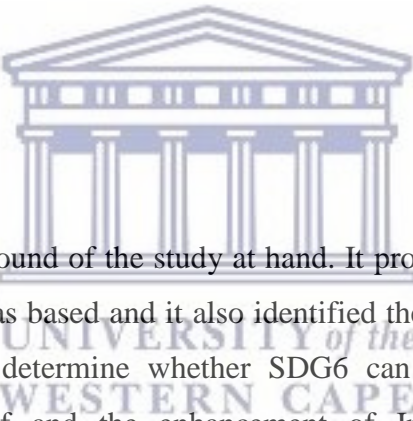
Water resource management remains one of the most critical areas in need of legal reform today. It is evident that the world is on the verge of a water crisis, which could lead to even more inter-relational complexities between nations if the world eventually runs out of usable water for human needs. Water is at the very core of sustainable development, critical for a thriving people, planet and prosperity. Since water is essential for human life, it seems to be convention that human beings will do everything in their power to conserve and preserve this natural resource. Unfortunately, a myriad of factors are affecting the global water situation. One of the main issues is how bureaucratic water relations have become. Since water is essential to life, more and more role-players are moving towards self-preservation, instead of the common-good approach that can be beneficial to all instead of a select few. Factors such as the non-recognition of water as an international human right, the unwillingness from nations to act as a global coalition on water-related matters and the nonchalant attitude of governments are driving society into increased water-scarcity situations. This is further compounded by the fact that there still exist issues such as non-access to water, pollution of water and scarcity of water resources itself. The combination of natural issues as well as management issues has led society into this well of uncertainty when it comes to water. The emergence of SDG6 has the ability to shine some much needed light on a somewhat bleak picture. The SDGs provides for a ‘light-at-the-end-of-the-tunnel,’ which gives nations and role-players something to work towards. The fact that SDG6 is not legally binding does pose

⁹³¹ Ki Moon, B. (2015), Building a Better Future for All: Selected Speeches of UN SG Ban Ki-moon 2007-2012, Published by the United Nations (New York), available at https://issuu.com/unpublications/docs/9789210559959_issuu, (last accessed 10/04/18).

many implementation and regulation issues, but the purpose of the goals, as well as the common-good which it intends to bring about should be given some weight. As stated by Spijkers, the underlying idea is that the concrete political commitments relating to water contained in the SDGs, and SDG6 in particular, can add substantive flesh to the otherwise abstract skeleton of general international water law. Hence, SDG6 can move from a purely political commitment to a legally relevant obligation if it can be attached to current international freshwater law, thus elevating its status in the process as well.⁹³² Indeed, the SDGs are at best soft-law obligations that have normative consequences attached, but an attachment of these targets to current hard-law water principles can allow for more legal legitimacy when it comes to the goals and can allow for better action to take place.

8.2. Chapter Recommendations

8.2.1. Introduction



Chapter one set out the background of the study at hand. It provided the actual context upon which the research question was based and it also identified the aims and significance of the study. The study set out to determine whether SDG6 can promote the furtherance of sustainable development itself and the enhancement of International Freshwater Law pursuant to the promotion of access to quality water, under the auspices of sustainable development.

8.2.2. Issues Surrounding Water

The main issue regarding water itself is the actual access to and the quality of water that human beings enjoy. SDG6 sets out to achieve universal and equitable access to water for all, as well as to improve water quality and allow for better water management. However, it is

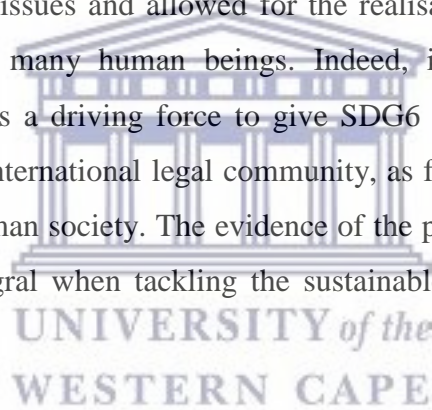
⁹³² Spijkers O., (2016), The Cross-fertilization between the Sustainable Development Goals and International Water Law, *Review of European, Comparative and International Environmental Law (RECIEL)*, Vol. 25, Issue No. 1, Page 39.

important to note why this goal was established in the first place. Chapter two of this composition dealt with the various issues currently found in international freshwater law, namely, access to water, pollution and quality of water and the scarcity of water. An investigation was done into how these issues have emerged and how these issues affect water access and quality, essential for sustainable human development. This chapter painted a dire picture of the current global water situation. More than a billion people lack access to safe drinking water. Two and a half billion people live without access to adequate sanitation systems necessary to reduce exposure to water-related diseases. Indeed, pollution of water itself is a major factor and must be addressed. Pollution of river bodies has become a major problem that is becoming critical because of inadequacy or non-existence of surface water quality protection measures and sanitation. Lagoons, rivers and streams are sinks for wastes. Wastes are most often discharged into the receiving water bodies with little or no regard to their assimilative capacities. The discharge of raw sewage, garbage, as well as oil spills are threats to the diluting capabilities of the lagoons and rivers in the major cities.⁹³³ On a positive note, by achieving SDG6, these issues surrounding water can gradually disappear as well. SDG6 has the ability to ensure that matters of access and pollution can be curbed. For instance, if we take into consideration the predecessor of the SDGs, it is noted that the MDGs showed good signs of gradual progress. In terms of the objectives of the MDGs, the results were that the world had met the target of halving the proportion of people without access to improved sources of water, five years ahead of its intended schedule and that between the years 1990 and 2015 2.6 billion people gained access to improved drinking water sources.⁹³⁴ This is good and shows that progress is possible if these issues are brought to the attention of the international community and given significance on the international agenda. As per the progress report on SDG6, 71 per cent of the global population (5.2 billion people) used a safely managed drinking water service; that is, one located on premises, available when needed and free from contamination. Also, estimates for safely managed drinking water were available for 96 countries (representing 35 per cent of the global population), and for four out of eight SDG regions. One out of three people using safely managed drinking water services (1.9 billion) lived in rural areas and eight out of ten people (5.8 billion) used improved sources with water available when needed. Three quarters of the global population (5.4 billion) used improved sources located on premises and three out of four people (5.4 billion)

⁹³³ Halder J.M. and Islam M.N., (2015), Water Pollution and its Impact on the Human Health, Journal of Environment and Human, Vol. 2, No. 1, Page 36 – 37.

⁹³⁴ MDG 7.C Outcomes, <http://www.un.org/millenniumgoals/enviro.html>, (last accessed 19/02/18).

used improved sources free from contamination.⁹³⁵ However, 89 per cent of the global population (6.5 billion people) used at least a basic service; that is, an improved source within 30 minutes' round trip to collect water. 844 million people still lacked even a basic drinking water service, 263 million people spent over 30 minutes per round trip to collect water from an improved source (constituting a limited drinking water service) and 159 million people still collected drinking water directly from surface water sources, 58% lived in sub-Saharan Africa.⁹³⁶ These statistics are an indicator of the successes that can be brought about as a result of the emergence of the SDGs. This is because the SDGs have essentially created global awareness to a global issue. It has put into motion progressive steps in achieving progressive targets the world over. The increase in access to water is a clear result of the good that can come out of the SDGs when all parties take the time and effort to firstly recognise the importance of the goals, and then implement steps in order to achieve the targets of the goals. Even though there are still problems, the emergence of SDG6 has allowed for a gradual progression of water issues and allowed for the realisation of access to safe water, which was not a reality to many human beings. Indeed, it is recommended that this progression should be seen as a driving force to give SDG6 (and SDGs in general) more weight and relevance in the international legal community, as fulfilling the SDG targets will have a positive impact on human society. The evidence of the progression through the SDGs itself should be seen as integral when tackling the sustainable development agenda going forward.



8.2.3. International Freshwater Law

The aim of the research was to determine how SDG6 promotes the furtherance of sustainable development and the enhancement of International Freshwater Law. In order to determine whether or not SDG6 plays a role, it was important to deal with the various facets of water law on an international scale. In chapter three of this composition, I dealt with the various International Conventions and Treaties regulating International Freshwater Law currently.

⁹³⁵ World Health Organisation., (2017), Progress on Drinking Water, Sanitation and Hygiene: Updates and SDG Baselines, available at <http://www.who.int/mediacentre/news/releases/2017/launch-version-report-jmp-water-sanitation-hygiene.pdf>, (last accessed 19/02/18).

⁹³⁶ World Health Organisation., (2017), Progress on Drinking Water, Sanitation and Hygiene: Updates and SDG Baselines, available at <http://www.who.int/mediacentre/news/releases/2017/launch-version-report-jmp-water-sanitation-hygiene.pdf>, (last accessed 19/02/18).

Particular emphasis was placed on the 1997 United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, as this is considered the main instrument for international watercourses. The chapter allowed for an idea of how water is regulated on an international scale. This chapter also dealt with the relationship between international freshwater law and sustainable development, as well as its potential link in terms of access to quality water. It is indeed clear that international treaties and conventions can play a major role in the development of water law. However, the issue revolves around the binding nature of the said treaties or conventions. Countries are not forced to be a party to an international agreement and this is where most of the issues arise. Water law has been debated upon for decades, and the emergence of SDG6 is another addition to this ever-expanding debate. The reality remains that non-binding agreements remain just that, non-binding. Since SDG6 in itself is not legally binding as well, it somewhat merely adds to the list of literature on this matter. The best thing to do is to look at a different approach, namely, a ‘common-good’ approach. This recommendation ensures that Nations must start to realise that natural resources are essential to life. Once a natural resource becomes diminished, efforts should be made to ensure that the remainder of the natural resource is properly used, managed and distributed for the greater good and survival of all of humanity. This ensures a coming together of States, which in turn will allow for better global relations and better environmental conservation. This sounds idealistic, however, it should be noted that expanding and increasing awareness and dialogue on current water law policies and its connection to or with SDG6 in particular can open the gateway for the expansion, evolution and development of international freshwater law doctrine that has been in existence for far too long. This evolution is essential, as law must develop with the ever-changing times that humanity is facing. Hence, it can be said that SDG6 adds value to the global water management and regulations agenda as it contains targets that are admirable in ensuring proper access to water for all. In essence, it can be said that SDG6 is based on many of the provisions within these international agreements, and it brings to the fore issues that have been part of the global water agenda for decades. It contributes to international freshwater law by ensuring set targets that must be met in order to allow for access of water for all as well as the conservation of water for all, while also ensuring better co-operation between States when dealing with water issues for all. Thus, this contribution provided by SDG6 has led Spijkers to recommend a cross-fertilization of current international freshwater law and

SDG6 in order to allow for better legal legitimacy,⁹³⁷ and this deduction is indeed correct. Spijkers makes an interesting point and it is indeed worth noting that this way of attaching SDG6 to current existing hard-law water principles can properly legitimise the SDGs from a legal standpoint, or at best, try to do so. Therefore, it is recommended that SDG6 is viewed within the framework of current international water law principles, as SDG6 has allowed for the creation of awareness of the current global water issue being faced by humankind, and has set out targets in order to properly manage this issue. It can be viewed that SDG6 does indeed enhance international freshwater law by way of sustainable development, as it has allowed for a resurgence of these policies to be viewed within the global context.

8.2.4. Explicit International Recognition of Water as a Human Right

Since water has been afforded so much international attention, chapter four explored the prevalence of classifying water as a human right. A link with various international treaties and conventions was made in order to establish the importance of water to mankind itself. There have been various calls for ensuring that water receives its due status, and this chapter explored the progression of the relevance and importance of water on the international scale. Since water is integral to the survival of man, it was indeed warranted to determine whether this necessity is part of our core necessity of basic human rights. Some parts of the SDG on water appear to encourage all states to acknowledge a universal human right of access to water of sufficient quality and quantity. International water law does not approach the management of trans-boundary waters from such a human rights perspective, although it does emphasise the importance of vital human needs. What the SDG process could do is to bring the human rights discourse and international water law closer together.⁹³⁸ It would seem that the recognition of water as a human right would be elementary, since water is critical to our existence as human beings. The international attention garnered by a ‘right’ to quality and accessible water has indeed been significant, and it is therefore imperative that this ‘right’ is progressively realized in order to allow for the progressive sustainable development to

⁹³⁷ Spijkers O., (2016), The Cross-fertilization between the Sustainable Development Goals and International Water Law, *Review of European, Comparative and International Environmental Law (RECIEL)*, Vol. 25, Issue No. 1, Page 39.

⁹³⁸ Spijkers, O., (2015), The Sustainable Development Goals as Catalyst for the Sustainable Management of Water Resources, *Journal of Water Law*, Vol. 24, Page 120.

gradually occur. Indeed, SDG6 bolsters the recognition of this right to water through its calls for universal human access to water, as well as through its recognition of good quality water and effective water management and conservation. The quality and quantity of water must be of proper standards to allow for human beings to be able to sustain themselves and the land around them. This ‘proper’ standard entails water that is fit for human consumption and productivity. A ‘right’ to access water is not truly fulfilled if that water is of sub-standard quality or is of too little in quantity. The progressive realization of the importance of water on a global scale must have an international effect if a ‘right’ is ever to be recognized. The emergence of SDG6 brings this ‘right’ debate to the forefront once more. Since water is recognized as a global goal, its importance is again highlighted. This seems to follow a continued trend that has been growing over the decades. There is no doubt that water is important, however, the continued non-recognition of water as a human right has converse effects on achieving the objectives of the goal itself. Without water, there can be no human life, thus water should be regarded as a universal human right. By elevating the status of water, effectively, there will be more recognition and serious attention given to water-related matters on a global scale. This recognition could even allow for better collaborative efforts to be made and for all nations to be party to water-related agreements so that this precious resource can be sustained and properly maintained. Thus, it is recommended that in light of the targets of SDG6 and in light of the universal importance of water to human kind, the dialogue regarding the explicit recognition of water as a universal human right must be re-opened and the acknowledgement of water as an essential human right must be recognized.

8.2.5. Sustainable Development and Water

Sustainable development is a concept synonymous with environmental law and it has been a concept around which many international treaties, agreements, laws and obligations have dealing with the environment has been formed. In Chapter five of this composition, a link was made between sustainable development and water law and how SDG6 can allow for sustainable water management to occur. Sustainable development focuses on using the earth’s natural resources in a manner that ensures use not only for the current generation, but for the future generations as well. It was found that sustainable development as a concept and a principle is indeed essential when it comes to international water law, water access, water

use and water sustainability. Sustainable water management can ensure that mechanisms are implemented that can allow for water to be used and conserved in a manner that will be beneficial to all of humankind, for generations to come. Ensuring sustainability in water essentially ensures life and growth itself, mainly due to the important nature of water for human existence. Therefore, it can be concluded that SDG6 will indeed be beneficial to the international water agenda and can indeed promote the furtherance of sustainable development and sustainable water management. This is because SDG6 expressly calls for the increase in water-use efficiency and sustainable withdrawals and supply of freshwater to address water scarcity issues, as well as the implementation of integrated water resources management at all levels. This will ensure that sustainable mechanisms for water conservation are put in place which can therefore allow for better sustainable development in relation to water. In addition to this, SDG6 calls for integrated water resource management as well as for the protection of water-related ecosystems, mountains, forests, wetlands, rivers, aquifers and lakes, which indicates the concern shown for future generations and for ensuring their equitable use of these precious natural resources. Therefore, it is recommended that SDG6 and the SDGs in general be linked with the overall concept of sustainable development, especially since the SDGs aim to ensure a progressively sustainable future for all. SDG6 is based upon principles of sustainable development, and the attachment of SDG6 to the sustainable development concept can go a long way in crystallising SDG6 in international freshwater law. The targets of SDG6 have sustainable development at heart and therefore the linkage must indeed be made in order for there to be a sustainable future in relation to water access and water conservation.

8.2.6. The Use of Sustainable Development Goals to Further the Water Agenda

Chapter six dealt with the SDGs as well as the MDGs. The aim of this chapter was to introduce the reader to the aims and objectives of the MDGs and SDGs in general and especially focus on those pertaining to water. The MDGs, now defunct, and the SDGs were explored and the main objectives of these goals as a whole were detailed, especially in relation to water. The chapter also explored the impact that the emergence of these SDGs has had in relation to overall sustainable development and International Freshwater Law. From the offset, it must be noted that the SDGs are not legally binding as a conventional instrument

of law. At best, it can be seen as ‘soft law,’ which again causes issues of implementation, enforcement and consequences. Hence, it would be in good stead to ensure global acceptance of water as a human right, as this will allow for SDG6 to have more weight since it will then deal with a ‘human rights’ issue. This will in turn solidify the legal status of water in the global context and will leave no room for ambiguity. The SDGs are an idealistic approach that is based on human values and needs to ensure that the ‘common-good’ is achieved. Idealistic approaches often succumb to the realistic situations of society. The crux of the matter is that SDG6 is a vehicle to address problems plaguing water on a global scale. However, the issue remains the actual status of the SDGs. As shown before, 71 per cent of the global population (5.2 billion people) used a safely managed drinking water service and three quarters of the global population (5.4 billion) used improved water sources located on premises and three out of four people (5.4 billion) used improved sources free from contamination.⁹³⁹ This proof shows the capability and power that a united global community can have. It shows that averting water-related crises is possible if the collective is ready to band together. The SDG process can be used to encourage the evolution towards a ‘greener’ or more sustainable international water law.⁹⁴⁰ If it were not for SDG6 highlighting these issues and setting global goals related to water, we might not have had these successes in this span of time. SDG6 provides a critical juncture in current water law, as it has highlighted the problems plaguing humanity in relation to water, and has provided us with guidelines and timelines as to how to address these problems. This shows the value and importance of SDG6 and the SDGs as a whole. It has allowed for humanity to move forward in relation to water-issues and it should be treated with more respect in the international legal fraternity. In addition, SDG6 does have the power to further sustainable development and international freshwater law. SDG6 has acted as a catalyst that has speedily brought water-issues to the fore and it has allowed for these matters to be addressed in a manner that is pursuant to the principles of sustainable development. It is centred upon the principles of access and quality and ensures that water is to be managed not only for the present generation, but for future generations as well. SDG6 can be viewed as human-centric with goals centred on the common-good of all of humanity. Indeed, the importance of water is paramount, and SDG6 has gone a long way in ensuring that this importance is properly recognised, as water is a

⁹³⁹ World Health Organisation., (2017), Progress on Drinking Water, Sanitation and Hygiene: Updates and SDG Baselines, available at <http://www.who.int/mediacentre/news/releases/2017/launch-version-report-jmp-water-sanitation-hygiene.pdf>, (last accessed 20/03/18).

⁹⁴⁰ Spijkers, O., (2015), The Sustainable Development Goals as Catalyst for the Sustainable Management of Water Resources, *Journal of Water Law*, Vol. 24, Page 125.

source of life for all of humanity. As per Spijker's analysis, he mentions key attributes that SDG6 brings to the international water law debate. It is mentioned that the SDG process encourages the sustainable use of freshwater resources. Thus, it is recommended for all states to unambiguously embrace a 'sustainable' interpretation of water law's fundamental principles. It has been shown how the cornerstone of international water law – the principle of equitable and reasonable use of water resources – can be interpreted in a more sustainable development friendly way. Also, the SDG process makes ample references to the need to protect ecosystems, including freshwater ecosystems. It has been shown how international water law can provide clarity as to the exact meaning of 'ecosystems', and the rights and obligations that follow from the adoption of a so-called 'ecosystems approach' to international water law.⁹⁴¹ SDG6 is an admirable goal with targets that are beneficial to the existence and development of mankind, and it aims at ensuring a favourable outcome for all of humankind. SDG6 has brought to the fore the global water agenda once more, and it is indeed a necessary step in the evolution of international water laws and policy. It has provided a new stepping-stone for water-related matters to be dealt with, and has opened up new targets that are necessary for human existence, hence, it can only further the international agenda on water law and further the fight for ensuring that water is protected and managed in a sustainable manner. Thus, the recommendation is for SDG6 to be integrated into the international freshwater law agenda so that it can add more value to this sphere of law, especially since it is aimed at addressing issues that are current to humankind today. Indeed, SDG6 allows for current co-ordination of water issues and provides for an ideal platform that integrates aspects of international law, human rights law, international freshwater law and sustainable development. This platform further re-iterates the fact that these aspects cannot be viewed in isolation when it comes to water and water management, and thus SDG6 has provided an opportune gateway to allow for better goal-orientated water resource management and conservation through its integrative nature.

⁹⁴¹ Spijkers, O., (2015), The Sustainable Development Goals as Catalyst for the Sustainable Management of Water Resources, *Journal of Water Law*, Vol. 24, Page 125.

8.2.7. Water Governance and SDG6

An important facet of effective implementation of legal policy is good governance. When it comes to matters regarding water access, international water governance also plays an important role. Chapter seven dealt with water governance and analysed how effective water governance can play an important role in ensuring that the issues mentioned in chapter four can be better managed and controlled. This chapter dealt with the issues surrounding current global water governance and it looked at how these issues can be dealt with. The chapter then focused on how global water governance can theoretically be a solution to ensuring effective water access, management and distribution. Governance is linked to enforcement and implementation hence SDG 17 was also explained and linked here. SDG 17 deals with revitalizing the global partnership for sustainable development, by revitalizing partnerships between governments, the private sector and civil society.⁹⁴² Thus, since international water governance requires co-operation on a global scale, this particular SDG must also be looked at. It is noted that the SDG process emphasises the importance of public participation in water governance at all levels, be it local, national or even global.⁹⁴³ Policies on effective planning, investment and operation of access to water require accurate data based on precise indicators and monitoring processes that generate and analyse gender and geographically disaggregated data on service performance. This includes accurate data on levels of access, quality, reliability, the levels of investment and operating costs and cost recovery, conditions of water and sanitation infrastructure, and economic status of water service users analysed to evaluate measures taken and adjust planning.⁹⁴⁴ The overall success of SDG6 and SDGs in general, is dependent upon global cooperation. SDG6 requires that every Nation be on the same page when it comes to water-management issues and that a transparent process is followed. SDG6 can only be truly realised if governance structures dealing with water are re-looked at and are standardised. The advantage of SDG6 and the goals in general, is that it provides a common checklist for all of humanity, not only for specific countries. This ensures that progression occurs together and that everyone can play a part in the achievement of the global goals. This inter-dependence allows for stronger ties to be built between the various role-players within

⁹⁴² <http://www.un.org/sustainabledevelopment/globalpartnerships/>, (last accessed 19/02/18).

⁹⁴³ Spijkers, O., (2015), The Sustainable Development Goals as Catalyst for the Sustainable Management of Water Resources, *Journal of Water Law*, Vol. 24, Page 125.

⁹⁴⁴ Budapest Water Summit, (2016), Policy Recommendations for the Implementation of the SDG-6 Areas, available at https://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf, (last accessed 3/03/18).

the global cause. It enhances political relations as well as inter-personal relations, and is a driving vehicle for good global governance on the larger scale. Ensuring that nations work together to achieve a common purpose can only enhance the manner in which those nations deal with each other. The common goals highlight the fact that we are a common humanity, in need of the same common goals, in order to ensure our common human survival. It is imperative that the global community acts as one, in order to achieve the goals, and in order to ensure one common front for achieving sustainable development. It is important to keep in mind that water is required for food production as well, and food production requires energy. Good governance can assist in ensuring that this nexus is properly managed and attained. Water, energy and food are integral elements of sustainable development, and have many interconnections and interdependencies within each other. A 50% increase in energy consumption by 2035 and a 60% more demand for food by 2050, respectively, are estimated. The combined effect of these changes can lead to a 55% increase in global water demand by 2050. Water infrastructure has synergetic impacts, such as producing hydropower and storing water for irrigation and urban uses, contributes to climate change adaptation and coping with water scarcity yet potentially adverse impacts on downstream areas, ecosystems and food systems, and on communities that have to resettle.⁹⁴⁵ The water, energy and food nexus offers the very useful possibility for a coherent and systemic approach to natural resources management for the attainment of the SDGs. The broad implications of food loss and waste on the water, energy, and climate change dimensions provide a very good example on how the nexus approach can help society recognize the broad picture and address multiple facets of the same problems effectively.⁹⁴⁶ Thus, the management and conservation of water is essential to life itself. It is therefore recommended that global water governance must evolve in order to keep up with the increase in demand of water and the decrease in supply of water. A water governance institution solely focussed on SDG6 and the achievement of the SDG6 targets can go a long way in ensuring that the targets are given due attention and are met timeously. This has the potential to allow for co-ordinated efforts in management and conservation of water, through new governance structures that will have the goals and targets of SDG6 at its core. Thus, it is of utmost importance that co-ordinated efforts are made in line with the goals of SDG6, as this can ensure that the ‘common-good’ is progressively achieved.

⁹⁴⁵ Budapest Water Summit (2016), Policy Recommendations for the Implementation of the SDG-6 Areas, available at https://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf, (last accessed 3/03/18).

⁹⁴⁶ Budapest Water Summit (2016), Policy Recommendations for the Implementation of the SDG-6 Areas, available at https://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf, (last accessed 3/03/18).

The enforcement of better and updated governance structures, mechanisms and protocols in relation to water can go a long way in ensuring that water-related matters are firstly properly brought to the fore and secondly properly managed and dealt with. A good water governance policy is indeed essential in ensuring the enforcement and progressive realisation of SDG6 itself.

8.3. Recommendations

Drinking water is too important to remain within the confines of water policies. It needs to be a high priority in allocation of effort and resources in ways that recognise the human rights to water.⁹⁴⁷ The study recommends that by elevating the status of water first, automatically we will have more attention and prevalence placed on water-related matters. Hence, applying a ‘human rights’ based approach to access safe drinking water will ensure that overall legal importance is then afforded to water itself. Universal, safe and reliable access to drinking water is a key objective of SDG6 and of the human right to drinking water. The study further recommends for SDG6 to be integrated into the international freshwater law agenda so that it can add more value to this sphere of law, especially since it is aimed at addressing issues that are current to humankind today. Thus, an attachment of these soft-law SDG principles to hard-law water policies can further legitimise and strengthen the force of SDG6 itself, allowing for actual enforcement and adherence to the policy itself. Also, since SDG6 is based upon principles of sustainable development, this study recommends that the targets of SDG6 must have sustainable development at heart and thus a linkage must indeed be made between SDG6 and sustainable development, in order for there to be a sustainable future in relation to water access and water conservation. The study also recommends that national governments must ensure that all necessary efforts are made to fulfil the targets of SDG6. Thus, it is of utmost importance that co-ordinated efforts are made in line with the goals of SDG6, as this can ensure that the ‘common-good’ is progressively achieved. This requires increased efforts both in terms of investments and implementation. National governments should develop human rights based national roadmaps to achieve these, incorporating the normative and

⁹⁴⁷ Budapest Water Summit (2016), Policy Recommendations for the Implementation of the SDG-6 Areas, available at https://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf, (last accessed 3/03/18).

legislative framework at national levels.⁹⁴⁸ National governments must also ensure that policy and regulations are properly updated and enforced in line with the goals and targets of SDG6 itself. SDG6 has provided an ideal platform in ensuring that current water issues are brought to the fore and it is up to governments to align their policies in order to combat the water-related issues that is plaguing mankind. This can then further enhance the global agenda in relation to water, and it can allow for the development of international water governance policies and mechanisms to be created and implemented. This will then ensure that co-operation between nations take place when it comes to water-related matters and it can also allow for some form of transparency and coherence in relation to water policy. Good governance structures in relation to water will indeed allow for SDG6 to have more international legal standing and for proper attention to be given to water-related issues, instead of merely just identifying issues and not actually implementing strategies for the alleviation of those said issues. Therefore, a good water governance policy is indeed essential in ensuring the enforcement and progressive realisation of SDG6 itself.



8.4. Concluding Remarks

SDG6 plays a vital role in the furtherance of sustainable development and international freshwater law. It plays an important role in ensuring access to quality water under the auspices of sustainable development itself. Since the targets of SDG6 deal directly with access, quality, management and cooperation, it truly encompasses all elements of international freshwater law. It highlights the current issues surrounding water, which have been highlighted on previous occasions. What it does differently is the set of targets it aims to achieve, and the time-frame within which these targets are to be achieved. This provides a purpose to ensure that the goal itself is realised, within a reasonable period, so that the benefits can be enjoyed by all. This also allows for better management practices and policies, which further ensures proper sustainable development to take place. The management and conservation of current water resources will be beneficial for the generations to come, as effective planning and policies will ensure the proper distribution of water for them as well. It

⁹⁴⁸ Budapest Water Summit (2016), Policy Recommendations for the Implementation of the SDG-6 Areas, available at https://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf, (last accessed 3/03/18).

is recommended that water issues be placed highly on the international agenda and that SDG6 becomes the forefront of water governance and policy. SDG6 has the potential to create a water-law network as it links to both international freshwater law and sustainable development. This indeed has the potential to create a designated co-ordinated effort to manage the impending global water crisis. This can only happen once the status of the goals is changed to hold more international legal weight and prominence. Proper enforcement and consequences must be implemented in order to ensure true cooperation. SDG6 is definitely an accelerant for the global water agenda. It comprises of goals and targets that is geared towards the common-good of humanity at large. Water is the vital natural resource that forms the essential platform of all dimensions of sustainable development, including ecosystem services. Healthy freshwater ecosystems are global reserves for life on earth.⁹⁴⁹ Without integrated management of land, water and air, which in themselves encompass energy and food, none of the objectives of the 2030 Agenda can be accomplished. SDG6 contains idealistic principles for an idealistic societal-structure that must be given a chance to bloom. Its core values are centred on the longevity of human life, by providing sustenance through water. With this as its bedrock, surely SDG6 can go a long way in ensuring better water policy, practices, management and access. SDG6 allows for an opportunity to re-visit international water law and policy, to enhance said policy and to provide a uniform agenda for the world to follow in relation to water matter. It provides transparency that has so desperately been lacking. It provides uniformity that is so much needed in the political agenda. Most of all, it provides a platform to address so many of water-related issues that keeps on plaguing humanity, and will continue to plague based on the scarcity of this precious resource. SDG6 can indeed further the discourse on international water law and it can do so pursuant to sustainable development. Surely, SDG6 can be a revival for the international water agenda. Surely, SDG6 must be given its proper due and precedence, in the on-going battle for equal access of water for all of humanity. The simple and profound equation is indeed this: Water is life.⁹⁵⁰

Word Count: 95 900

⁹⁴⁹ Budapest Water Summit (2016), Policy Recommendations for the Implementation of the SDG-6 Areas, available at https://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf, (last accessed 3/03/18).

⁹⁵⁰ Lake O.O., (2010), Uprisings for the Earth: Reconnecting Culture with Nature, Ashland, OR: White Cloud Press, Page 1.

BIBLIOGRAPHY

Books

1. Aggarwal-Khan S., (2011), *The Policy Process in International Environmental Governance*, Palgrave Macmillan Publishing.
2. Anand R., (2004), *International Environmental Justice: A North-South Dimension*, Burlington Vermont, Ashgate Publishing.
3. Anderson D. and Grove R., ed., (1984), *Conservation in Africa: People, Policies and Practice*, Cambridge, UK: Cambridge University Press.
4. Anton D.K. and Shelton D.L., (2011), *Environmental Protection and Human Rights*, Cambridge University Press.
5. Barnett M. and Finnemore M., (2004), *Rules for the World: International Organizations in Global Politics*, Ithaca, Cornell University Press.
6. Baslar K., (1998), *The Concept of the Common Heritage of Mankind in International Law*, The Hague: Martinus Nijhoff Publishers.
7. Beyerlin U. and Marauhn T., (2011), *International Environmental Law*, Hart Publishing, Oxford.
8. Biermann F. and Bauer S., (2004), *A World Environment Organization: Solution or Threat for Effective International Environmental Governance?* London, Ashgate.
9. Birnie P.W. and Boyle A.E., (2002), *International Law and the Environment*, 2nd ed., Oxford University Press.
10. Bodin J., (1992), *On Sovereignty: Four Chapters from the Six Books of the Commonwealth*, edited and trans.by Julian H. Franklin, Cambridge: Cambridge University Press.
11. Boyle A. and Freestone D., (1999), *International Law and Sustainable Development: Past Achievements and Future Challenges*, Oxford: Oxford University Press.
12. Cairncross S, Hardoy J E, Satterthwaite D., (1990), *The Poor Die Young: Housing and Health in the Third World*, London, Earthscan Publishing.
13. Carter N., (2007), *The Politics of the Environment*, Cambridge, Cambridge University Press.
14. Cassese A., (2005), *International Law*, 2nd ed., Oxford University Press, Oxford.

15. Chaisse J., (2017), *Charting the Water Regulatory Future – Issues, Challenges and Directions*, Edward Elgar Publishing.
16. Clapham A., (2012), *Brierly's Law of Nations: An Introduction to the Role of International Law in International Relations*, 7th ed., Oxford University Press.
17. Clapp J. and Dauvergne P., (2005), *Paths to a Green World: The Political Economy of the Global Environment*, Cambridge, Mass, MIT Press.
18. Conca K., (2005), *Governing Water: Contentious Transnational Politics and Global Institution Building*, MIT Press, Cambridge, Massachusetts, USA.
19. Cordonier Segger M.C. and Khalfan A., (2004), *Sustainable Development Law: Principles, Practices and Prospects*, Oxford: Oxford University Press.
20. Cullet P., (2003), *Differential Treatment in International Environmental Law*, Ashgate Publishing.
21. De Chazournes L.B., Leb C. and Tignino M., (2013), *International Law and Freshwater: The Multiple Challenges*, New Horizons in Environmental and Energy Law Series, Edward Elgar Publishing UK.
22. DiMento J.F.C. and Hickman A.J., (2012), *Environmental Governance of the Great Seas, Law and Effect*, New Horizons in Environmental and Energy Law, Edward Elgar Publishing, United Kingdom.
23. Dupuy P.M. and Vinuales J.E., (2015), *International Environmental Law*, Cambridge University Press.
24. Earle A *et al*, (2013), *Transboundary Water Management: Principles and Practice*, Earthscan Publications Ltd, Routledge.
25. Easterbrook G., (1995), *A Moment on the Earth: The Coming Age of Environmental Optimism*.
26. Ebbesson J., (2009), *Environmental Law and Justice in Context*, Cambridge: Cambridge University Press.
27. Fitzmaurice M., Ong DM., and Merkouris P., (2010), *Research Handbook on International Environmental Law*, Edward Elgar Publishing.
28. French D. and Kotze L., (2018), *Sustainable Development Goals: Law, Theory and Implementation*, Edward Elgar Publishing, United Kingdom.
29. French D., (2005), *International Law and Policy of Sustainable Development*, Manchester, Manchester University Press.
30. French D., (2010), *The Global Order, Global Justice and Sustainable Development*, Leiden, Martinius Nijhoff Publishers.

31. Friedrich J., (2013), *International Environmental Law Soft Law: The Functions and Limits of Nonbinding Instruments in International Environmental Governance and Law*, Springer Publishing.
32. Garretson A.H., Hayton R.D. and Olmstead C.J., eds., (1969), *The Law of International Drainage Basins*, Oceana New York.
33. Glazewski J., (2005), *Environmental Law in South Africa*, 2nd Edition, Durban, LexisNexis Butterworths.
34. Gleick P.H., (1993), *Water in Crisis: A Guide to the World's Freshwater Resources*, Oxford University Press.
35. Harvey D., (2005), *A Brief History of Neoliberalism*, Oxford, Oxford University Press.
36. Higgins R., (1994), *Problems and Processes: International Law and How We Use It*, Oxford University Press, Oxford.
37. Hoekstra A.Y., and Chapagain A.K., (2008), *Globalization of Water: Sharing the Planet's Freshwater Resources*, Blackwell Publishing, Oxford, UK.
38. Kanie N. and Biermann F., eds., (2017), *Governing Through Goals: Sustainable Development Goals as Governance Innovation*, MIT Press.
39. Kidd M., (2011), *Environmental Law*, 2nd ed., Juta and Co Ltd, Cape Town.
40. Kotze L.J. And Paterson A., (2009), *The Role of the Judiciary in Environmental Governance: Comparative Perspectives*, Kluwer Law International, Wolters Kluwer International Books, The Netherlands.
41. Lake O.O., (2010), *Uprisings for the Earth: Reconnecting Culture with Nature*, Ashland, OR: White Cloud Press.
42. Lynton C., (1997), *Environmental Policy: Transnational Issues and National Trends*, Westport, Quorum Books.
43. Maluwa T., (1999), *International Law in Post-Colonial Africa*, Brill Publishing.
44. McCaffrey S., (2001), *The Law of International Watercourses: Non-Navigational Uses*, Oxford University Press, Oxford, UK.
45. McIntyre O., (2007), *Environmental Protection of International Watercourses under International Law*, Ashgate Publishing.
46. Paterson A. and Kotzé L., (2009), *Environmental Compliance and Enforcement in South Africa Legal Perspectives*, Juta Publishing, Cape Town.
47. Pierre J., (2000), *Debating Governance, Authority, Steering and Democracy*, Oxford University Press.

48. Postiglione A., (2010), *Global Environmental Governance – The Need for an International Environmental Agency and an International Court of the Environment*, Bruylant Bruxelles Books.
49. Riedel E. and Rothen P., eds., (2006), *The Human Right to Water*, BWV - Berliner Wissenschafts-Verlag GmbH.
50. Rieu-Clarke A., (2005), *International Law and Sustainable Development: Lessons from the Law of International Watercourses*, Water Law and Policy Series, IWA Publishing, London.
51. Rogers P. and Leal S., (2010), *Running Out of Water: The Looming Crisis and Solutions to Conserve Our Most Precious Resource*, St. Martin's Press, New York.
52. Rose G., (2008), *The Big Necessity: The Unmentionable World of Human Waste and Why it Matters*, Metropolitan Books.
53. Sagan C., (1983), *Cosmos*, Little Brown Book Group.
54. Sands P. and Peel J., (2012), *Principles of International Environmental Law*, 3rd Edition, Cambridge University Press, United Kingdom.
55. Scholtz W. and Verschuuren V., (2015), *Regional Environmental Law: Trans-regional Comparative Lessons in Pursuit of Sustainable Development*, Edward Elgar Publishing, United Kingdom.
56. Schrijver N. and Weiss F., (2004), *International Law and Sustainable Development: Principles and Practice*, Martinus Nijhoff Publishers.
57. Singh N., (2016), *The Human Right to Water – From Concept to Reality*, Springer Publishing.
58. Tanzi A. and Arcari M., (2001), *The United Nations Convention on the Law of International Watercourses – A Framework for Sharing*, Kluwer Law International, The Hague.
59. Teisman G., van Buuren A. and Gerrits L., (2009), *Managing Complex Governance Systems, Dynamics, Self-organisation and Coevolution in Public Investments*, ed., Routledge, London.
60. Van Der Burg W. and Taekema S., (2004), *The Importance of Ideals: Debating their Relevance in Law, Morality and Politics*, P.I.E. Peter Lang SA Publishing.
61. Voigt C., (2009), *Sustainable Development as a Principle of International Law*, Martinus Nijhoff Publishers Leiden.
62. WCED (World Commission on the Environment and Development), (1987), *Our Common Future*, Oxford University Press (The Brundtland Report).

63. Weiss E.B., (1989), *In Fairness to Future Generations*, New York: United Nations University and Transnational Publishers.
64. Weiss E.B., (2013), *International Water Law for a Water-Scarce World*, Martinus Nijhoff Publishers.
65. Weiss E.B., et al., ed., (2005), *Fresh Water and International Economic Law*, Oxford University Press.
66. Wolfke K., (1993), *Custom in Present International Law*, 2nd rev. ed., Martinus Nijhoff Publishers, Dordrecht, The Netherlands.
67. Wolfrum R., ed., (1996), *Enforcing Environmental Standards: Economic Mechanisms as Viable Means?* New York, Springer Publishing.

Chapters in Books

1. Beyerlin U., (1996), *The Concept of Sustainable Development*, in Wolfrum R., (ed.), *Enforcing Environmental Standards: Economic Mechanisms as Viable Means?* New York, Springer Publishing.
2. Bielefeldt H., (2006), *Access to Water, Justice and Human Rights*, in Riedel E. and Rothen P., *The Human Right to Water*, BWV - Berliner Wissenschafts-Verlag GmbH.
3. Bowman M., (2010), *Environmental Protection and the Concept of Common Concern of Mankind*, in Fitzmaurice M., Ong DM., and Merkouris P., *Research Handbook on International Environmental Law*, Edward Elgar Publishing.
4. Cairncross S., (1990), *The Urban Context*, in: Cairncross S, Hardoy J E, Satterthwaite D, ed., *The Poor Die Young: Housing and Health in the Third World*, London: Earthscan
5. Craven M., (2006), *Some Thoughts on the Emergent Right to Water*, in Riedel E. and Rothen P., eds., *The Human Right to Water*, BWV - Berliner Wissenschafts-Verlag GmbH.
6. Drumble M., (2007), *Actors and Law-Making in International Environmental Law*, in Fitzmaurice M., Ong DM., and Merkouris P., *Research Handbook on International Environmental Law*, Edward Elgar.
7. Falkenmark M. and Gunnar L., (2000), *Water and Economic Development*, in Gleick P.H., *Water in Crisis*, Oxford University Press.

8. Fitzmaurice M., (2010), *The Relationship Between the Law of international Watercourses and Sustainable Development*, in Fitzmaurice M., Ong DM., and Merkouris P., *Research Handbook on International Environmental Law*, Edward Elgar Publishing.
9. French D., (2010), *Sustainable Development and the Instinctive Imperative of Justice*, in French D., *The Global Order, Global Justice and Sustainable Development*, Leiden, Martinus Nijhoff Publishers.
10. French D., (2010), *Sustainable Development*, in Fitzmaurice M., Ong DM., and Merkouris P., *Research Handbook on International Environmental Law*, Edward Elgar.
11. French D., (2017), *The Global Goals: Formalism Foregone, Contested Legality and Re-Imaginings of International Law*, in *Ethiopian Yearbook of International Law*, Springer Publishing.
12. Gleick P.H., (2000), *Water in the 21st Century*, in Gleick P.H., *Water in Crisis*, Oxford University Press.
13. Hilderling A., (2004), *The Right of Access to Freshwater Resources*, in Schrijver N. and Weiss F., *International Law and Sustainable Development: Principles and Practice*, Martinus Nijhoff Publishers.
14. Kanie N., Bernstein S., Biermann F., Haas P.M., (2017), *Introduction: Global Governance Through Goal Setting*, in Kanie N. and Biermann F., eds., *Governing Through Goals: Sustainable Development Goals as Governance Innovation*, MIT Press.
15. Kotzé L., (2009), *Environmental Governance*, in Paterson A. and Kotzé L., eds., *Environmental Compliance and Enforcement in South Africa Legal Perspectives*, Juta Publishing, Cape Town.
16. Kotze L.J. and Paterson A., (2009), *South Africa*, in Kotze LJ. and Paterson A., *The Role of the Judiciary in Environmental Governance: Comparative Perspectives*, Kluwer Law International, Wolters Kluwer International Books, The Netherlands.
17. Lipper J., (1967), *Equitable Utilisation*, in Garretson A.H., Hayton R.D. and Olmstead C.J., eds., *The Law of International Drainage Basins*, Oceana New York.
18. Lowe V., (1999), *Sustainable Development and Unsustainable Arguments*, in Boyle A. and Freestone D., (1999), *International Law and Sustainable Development: Past Achievements and Future Challenges*, Oxford, Oxford University Press.

19. McCaffrey SC., (2005), *The Basic Right to Water*, in Weiss E.B., et al eds., *Fresh Water and International Economic Law*, Oxford University Press.
20. McCaffrey SC., (2013), *The Codification of Universal Norms: A Means to Promote Cooperation and Equity?* in De Chazournes L.B., Leb C. and Tignino M., (2013), *International Law and Freshwater: The Multiple Challenges*, New Horizons in Environmental and Energy Law Series, Edward Elgar Publishing United Kingdom.
21. McIntyre O., (2013), *International Water Law: Concepts, Evolution and Development*, in Earle A et al eds., *Transboundary Water Management: Principles and Practice*, Earthscan Publications Ltd, Routledge.
22. McIntyre O., (2018), *International Water Law and SDG 6: Mutually Reinforcing Paradigms*, in French D. and Kotze L., *Sustainable Development Goals: Law, Theory and Implementation*, Edward Elgar Publishing, United Kingdom.
23. Mickelson K., (2009), *Competing Narrative of Justice in North-South Environmental Relations*, in Ebbesson J., *Environmental Law and Justice in Context*, Cambridge: Cambridge University Press.
24. Najam A., (2004), *Neither Necessary, Nor Sufficient: Why Organizational Tinkering Will Not Improve Environmental Governance*, in Biermann F. and Bauer S., (2004), *A World Environment Organization: Solution or Threat for Effective International Environmental Governance?* London, Ashgate.
25. Oberthur S. and Gehring T., (2005), *Reforming International Environmental Governance*, in Biermann F. and Bauer S., (2004), *A World Environment Organization: Solution or Threat for Effective International Environmental Governance?* London, Ashgate Publishing.
26. Rieu-Clarke A., (2004), *Sustainable Use and the EU Water Framework Directive: From Principle to Practice?* in Schrijver N. and Weiss F., *International Law and Sustainable Development: Principles and Practice*, Martinus Nijhoff Publishers.
27. Scholtz W. and Barnard M., (2018), *The Environment and the SDGs: 'We are on a Road to Nowhere,'* in French D. and Kotze L., *Sustainable Development Goals: Law, Theory and Implementation*, Edward Elgar Publishing, United Kingdom.
28. Scholtz W., (2015), *Human Rights and the Environment in the African Union Context*, in Scholtz W. and Verschuuren V., *Regional Environmental Law: Trans-regional Comparative Lessons in Pursuit of Sustainable Development*, (2015), Edward Elgar Publishing, United Kingdom.

29. Shah S.A., (2017), *The Provision and Violation of Water Rights (the Case of Pakistan) – A Human Rights Based Approach*, in Chaisse J., *Charting the Water Regulatory Future – Issues, Challenges and Directions*, Edward Elgar Publishing.
30. Weiss E.B., (2010), *Implementing Intergenerational Equity*, in Fitzmaurice M., Ong DM., and Merkouris P., *Research Handbook on International Environmental Law*, Edward Elgar.
31. Young O.R., (2017), *Conceptualization: Goal-setting as a Strategy for Earth System Governance*, in Kanie N. and Biermann F., *Governing Through Goals: Sustainable Development Goals as Governance Innovation*, MIT Press.

Case Law

1. *Case Concerning the Gabčíkovo-Nagymaros Dam (25 September 1997) (Hungary v Slovakia)*, I.C.J. Rep., 37 I.L.M. (1998).
2. *Gabčíkovo-Nagymaros Project (Hungary v Slovakia)*, (Judgment of 25 September 1997), ICJ Reports 1997.
3. *Gabčíkovo-Nagymaros Project, Hungary v Slovakia*, Judgment, Merits, ICJ GL No 92, (1997), ICJ Rep 7.
4. *Lake Lanoux Arbitration* (English translation), 24 ILR 105-142; *Affaire du Lac Lanoux*, (1957) XII UNRIAA, 285-317 (Lake Lanoux case).
5. *Mazibuko v City of Johannesburg* Unreported Case No. 06/13865 (W).
6. *City of Johannesburg v Mazibuko*, 2009 (3) SA 592 (SCA).
7. *Mazibuko v City of Johannesburg*, 2010 (4) SA 1 (CC).
8. *Pulp Mills on the River Uruguay, Argentina v Uruguay*, Order, Provisional Measures, ICJ GL No 135, (2006) ICJ Rep 113, (2006) 45 ILM 1025, ICGJ 2 (ICJ 2006), 13th July 2006, International Court of Justice (ICJ).

Conventions, Treaties, Legislation and Resolutions

1. A/RES/66/288 - The Future We Want.
2. African Convention on the Conservation of Nature and Natural Resources (1968).

3. African Convention on the Conservation of Nature and Natural Resources (2003).
4. Agenda 21: Programme of Action for Sustainable Development, U.N. GAOR, 46th Sess., Agenda Item 21, UN Doc A/Conf.151/26 (1992).
5. Articles on the Law of Transboundary Aquifers (2008), UNGA Resolution A/RES/63/124.
6. Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, 1989 (1673 UNTS 126; 28 ILM 657 (1989)).
7. Convention on the Law of the Non-navigational Uses of International Watercourses 1997, 36 ILM 700 (1997); G.A. Res. 51/229, U.N. GAOR, 51st Sess., 99th mtg., UN Doc A/RES/51/229 (1997).
8. Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, 1999 (2244 UNTS 337; 38 ILM 1 (1999)).
9. Draft African Charter prepared for the Meeting of Experts in Dakar, Senegal from 28 November to 8 December 1979, CAB/LEG/67/3/Rev.1.
10. G.A. Res. 64/292, The Human Right to Water and Sanitation (July 28, 2010).
11. Human Rights Council, 15/9: Human Rights and Access to Safe Drinking Water and Sanitation, A/HRC/RES/15/9 (Oct. 6, 2010).
12. International Decade for Action, Water for Life, 2005-2015, G.A. Res. 58/217 (Dec. 23, 2003).
13. International Law Association (ILA), Report of the 71st Conference on International Water Law (2004).
14. International Law Association, The Helsinki Rules on the Uses of the Waters of International Rivers, International Law Association, Report of the 52nd Conference 484 (1967), http://webworld.unesco.org/water/wwap/pccp/cd/pdfeducationaltools/coursemodules/reference_documents/internationalregionconventions/helsinkirules.pdf, (last accessed 20/05/17).
15. International Year of Freshwater, G.A. Res. 55/196 (Dec. 20, 2000).
16. Johannesburg Declaration on Sustainable Development, Report of the World Summit on Sustainable Development, 2002 (UN Doc A/CONF.199/20).
17. Manila Declaration on Furthering the Implementation of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, 2012 (UNEP/GCSS.XII/INF/10).

18. Manila Declaration on Health and Environment, available at http://www.wpro.who.int/entity/apac_rfhe/manila_declaration.pdf, (last accessed 24/02/18).
19. National Environmental Management Act 107 of 1998.
20. Oral Report of the coordinator of the informal consultations on Article 10(2), UN Doc A/C.6/51/SR.57 (1997).
21. Organization of African Unity (OAU), African Charter on Human and Peoples' Rights (Banjul Charter), 27 June 1981, CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982).
22. Preliminary Studies on the Legal Problems relating to the Utilization and Use of International Rivers (UNGA Res. 1401 (XIV), 21 November 1959).
23. Programme for the Further Implementation of Agenda 21, A/RES/S-19/2.
24. Promotion and Protection of All Human Rights, Civil, Political, Econ., Social and Cultural Rights, Including the Right to Development: Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, 5, U.N. Doc. A/HRC/12/24 (Jul. 1, 2009).
25. Resolution on the Right to Water Obligations, Resolution ACHPR/Res.300 (EXT.OS/XVII) 20.
26. Southern African Development Community Revised Protocol on Shared Watercourses (2000), available at <https://www.internationalwaterlaw.org/documents/regionaldocs/Revised-SADC-SharedWatercourse-Protocol-2000.pdf>.
27. Statute of the International Court of Justice, available at http://legal.un.org/avl/pdf/ha/sicj/icj_statute_e.pdf, (last accessed 20/03/18).
28. Stockholm Conference on the Human Environment (1972), UN General Assembly, United Nations Conference on the Human Environment, 15 December 1972, A/RES/2994.
29. Stockholm Convention on Persistent Organic Pollutants, 2001 (2256 UNTS 119; 40 ILM 532 (2001)).
30. The 2000 Revised SADC Protocol on Shared Water Resources.
31. The Constitution of the Republic of South Africa, 1996.
32. The Convention on the Protection and Use of Transboundary Watercourses and International Lakes 1936 UNTS 269; 31 ILM 1312 (1992).
33. The Convention on the Protection and Use of Transboundary Watercourses and International Lakes, opened for signature, Mar. 17, 1992, 1936 U.N.T.S.

34. The Human Right to Safe Drinking Water and Sanitation, Human Rights Council Res. 24/18 (Sept. 27, 2013).
35. The International Covenant on Economic, Social and Cultural Rights, available at <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>, (last accessed 3/03/18).
36. The National Water Act 36 of 1998 (South Africa).
37. The New York Convention, 330 UNTS 38; 21 UST 2517; 7 ILM 1046 (1968).
38. The Ramsar Convention 996 UNTS 245; TIAS 11084; 11 ILM 963 (1972).
39. The Rio Declaration, UN Doc. A/CONF.151/26 (vol. I); 31 ILM 874 (1992).
40. The Water Services Act 108 of 1997 (South Africa).
41. UN Committee on Economic, Social and Cultural Rights (CESCR), General Comment No. 15: The Right to Water (Arts. 11 and 12 of the Covenant), 20 January 2003, E/C.12/2002/11.
42. UN Committee on Economic, Social and Cultural Rights, General Comment NO. 14 (4), UN Doc E/C12/200/4 (2004).
43. UN Conference on Environment and Development, Report of the United Nations Conference on Environment and Development, Vol I: Resolutions Adopted by the Conference (United Nations 1993) resolution 1, annex II.
44. UN General Assembly Resolution 68/157 (2013).
45. UN General Assembly Resolution 70/169 (2015).
46. UN General Assembly, Convention on the Elimination of All Forms of Discrimination Against Women, 18 December 1979, United Nations, Treaty Series, vol. 1249.
47. UN General Assembly, Convention on the Rights of the Child, 20 November 1989, United Nations, Treaty Series, vol. 1577.
48. UN General Assembly, Human Rights Council, Report of the United Nations High Commissioner for Human Rights on the Scope and Content of the Relevant Human Rights Obligations Related to Equitable Access to Safe Drinking Water and Sanitation Under International Human Rights Instruments, Page 66, UN Doc A/HRC/6/3.
49. UN General Assembly, Transforming our World: the 2030 Agenda for Sustainable Development, 21 October 2015, A/RES/70/1.
50. UN General Assembly, United Nations Conference on the Human Environment, 15 December 1972, A/RES/2994.

51. UN General Assembly, United Nations Water Conference, 1977, E.77II.A.12.
52. UN General Assembly, Universal Declaration of Human Rights, 10 December 1948, 217 A (III).
53. UN Human Rights Council Resolution 15/9 (2010).
54. United Nations Cartagena Protocol, 2226 U.N.T.S. 208; 39 ILM 1027 (2000); UN Doc. UNEP/CBD/ExCOP/1/3.
55. United Nations Committee on Economic, Social and Cultural Rights, General Comment No 15: The Right to Water (UN Doc E/C.12/2002/11).
56. United Nations Conference on Sustainable Development, Rio+20, (2012), The Future We Want, available at <https://sustainabledevelopment.un.org/content/documents/733FutureWeWant.pdf>, (last accessed 19/02/18).
57. United Nations Convention on Biological Diversity 1760 UNTS 79; 31 ILM 818 (1992).
58. United Nations Convention to Combat Desertification and Drought, 1954 UNTS 3; 33 ILM 1328 (1994).
59. United Nations Economic and Social Council, (2017), Progress Towards the Sustainable Development Goals, Document E/2017/66.
60. United Nations General Assembly, (1986), Declaration on the Right to Development, A/RES/41/128.
61. United Nations General Assembly, World Charter for Nature, (1982), A/RES/37/7.
62. United Nations Kyoto Protocol, UN Doc FCCC/CP/1997/7/Add.1, Dec. 10, 1997; 37 ILM 22 (1998).
63. United Nations Water Conference, Mar Del Plata, General Assembly Resolution 32/158.
64. United Nations Water Conference, Mar del Plata, Mar. 14-25, 1977, Report of the United Nations Water Conference, U.N. Doc. E/CONF.70/29 (1977).
65. United Nations, (1987), Report of the World Commission on Environment and Development. General Assembly Resolution 42/187.
66. United Nations, Report of the Secretary-General, (2001), Water: A Key Resource for Sustainable Development, UN Commission on Sustainable Development, UN Doc. A/CN.17/2001/PC/17.
67. United Nations, Statute of the International Court of Justice, 18 April 1946, available at: <http://www.refworld.org/docid/3deb4b9c0.html>, (last accessed 15/01/18).

68. United Nations, (1987), Report of the World Commission on Environment and Development. General Assembly Resolution 42/187.
69. Universal Declaration of Human Rights, adopted 10 Dec. 1948, G.A. Res. 217A (III), U.N. GAOR, 3rd Sess., U.N. Doc. A/RES/3/217A (1948).
70. World Health Organization, Drinking Water, Sanitation and Health, Res. 64/24 (May 24, 2011).
71. World Summit on Sustainable Development, A/CONF.199/20.

Journal Articles

1. Adger W., Brown K. and Tompkins E.L., (2005), *The Political Economy of Cross-Scale Networks in E-source Co-management*, Ecology and Society Journal, Vol. 10(2).
2. Agrawal A. and Ribot J., (1999), *Accountability in Decentralization: A Framework with South Asian and West African Cases*, The Journal of Developing Areas, Vol. 33.
3. Alrumman S.A., El-Kott A.F. and Kehsk M.A., (2016), *Water Pollution: Source and Treatment*, American Journal of Environmental Engineering, Vol. 6 (3).
4. Alston P., (2005), *Ships Passing in the Night: The Current State of the Human Rights and Development - Debate Seen Through the Lens of the Millennium Development Goals*, Human Rights Quarterly, Vol.27.
5. Angelsen A., (1997), *The Poverty-Environment Thesis: Was Brundtland Wrong?* Forum For Development Studies, Vol. 24, Issue 1.
6. Asadi A. and Others., (2008), *Poverty Alleviation and Sustainable Development: The Role of Social Capital*, Journal of Social Sciences Vol. 4 (3).
7. Assefa Y. and Others, (2017), *Successes and Challenges of the Millennium Development Goals in Ethiopia: Lessons for the Sustainable Development Goals*, BMJ Global Health 2:e000318.
8. Bakker K., (2003), *Archipelagos and Networks: Urbanization and Water Privatization in the South*, The Geographical Journal, Vol. 169.
9. Barral V., (2012), *Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm*, European Journal of International Law, Vol. 23, Issue 2.

10. Baumgartner, T., and Pahl-Wostl C., (2013), *UN–Water and its Role in Global Water Governance*, Ecology and Society Journal, Vol. 18(3).
11. Beder S., (2000), *Costing the Earth: Equity, Sustainable Development and Environmental Economics*, New Zealand Journal of Environmental Law, Vol. 4.
12. Benvenisti V. and Downs G.W., (2007), *The Empire's New Clothes: Political Economy and the Fragmentation of International Law*, The Berkeley Electronic Press.
13. Beyerlin U., (2006), *Bridging the North-South Divide in International Environmental Law*, Heidelberg International Law Journal, Vol. 66.
14. Biermann F., Kanie N. and Kim R.E., (2017), *Global Governance by Goal-Setting: The Novel Approach of the UN Sustainable Development Goals*, Current Opinion in Environmental Sustainability, Vol. 26 - 27.
15. Boyle A., (1999), *Some Reflections on the Relationship of Treaties and Soft Law*, International and Comparative Law Quarterly, Vol. 48.
16. Boyle A., (2012), *Human Rights and the Environment: Where Next?*, The European Journal of International Law, Vol. 23, No. 2.
17. Brunnee J. and Toope S.J., (1994), *Environmental Security and Freshwater Resources: A Case for International Ecosystem Law*, Yearbook of International Environmental Law Vol. 5(41).
18. Brunnee J. and Toope S.J., (1997), *Environmental Security and Freshwater Resources: Ecosystem Regime Building*, American Journal of international Law, Vol. 26.
19. Bulto T.S., (2011), *The Human Right to Water in the Corpus and Jurisprudence of the African Human Rights System*, African Human Rights Law Journal, Vol. 11.
20. Cashore B., (2002), *Legitimacy and the Privatization of Environmental Governance: How Non-State Market Driven (NSMD) Governance Systems Gain Rule-Making Authority*, Governance Journal, Vol. 15.
21. Cass S., (2003), *Preferences and Rational Choice: New Perspectives and Legal Implications: Beyond the Precautionary Principle*, University of Philadelphia Law Review, Vol. 151, Issue 3.
22. Curry E., (2010), *Water Scarcity and the Recognition of the Human Right to Safe Freshwater*, North-Western Journal of International Human Rights Vol. 9.
23. Dar O.A. and Khan M.S., (2011), *Millennium Development Goals and the Water Target: Details, Definitions and Debate*, Tropical Medicine and International Health, 16:540–544. doi:10.1111/j.1365-3156.2011.02736.x.

24. De Visser and Others., (2002), *The Free Basic Water Supply Policy: How Effective is it in Realising the Right?* Economics and Social Rights (ESR) in South Africa Review Vol. 3.
25. Dellapenna J. (1994), *Treaties as Instruments for Managing Internationally-Shared Water Resources: Restricted Sovereignty vs. Community of Property*, Case-Western Reserve Journal of International Law Vol. 26:2.
26. Dellapenna J., (2001), *The Customary International Law of Transboundary Fresh Waters*, International Journal of Global Environmental Issues Vol.1.
27. Desai N., (2014), *A Study on the Water Pollution based on the Environmental Problem*, Indian Journal of Research, Vol. 3(12).
28. Eckstein G. and Sindico F., (2014), *The Law of Transboundary Aquifers: Many Ways of Going Forward, but Only One Way of Standing Still*, Review of European, Comparative and International Environmental Law (RECIEL), Vol. 23 (1).
29. Feris L.A., (2010), *The Role of Good Environmental Governance in the Sustainable Development of South Africa*, PER: Potchefstroomse Elektroniese Regsblad/ Potchefstroom Electronic Law Journal, Vol. 13, No. 1.
30. Geisinger A., (1999), *Sustainable Development and the Domination of Nature: Spreading the Seed of the Western Ideology of Nature*, Boston College Environmental Affairs Law Review, Vol. 27.
31. Gleick P.H., (1993), *Water Resources: A Long-Range Global Evaluation*, Ecology Law Quarterly, Vol. 20 (141).
32. Gleick P.H., (1999), *The Human Right to Water*, Water Policy, Vol. 1 (5).
33. Gonzalez C.G., (2011), *An Environmental Justice Critique of Comparative Advantage*, University of Pennsylvania Journal of International Law, Vol. 32.
34. Greenberg M.R., (2009), *Why is Water an Issue?* American Journal of Public Health, Vol. 99(11).
35. Grey D. and Sadoff C., (2013), *Sink or Swim? Water Security for Growth and Development*, Water Policy, Vol. 9.
36. Halder J.M. and Islam M.N., (2015), *Water Pollution and its Impact on the Human Health*, Journal of Environment and Human, Vol. 2, No. 1.
37. Hardberger A., (2006), *Whose Job is it Anyway? Governmental Obligations Created by the Human Right to Water*, Texas International Law Journal Vol. (41)533.

38. Helal M.S., (2007), *Sharing Blue Gold: The 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses Ten Years On*, Colorado Journal of International Environmental Law and Policy, Vol. 18.
39. Kamble S.M., (2014), *Water Pollution and Public Health Issues in Kolhapur City in Maharashtra*, International Journal of Scientific and Research Publications, Vol. 4(1).
40. Karabarbounis L., (2011), *One Dollar, One Vote*, The Economic Journal, Vol. 121, doi:[10.1111/j.1468-0297.2010.02406](https://doi.org/10.1111/j.1468-0297.2010.02406).
41. Khan M.A., and Ghouri A.M., (2011), *Environmental Pollution: Its Effects on Life and its Remedies*, Journal of Arts, Science and Commerce, Vol. 2(2).
42. Kidd M.A., (2004), *Not a Drop to Drink: Disconnection of Water Services for Non-Payment and the Right of Access to Water*, South African Journal on Human Rights, Vol. 20, Issue 1.
43. Kidd M.A., (2006), *Greening the Judiciary*, PER: Potchefstroomse Elektroniese Regsblad/ Potchefstroom Electronic Law Journal, Vol. 3.
44. Kortenkamp K.V. and Colleen M.F., (2001), *Ecocentrism and Anthropocentrism: Moral Reasoning about Ecological Commons Dilemmas*, Journal of Environmental Psychology, Vol. 21.
45. Kumar Reddy D.H. and Lee S.M., (2012), *Water Pollution and Treatment Technologies*, Journal of Toxicology and Environmental Health, Vol. 2:e103.
46. Kumar S. and Others., (2016), *Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs): Addressing Unfinished Agenda and Strengthening Sustainable Development and Partnership*, Indian Journal of Community Medicine, Vol. 41(1).
47. Kuokkanen T., (2017), *Water Security and International Law*, PER: Potchefstroomse Elektroniese Regsblad/ Potchefstroom Electronic Law Journal, Vol. 20.
48. Kuruvilla S. and Others., (2012), *The Millennium Development Goals and Human Rights: Realizing Shared Commitments*, *Human Rights Quarterly*, Vol. 34, The Johns Hopkins University Press.
49. Lafferty W. and Meadowcroft J., (2000), *Implementing Sustainable Development*, Oxford, Oxford Scholarship Online, DOI:10.1093/0199242011.001.0001.
50. Langhelle O., (1999), *Sustainable Development: Exploring the Ethics of Our Common Future*, International Political Science Review / Revue Internationale de Science Politique, Vol. 20, No. 2.

51. Li X., (2013), *Soft Law-Making on Development: The Millennium Development Goals and Post-2015 Development Agenda*, Manchester Journal of International Economic Law, Vol. 10.
52. Lorek S. and Spangenberg J.H., (2014), *Sustainable Consumption within a Sustainable Economy: Beyond Green Growth and Green Economies*, Journal of Cleaner Production, Vol. 62.
53. Macdonald J., (1993), *The Principle of Solidarity in Public International Law*, Pace International Law Review, Vol. 8, Issue 2.
54. Maggio G.F., (1997), *Inter/Intra-Generational Equity: Current Applications under International Law for Promoting the Sustainable Development of Natural Resources*, Buffalo Environmental Law Journal, Vol. 4.
55. McCaffrey S., (1997), *The Coming Fresh Water Crisis: International Legal and Institutional Responses*, Vermont Law Review Vol. (21)803.
56. McCaffrey S.C., (2011), *International Watercourses, Environmental Protection*, Max Planck Encyclopaedia of Public International Law.
57. McCaffrey S.C., (2016), *The Human Right to Water: A False Promise?* University of Pacific Law Review, Vol. 47.
58. McIntyre O., (2004), *The Emergence of an "Ecosystem Approach" to the Protection of International Watercourses under International Law*, Review of European, Comparative and International Environmental Law (RECIEL), Vol. 13(1).
59. Mishra U.S., (2004), *Millennium Development Goals: Whose Goals and for Whom?* British Medical Journal, 329:742. doi:10.1136/bmj.329.7468.742-b.
60. Murthy S.L., (2013), *The Human Right(s) to Water and Sanitation: History, Meaning, and the Controversy Over-Privatization*, Berkeley Journal of International Law, Vol. 31, Issue 1.
61. Nayar K.R., (1994), *Politics of Sustainable Development*, Economic and Political Weekly, Vol. 29, No. 22.
62. Owa F.D., (2013), *Water Pollution: Sources, Effects, Control and Management*, Mediterranean Journal of Social Sciences, Vol. 4 No. 8, MCSER Publishing (Rome-Italy).
63. Oyeshola D., (2007), *Development and Poverty: A Symbiotic Relationship and its Implication in Africa*, African Journal of Traditional, Complementary Alternative Medicines, Vol. 4(4).

64. Pahl-Wostl C., Conca K., Kramer A., Maestu J., and Schmidt F., (2013), *Missing Links in Global Water Governance: A Processes-Oriented Analysis*, Ecology and Society, Vol. 18(2).
65. Pahl-Wostl C., Gupta J. and Petry D., (2008), *Governance and the Global Water System: A Theoretical Exploration*, Global Governance, Vol. 14.
66. Paisley R., (2002), *Adversaries into Partners: International Water Law and the Equitable Sharing of Downstream Benefits*, Melbourne Journal of International Law, Vol. 3(2).
67. Palmer E., (2015), *The Sustainable Development Goals*, Journal of Global Ethics, Vol. 11, No. 3.
68. Palmer G., (1992), *New Ways to Make International Environmental Law*, American Journal of International Law, Vol. 86.
69. Persson A., Weitz N. and Nilsson M., (2016), *Follow-up and Review of the Sustainable Development Goals: Alignment vs. Internalization*, Review of European, Comparative and International Environmental Law (RECIEL), Vol. 25(1).
70. Rieu-Clarke A. and Loures F., (2009), *Still not in Force: Should States Support the 1997 UN Watercourses Convention?* Review of European, Comparative and International Environmental Law (RECIEL), Vol.18, Issue 2.
71. Robinson J., (2004), *Squaring the Circle? Some Thoughts on the Idea of Sustainable Development*, Ecological Economics, Vol. 48.
72. Salman S.M.A., (2001), *Legal Regime for Use and Protection of International Watercourses in the Southern African Region: Evolution and Context*, Natural Resources Journal, Vol. 41.
73. Salzman J., (2006), *Thirst: A Short History of Drinking Water*, Yale Journal of Law and the Humanities, Vol. 18.
74. Sanwal, M., (2004), *Trends in Global Environmental Governance: The Emergence of a Mutual Supportiveness Approach to Achieve Sustainable Development*, Global Environmental Politics, Volume 4, Number 4.
75. Scott K.N., (2011), *International Environmental Governance: Managing Fragmentation through Institutional Connection*, Melbourne Journal of International Law, Vol. 12.
76. Soto MV., (1996), *General Principles of International Environmental Law*, ILSA Journal of International and Comparative Law, Vol. 3(1).

77. Spijkers O., (2016), *The Cross-fertilization between the Sustainable Development Goals and International Water Law*, Review of European, Comparative and International Environmental Law (RECIEL), Vol. 25, Issue No. 1.
78. Spijkers, O. (2015), *The Sustainable Development Goals as Catalyst for the Sustainable Management of Water Resources*, Journal of Water Law, Vol. 24.
79. Stoa R., (2014), *The United Nations Watercourses Convention on the Dawn of Entry Into Force*, Florida International University College of Law, Vanderbilt Journal of Transnational Law, Vol. 47.
80. Therien J., (1999), *Beyond the North-South Divide: The Two Tales of World Poverty*, Third World Quarterly, Vol 20, No. 4.
81. Thompson S., (1994), *Ecocentric and Anthropocentric Attitudes toward the Environment*, Journal of Environmental Psychology, Vol. 14, Issue 2.
82. Urueña R., (2009), *Expertise and Global Water Governance: How to Start Thinking about Power Over Water Resources?* Anuario Mexicano de Derecho Internacional, Vol. 9.
83. Van Asselt H., (2011), *Managing the Fragmentation of International Environmental Law: Forests at the Intersection of the Climate and Biodiversity Regimes*, New York University Journal of International Law and Politics (JILP), Vol. 44 (4).
84. Veinla H., (2005), *Sustainable Development as the Fundamental Principle of Europe's Environmental Ius Commune*, Juridica International.
85. Verschuuren J., (2006), *Sustainable Development and the Nature of Environmental Legal Principles*, PER: Potchefstroomse Elektroniese Regsblad/ Potchefstroom Electronic Law Journal, Vol. (9)1.
86. Weiss E.B., (1990), *Our Rights and Obligations to Future Generations for the Environment*, American Journal of International Law, Vol. 84.
87. Wouters P. and Rieu-Clarke A., (2001), *The Role of International Water Law in Promoting Sustainable Development, Review and Analysis of Aquatic Environmental Law and Economic Regulation in the UK and EU*, Journal of Water Law, Vol. 12(5).
88. Ziganshina D., (2008), *Rethinking the Concept of the Human Right to Water*, Santa Clara Journal of International Law, Vol. 1.

Reports

1. Abayawardana S. and Hussain I., (2003), *Water, Health and Poverty linkages: A Case Study from Sri Lanka*, in *Case Studies from Nepal, Pakistan and Sri Lanka*, International Water Management Institute, Project Report 1.
2. Abbott K.W. and Snidal D., (2003), *Hard and Soft Law in International Governance*, International Organization, Vol. 54(3).
3. Banuri T. and Najam A., (2002), *Civic Entrepreneurship: A Civil Society Perspective on Sustainable Development*.
4. Barron J. and Others, (2007), *Water and Poverty Linkages in Africa*, Stockholm Environment Institute, Working Paper, Water and Sanitation Programme.
5. Batchelor C., (2007), *Water Governance Literature Assessment*, International Institute for Environment and Development.
6. Biswas A., (2004), *Integrated Water Resources Management: A Reassessment*, International Water Resources Association Water International, Vol. 29, Number 2.
7. Braune E and Others., (2008), *Protocol for the Assessment of the Status of Sustainable Utilization and Management of Groundwater Resources with Special Reference to Southern Africa*, Water Research Commission, WRC Report Number TT318/08.
8. Brels S., Coates D., and Loures F., (2008), *Transboundary Water Resources Management: The Role of International Watercourse Agreements in Implementation of the CBD*, CBD Technical Series no. 40, Secretariat of the Convention on Biological Diversity, Montreal, Canada.
9. Calaguas B., (1999), *The Right to Water, Sanitation and Hygiene and the Human Rights-Based Approach to Development*, Water Aid Briefing Paper.
10. Carolyn A., (2001), *Controlling Environmental Agency Discretion: A Public Law Perspective*, Environmental Law and Management, Vol. 13(5).
11. Chenoweth J., (2008), *A Re-Assessment of Indicators of National Water Scarcity*, Water International, Vol. 33(1).
12. *Commentary to the Draft Articles on the Law of the Non-navigational Uses of International Watercourses*, in Report of the International Law Commission on the work of its forty-sixth session, UN GAOR, 49th Sess. Supp. (No. 10), UN Doc. A/49/10, (1994).
13. *Convention on the Law of the Non-Navigational Uses of International Watercourses, Report of the 6th Committee Working Group*, (1997), GAOR A/51/869.

14. De Chazournes L.B., (2009), *Freshwater and International Law: The Interplay between Universal, Regional and Basin Perspectives*, The United Nations World Water Development Report, Vol.3.
15. Decleris M., (2000), *The Law of Sustainable Development: General Principles*, (A Report produced for the European Commission), Luxemburg.
16. Drexhage J. and Murphy D., (2010), *Sustainable Development: From Brundtland to Rio 2012*, International Institute for Sustainable Development (IISD), New York.
17. Earle A. and Malzbender D., (2007), *Water – and the Peaceful, Sustainable Development of the SADC Region*, African Centre for Water Research (Publications).
18. Ebenstein A.Y., (2008), *Water Pollution and Digestive Cancer in China*, Institutions and Governance Programs.
19. Falk and Others., (1993), *Social Equity and the Urban Environment*, Report to the Commonwealth Environment Protection Agency, AGPS, Canberra.
20. Falkenmark, M., (1997), *Meeting Water Requirements of an Expanding World Population*, Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences, Vol. 352.
21. Feitelson, E. and Chenoweth J., (2002), *Water Poverty: Towards a Meaningful Indicator*, Water Policy, Vol. 4(3).
22. Gamage D., (2003), *Agricultural Water and Poverty: A Case Study from the Dry Zone of Sri Lanka*, in *Case Studies from Nepal, Pakistan and Sri Lanka*, International Water Management Institute, Project Report 1.
23. Gleick P., (2007), *The Human Right to Water*, Pacific Institute.
24. Global Water Partnership, (2003), *Poverty Reduction and IWRM*, TEC Background Papers, No. 8. Global Water Partnership, Stockholm.
25. Haseena M. and Others, (2017), *Water Pollution and Human Health*, Environmental Risk Assessment and Remediation (2017) Vol. 1, Issue 3.
26. Hildering A., (2004), *International Law, Sustainable Development and Water Management*, Delft: Eburon Academic Publishers.
27. Hoekstra A.Y, Mekonnen M.M, Chapagain A.K, Mathews R.E, and Richter B.D., (2012), *Global Monthly Water Scarcity: Blue Water Footprints versus Blue Water Availability*, PLoS ONE 7(2): e32688.
28. Hoekstra A.Y., (2006), *The Global Dimension of Water Governance: Nine Reasons for Global Arrangements in Order to Cope with Local Water Problems*, Value of Water Research Report Series No. 20.

29. Honniball A. and Spijkers O., (2014), *Lessons Learnt from Global Public Participation in the Drafting of the UN Development Goals*, Vereinte Nationen - German Review on the United Nations, Vol. 62, No. 6.
30. Hoosain R. and Slaymaker T., (2014), *Methodological Note: Proposed Indicator Framework for Monitoring SDG Targets on Drinking-Water, Sanitation, Hygiene and Wastewater*, Prepared by the World Health Organisation and UNICEF, 68th General Assembly document: A/68/970, available at <http://undocs.org/A/68/970>, (last accessed 19/02/18).
31. Hussain I., and Giordano M., (2003), *Water and Poverty Linkages: Case Studies from Nepal, Pakistan and Sri Lanka*, International Water Management Institute, Project Report 1.
32. Hussain I., Giordano M. and Hanjra MA., (2004), *Agricultural Water and Poverty Linkages: Case Studies on Large and Small Systems, in Water and Poverty: The Realities*, Published by the Asian Development Bank.
33. International Law Association Reports of Conferences (2004) Vol. 71 pt. II: *Water Resources Law* 334–421
http://internationalwaterlaw.org/documents/intldocs/ILA_Berlin_Rules-2004.pdf, article 3(19), (last accessed 20/02/18).
34. Ivanova M., (2005) *Assessing UNEP as Anchor Institution for the Global Environment: Lessons for the UNEO Debate*, Policy Paper, Yale Center for Environmental Law and Policy, Yale.
35. Key A., (1956), *Pollution of Surface Water in Europe*, World Health Organisation.
36. Khalfan A. and Others., (2007), *Manual on The Right to Water and Sanitation, Centre on Housing Rights and Evictions*, OHRE, AAAS, SDC and UN-HABITAT, Manual on the Right to Water and Sanitation (2007), Geneva, Switzerland, Vol.11.
37. Khurana I. and Sen R., (2008), *Drinking Water Quality in Rural India: Issues and Approaches*, Water Aid, India Water Portal.
38. Kirschner A., (2011), *The Human Right to Water and Sanitation*, Max Planck Yearbook of United Nations Law, Volume 15.
39. Klasen S., (2012), *Poverty, Equity and Growth in Developing and Transition Countries: Statistical Methods and Empirical Analysis*, Discussion Papers, No. 123.
40. Kuehn R.R., (2000), *A Taxonomy of Environmental Justice*, Environmental Law Reporter, Vol. 30.

41. Lee J. and Best M., (2017), *The Human Right to Water: A Research Guide and Annotated Bibliography*, The Program on Human Rights and the Global Economy, North-Eastern University School of Law.
42. Lemos M. and Agarwal A., (2006), *Environmental Governance*, School of Natural Resources and Environment, University of Michigan.
43. McCaffrey S.C., (2011), *International Watercourses*, Environmental Protection, Max Planck Encyclopaedia of Public International Law (MPEPIL).
44. Mensah A.M. and Castro L.C., (2004), *Sustainable Resource Use and Sustainable Development: A Contradiction?!*, Center for Development Research, University of Bonn.
45. Muller M. and Others., (2009), *Water Security in South Africa*, Development Planning Division, Working Paper Series No. 12.
46. Muller M. and Others., (2009), *Water Security in South Africa*, Development Planning Division, Working Paper Series No. 12.
47. Najam A. and Robins N., (2001), *Seizing the Future: The South, Sustainable Development and International Trade*, International Affairs, Royal Institute of International Affairs, Vol. 77, No. 1.
48. Najam A., (1999), *Citizen Organizations as Policy Entrepreneurs*, *International Perspectives on Voluntary Action: Reshaping the Third World*, edited by David Lewis, London, Earthscan.
49. Najam A., Papa M. and Taiyab N., (2006), *Global Environmental Governance: A Reform Agenda*, International Institute for Sustainable Development, Winnipeg, Canada.
50. Oki T. and Kanae S., (2006), *Global Hydrological Cycles and World Water Resources*, Science, Vol. 313, Issue 5790.
51. Orians G., (1996), *Economic Growth, the Environment, and Ethics*, Ecological Applications Vol. 6(1).
52. Pariyar MP., (2003), *Water and Poverty Linkages in Mountainous Areas: A Case Study from Nepal*, in *Case Studies from Nepal, Pakistan and Sri Lanka*, International Water Management Institute, Project Report 1.
53. Pink R., (2012), *Child Rights, Right to Water and Sanitation, and Human Security*, Health and Human Rights, Vol. 14, Number 1.
54. Postel S.L., (2000), *Entering an Era of Water Scarcity: The Challenges Ahead*, Ecology Applied, Vol. 10(4).

55. Report of the International Court of Justice, (1997), A/53/4.
56. Report of the Secretary-General on the Legal Problems Relating to the Utilization of International Watercourses (UN Doc. A/5409, 15 April 1963).
57. Report of the Sixth Committee Convening as the Working Group of the Whole UN Doc A 51/869 (1997).
58. Ribot J.C., (1999), *Decentralisation, Participation and Accountability in Sahelian Forestry*, Legal Instruments of Political-Administrative Control Africa, Vol. 69 (1).
59. Rockström J., Falkenmark M., Karlberg, L., Hoff H., Rost S. and Gerten D., (2009), *Future Water Availability for Global Food Production: The Potential of Green Water for Increasing Resilience to Global Change*, Water Resource Res 45.
60. Rogers P. and Hall A.W., (2003), *Effective Water Governance*, TEC Background Papers No.7, Global Water Partnership, Stockholm.
61. Sahu M.J., (2015), *Principle of Natural Justice in South Africa*, National University of Study and Research in Law, Ranchi.
62. Salman S.M.A., (2007), *The Helsinki Rules, the UN Watercourses Convention and the Berlin Rules: Perspectives on International Water Law*, Water Resources Development, Vol. 23, No. 4.
63. Salman S.M.A., (2007), *The United Nations Watercourses Convention Ten Year Later: Why Has its Entry into Force Proven Difficult?* International Water Resources Association Water International, Volume 32, Number 1.
64. Schwarzenbach R.P., Escher B.I., Fenner K., Hofstetter T.B., Johnson CA, *et al*, (2006), *The Challenge of Micropollutants in Aquatic Systems*, Science, Vol. 313.
65. Serageldin I., (1995), *Toward Sustainable Management of Water Resources*, The World Bank, Washington, D.C, Vol. 3.
66. Spijkers O. and Others, (2016), *The Role of Sustainable Natural Resources Management International Law*, Johannesburg Conference
67. Spijkers O., *et al*, (2016), *Rules and Practices of International Law for the Sustainable Management of Fresh Water Resources towards SDG 6 on Ensuring Water and Sanitation for All*, in International Law Association Committee on the Role of International Law in Sustainable Natural Resource Management for Development, Sustainable Natural Resource Management for Development Final Draft 6.
68. Stevanve A.S., (2015), *Review of the Sustainable Development Goals: The Science Perspective*, Paris, International Council for Science (ICSU).

69. Stevens C. and Kanie N., (2016), *The Transformative Potential of the Sustainable Development Goals (SDGs)*, International Environmental Agreement 2016, Vol. 16.
70. Tanzi A., (2000), *The Relationship between the 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the 1997 UN Convention on the Law of the Non Navigational Uses of International Watercourses*, Report of the UN/ECE Task Force on Legal and Administrative Aspects.
71. Toonen T., (2011), *The (Changing) Role of National Government in Multilevel (Water) Governance*, Principles of Good Governance at Different Water Governance Levels, Workshop Document.
72. U.N. Secretary-General, *We the Peoples: The Role of the United Nations in the 21st Century (Millennium Report of the Secretary-General)*, The United Nations Department of Public Information (2000).
73. UN Development Programme, *Beyond Scarcity: Power, Poverty and the Global Water Crisis*, (2006).
74. UN General Assembly, *International Covenant on Economic, Social and Cultural Rights*, 16 December 1966, United Nations, Treaty Series, Vol. 993.
75. UNDP, (1995), *Public Sector Management, Governance and Sustainable Human Development*, New York, NDP.
76. United Nations (UN), (2003), *Water: A Matter of Life and Death: Fact Sheet*, International Year of Freshwater 2003.
77. United Nations (UN), (2012), *World Water Development Report 4: Managing Water under Uncertainty and Risk*, Paris, France: UNESCO.
78. United Nations Chief Executives Board for Coordination (UNSCEB), (2003), Report of the High-Level Committee on Programmes on its Fifth Session, United Nations, New York, New York, USA.
79. United Nations Environment Programme, (2006), *Africa's Lakes: Atlas of Our Changing Environment*, Division of Early Warning and Assessment, UNEP, Nairobi.
80. UN-Water, *A Post-2015 Global Goal for Water: Synthesis of Key Findings and Recommendations from UN-Water* (2014).
81. UN-Water Task Force on Water Security Water Security and the Global Water Agenda, *A UN-Water Analytical Brief*, (2013) UN-Water.
82. Veinla H., (2005), *Sustainable Development as the Fundamental Principle of Europe's Environmental Ius Commune*, Juridica International.

83. Victor D.G., (2006), *Recovering Sustainable Development*, Foreign Affairs, Vol. 85, No. 1.
84. Viriyo A., (2012), *Principle of Sustainable Development in International Environmental Law*, International Legal Materials, Vol. 1 (37).
85. Wisor S., (2012), *After the MDGs: Citizen Deliberation and the Post-2015 Development Framework*, Vol. 26(1), Ethics and International Affairs.
86. World Summit on Sustainable Development, Plan of Implementation of the World Summit on Sustainable Development, U.N. Doc. A/Conf.199/20 (Sept. 4, 2002).
87. World Water Assessment Programme (2003), The United Nations World Water Development Report (Executive Summary), Vol. 8.
88. WTO Appellate Body Report on U.S. – Import Prohibition of Certain Shrimp and Shrimp Products, WT/DS58/AB/R (October 12, 1998).

Publications Accessed via Websites

1. African Commission on Human and Peoples' Rights, available at <http://www.achpr.org/sessions/17th-ec/resolutions/300/>, (last accessed 9/06/17).
2. Agenda 21, <https://sustainabledevelopment.un.org/outcomedocuments/agenda21>, (last accessed 10/01/18).
3. AQUASTAT, Food and Agriculture Organization of the United Nations, Water Use, http://www.fao.org/nr/water/aquastat/water_use/index.stm, (last accessed 2/05/17).
4. Barlow M., (2008), *Blue Covenant: The Alternative Water Future*, Monthly Review, <http://www.monthlyreview.org/080818barlow.php>, (last accessed 17/05/17).
5. Brus, M., (2017), *Soft Law in Public International Law: A Pragmatic or a Principled Choice? Comparing the Sustainable Development Goals and the Paris Agreement*, Available at SSRN: <https://ssrn.com/abstract=2945942> or <http://dx.doi.org/10.2139/ssrn.2945942>, (last accessed 20/02/18).
6. Budapest Water Summit, (2016), *Policy Recommendations for the Implementation of the SDG-6 Areas*, available at https://www.budapestwatersummit.hu/data/images/Statement%202016/BWS2016_PR_v1129.pdf, (last accessed 17/05/17).

7. Center for Economic and Social Rights, *The Nine Core Human Rights Conventions*, available at <http://archive.cesr.org/article.php?id=271>, (last accessed 19/02/18).
8. Cities Alliance - A Look at Urbanisation, <http://www.citiesalliance.org/node/2195>, (last accessed 7/05/17).
9. City of Cape Town Guidelines, available at: <http://resource.capetown.gov.za/documentcentre/Documents/Graphics%20and%20educational%20material/50%20Litre%20Life%20Poster-colour.pdf>, (last accessed 15/02/18).
10. Cooley H. and Others., (2013), *Global Water Governance in the 21st Century*, Pacific Institute, available at <http://www.pacinst.org/publication/global-water-governance-in-the-21st-century/>, (last accessed 1/03/18).
11. Dellapenna J., (2004), *Is Sustainable Development a Serviceable Legal Standard in the Management of Water?*, Water Resources Update 127, accessible at: <http://www.ucowr.siu.edu/updates/127/Dellapenna.pdf>, (last accessed 19/01/18).
12. Grigg R., (2013), *Climate Change a Failure of Political Will*, The Common-sense Canadian at <http://commonsensecanadian.ca/climate-change-a-failure-of-political-will/>, (last accessed 3/03/18).
13. <http://www.capetown.gov.za/Family%20and%20home/residential-utility-services/residential-water-and-sanitation-services/make-water-saving-a-way-of-life>, (last accessed 15/02/18).
14. <http://www.dwaf.gov.za/documents/fbw/qabrochureaug2002.pdf>, (last accessed 08/06/2016).
15. <http://www.internationalwaterlaw.org/blog/2014/01/22/offshore-fresh-water-aquifers-which-law-will-apply/>, (last accessed 31/07/17).
16. <http://www.investorwords.com/2186/GNP.html#ixzz2e7HRtITP>, (last accessed 7/02/18).
17. <http://www.nepad.org/system/files/NEPAD%20Framework%20%28English%29.pdf>, (last accessed 16/01/18).
18. http://www.transboundarywaters.orst.edu/publications/atlas/atlas_pdf/2_WorldsAgreements_atlas.pdf, (last accessed 3/06/17).
19. <http://www.un.org/documents/ga/res/35/a35r8e.pdf>, (last accessed 15/01/18).
20. <http://www.un.org/millenniumgoals/>, (last accessed 19/02/18).
21. <http://www.un.org/sustainabledevelopment/globalpartnerships/>, (last accessed 31/07/2017).

22. <http://www.un.org/waterforlifedecade/background.shtml>, (last accessed 7/05/2016).
23. <http://www.unwater.org/>, (last accessed 19/02/18).
24. <http://www.unwater.org/about-unwater/>, (last accessed 19/02/18).
25. <http://www.unwater.org/about-unwater/governance/>, (last accessed 19/02/18).
26. <http://www.unwater.org/sdgs/a-dedicated-water-goal/en/>, (last accessed 31/07/17).
27. <http://www.unwater.org/what-we-do/>, (last accessed 19/02/18).
28. <https://sustainabledevelopment.un.org/sdg6>, (last accessed 22/06/16).
29. https://www.internationalwaterlaw.org/documents/regionaldocs/Uruguay_River_Statute_1975.pdf, (last accessed 15/01/18).
30. <https://www.merriam-webster.com/dictionary>, (last accessed 7/02/18).
31. <https://www.theguardian.com/global-development/2015/jan/19/sustainable-development-goals-united-nations>, (last accessed 19/02/18).
32. <https://www.un.org/millenniumgoals/bkgd.shtml>, (last accessed 19/02/18).
33. <https://www.unwatercoursesconvention.org/documents/UNWC-Fact-Sheet-4-Equitable-and-Reasonable-Utilisation.pdf>, (last accessed 16/01/18).
34. Human Rights and the Environment, Icelandic Human Rights Centre, available at <https://web.archive.org/web/20140306185240/http://www.humanrights.is/the-human-rights-project/humanrightscasesandmaterials/humanrightsconceptsideasandfora/humanrightsrelationtoothertopics/humanrightsandtheenvironment/>, (last accessed 1/06/17).
35. International Conference on Water and the Environment, Dublin, Ir., Jan. 26-31, (1992), The Dublin Statement on Water and Sustainable Development (June 1992), available at <http://www.un-documents.net/h2o-dub.htm>, (last accessed 3/01/17).
36. International Water Management Institute (IWMI), (2000), The IWMI global water scarcity study, available at http://www.iwmi.cgiar.org/About_IWMI/Strategic_Documents/Annual_Reports/WSarcity.pdf, (last accessed 7/05/17).
37. Ki Moon B., (2015), Opening Speech at 70th General Assembly, September 28, available at <http://www.voltairenet.org/article188865.html>, (last accessed 20/02/18).
38. Ki Moon, B. (2015), Building a Better Future for All: Selected Speeches of UN SG Ban Ki-moon 2007-2012, Published by the United Nations (New York), available at https://issuu.com/unpublications/docs/9789210559959_issuu, (last accessed 10/04/18).

39. Kydland F., Stokey N. and Schelling T., (2015), *Smart Development Goals*, available at <http://www.copenhagenconsensus.com/post-2015-consensus/nobel-laureates-guide-smarter-global-targets-2030>, (last accessed 20/02/18).
40. Level 6B Water Restrictions – Cape Town, available at <http://resource.capetown.gov.za/documentcentre/Documents/Procedures,%20guidelines%20and%20regulations/Level%206B%20Water%20restriction%20guidelines-%20eng.pdf>, (last accessed 15/02/18).
41. Lewis K., United Nations Development Programme, (2007), *Effective Water Governance: The Key to Sustainable Water Management and Poverty Eradication*, available at <http://www.undp.org/water/>, (last accessed 19/06/16).
42. Matshe I. and Others, (2013), *Water Poverty and Rural Development: Evidence from South Africa*, available at <https://ageconsearch.umn.edu/bitstream/160632/2/Chapter%206.pdf>, (last accessed 20/05/17).
43. McCaffrey S.C., (1997), *Convention on the Law of the Non-Navigational Uses of International Watercourses*, New York, 21 May 1997, available at <http://legal.un.org/avl/ha/clnuiw/clnuiw.html>, (last accessed 21/05/17).
44. McMichael A.J. and Butler C.D., (2006), *Climate Change, Health, and Development Goals*, *Lancet*. 2004;364:2004–2006. doi:10.1016/S0140-6736(04)17529-6.
45. MDG 7.C Outcomes and Findings, <http://www.un.org/millenniumgoals/environ.shtml>, (last accessed 19/02/18).
46. Millennium Development Goal 1, available at <http://www.un.org/millenniumgoals/poverty.shtml>, (last accessed 12/01/18).
47. Miller-Dawkins M., (2014), *Global Goals and International Agreements: Lessons for the Design of the Sustainable Development Goals*, available at: www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinionfiles/9295.pdf, (last accessed 25/02/18).
48. Mitchell H.H., (1945), *Journal of Biological Chemistry*, available at <http://www.jbc.org/content/158/3/625.full.pdf+html>, (last accessed 15/06/16).
49. Mullen K., (2012), *Information on Earth's Water*, available at <http://www.ngwa.org/Fundamentals/teachers/Pages/information-on-earth-water.aspx>, (last accessed 7/03/17).
50. Newmarch J., (2012), 'COP-17' Lack of 'Political Will' to Tackle Climate Change, Business Day Live at <http://www.bdlive.co.za/articles/2011/12/01/cop-17-lack-of->

- [political-will-to-tackle-climate-change;jsessionid=73E3EA3E95096890DF01F6F26C7B41EB.present1.bdfm](#), (last accessed 3/03/18).
51. OECD, (2001), *Governance in the 21st Century*, available at <https://www.oecd.org/futures/17394484.pdf>.
52. Perlman H., (2016), *The Water in You*, The USGS Water Science School, available at <https://water.usgs.gov/edu/propertyyou.html>, (last accessed 15/06/16).
53. Reiners N., (2002), *General Comment No. 15 on the Right to Water*, available at <https://www.geschichte-menschenrechte.de/general-comment-no-15-on-the-right-to-water-2002/?type=98765>, (last accessed 24/05/18).
54. Roy J. and Ivanova M., (2007), *The Architecture of Global Environmental Governance: Pros and Cons of Multiplicity*, available at: <http://www.centerforunreform.org/system/files/Ivanova+and+Roy+GEG.pdf>, (last accessed 3/03/18).
55. SDG11, available at <https://sustainabledevelopment.un.org/sdg11>, (last accessed 19/02/18).
56. SDG12, available at <https://sustainabledevelopment.un.org/sdg12>, (last accessed 19/02/18).
57. SDG15, available at <https://sustainabledevelopment.un.org/sdg15>, (last accessed 19/02/18).
58. SDG3, available at <http://www.un.org/sustainabledevelopment/health/>, (last accessed 19/02/18).
59. SDG6, <https://sustainabledevelopment.un.org/sdg6>, (last accessed 20/02/18).
60. Shelton D., (2008), *Soft Law*, George Washington University Law School: Publications and Other Works, available at <http://scholarship.law.gwu.edu/cgi/viewcontent.cgi?article=2048&context=faculty>, (last accessed 21/04/2017).
61. Southern African Development Community (SADC) official website, <http://www.sadc.int/about-sadc/overview/sa-protocols/>, (last accessed 7/01/18).
62. Sustainable Development Goal 1, available at <http://www.un.org/sustainabledevelopment/poverty/>, (last accessed 12/01/18).
63. Sustainable Development Goals 1 – 17 as per the official SDG United Nations website, available at <https://sustainabledevelopment.un.org/sdgs>, (last accessed 19/02/18).

64. Sustainable Development Knowledge Platform, Agenda 21, available at <https://sustainabledevelopment.un.org/outcomedocuments/agenda21>, (last accessed 31/01/18).
65. The Millennium Development Goals Report (2015), Page 10, available at <http://www.un.org/en/development/desa/millennium-development-goals.html>, (last accessed 19/02/18).
66. UNICEF, *Water, Sanitation and Hygiene*, Updated May 2010. http://www.unicef.org/media/media_45481.html, (last accessed 5/04/17).
67. United Nations Development Programme, (2006), *Human Development Report 2006: Beyond Scarcity: Power, Poverty and the Global Water Crisis*, available at <http://hdr.undp.org/en/reports/global/hdr2006/>, (last accessed 4/04/17).
68. United Nations Development Programme, (2007), *Effective Water Governance: The Key to Sustainable Water Management and Poverty Eradication*, <http://www.undp.org/water/>, (last accessed 19/02/18).
69. United Nations Development Programme, *Sustainable Development Goals, Clean Water and Sanitation, Why it Matters*, available at http://www.un.org/sustainabledevelopment/wp-content/uploads/2016/06/Why-it-Matters_Sanitation_1p.pdf, (last accessed 20/06/17).
70. United Nations Development Programme, *Sustainable Development Goals*, available at <http://www.un.org/sustainabledevelopment/water-and-sanitation/>, (last accessed 19/02/18).
71. United Nations Environment Programme (UNEP), (2013), *Africa Environment Outlook Summary for Policy-Makers*, available at <http://wedocs.unep.org/handle/20.500.11822/8653>, (last accessed 15/01/18).
72. United Nations Report (2015), *Indicators and a Monitoring Framework for the Sustainable Development Goals*, available at <https://sustainabledevelopment.un.org/content/documents/2013150612-FINAL-SDSN-Indicator-Report1.pdf>, (last accessed 20/02/18).
73. United Nations. Statement by Secretary General Kofi Annan. June 2003, available at <http://www.un.org/News/Press/docs/2003/sgsm8707.doc.htm>, (last accessed 21/03/17).
74. UN-Water., (2013), *Water Security and the Global Water Agenda: A UN-Water Analytical Brief*, available at <http://www.unwater.org/publications/water-security-global-water-agenda/>, (last accessed 15/06/17).

75. UN-Water., (2015), *A Compilation of Aspects on the Means of Implementation: Water and Sanitation: A Look at Goal 6 and 17*, available at https://sustainabledevelopment.un.org/content/documents/1746UN-Water%20draft%20MOI%20compilation_4%2024%202015.pdf, (last accessed 19/02/18).
76. Water and Sanitation: Addressing Inequalities, (2014), [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)60665-6/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)60665-6/fulltext), (last accessed 20/02/18).
77. Watkins K., et al (2006), *Human Development Report: Beyond Scarcity: Power, Poverty and the Global Water Crisis*, available at <http://www.undp.org/content/dam/undp/library/corporate/HDR/2006%20Global%20HDR/HDR-2006-Beyond%20scarcity-Power-poverty-and-the-global-water-crisis.pdf>, (last accessed 19/03/17).
78. WHO/UNICEF, (2010), *Joint Monitoring Programme for Water Supply and Sanitation, Progress on Sanitation and Drinking Water 2010*, available at www.wssinfo.org/, (last accessed 19/03/17).
79. WHO/UNICEF, (2009), *Diarrhoea: Why Children are still Dying and what can be Done*, available at http://www.unicef.org/health/index_51412.html, (last accessed 20/03/17).
80. WHO/UNICEF, *Progress on Sanitation and Drinking Water 013 update*, available at http://apps.who.int/iris/bitstream/10665/81245/1/9789241505390_eng.pdf, (last accessed 20/02/18).
81. Winkler I., and Roaf V., (2015), *SDG Series: Progress on Water, Sanitation and Hygiene through SDG 6? Only if the Focus Shifts to Eliminating Inequalities*, Health and Human Rights Journal, available at <https://www.hhrjournal.org/2015/09/sdg-series-progress-on-water-sanitation-and-hygiene-through-sdg-6-only-if-the-focus-shifts-to-eliminating-inequalities/>, (last accessed 24/02/18).
82. Wohlwend B., (2001), *Equitable Utilization and the Allocation of Water Rights to Shared Water Resources*, available at <http://www.aida-waterlaw.org/PDF/EQUITABLE.PDF>, (last accessed 20/05/17).
83. Wolski P., (2017), *Why Cape Town's Drought was so Hard to Forecast*, available at <https://www.news.uct.ac.za/news/cape-town-water-crisis/-article/2017-10-20-why-cape-towns-drought-was-so-hard-to-forecast>, (last accessed 15/02/18).

84. World Health Organisation., (2017), *Progress on Drinking Water, Sanitation and Hygiene: Updates and SDG Baselines*, available at <http://www.who.int/mediacentre/news/releases/2017/launch-version-report-jmp-water-sanitation-hygiene.pdf>, (last accessed 19/02/18).
85. World Health Organization, *Costs and Benefits of Water and Sanitation Improvements*, at the global level, http://www.who.int/water_sanitation_health/wsh0404/en/, (last accessed 4/04/17).
86. World Health Organization, *Global Costs and Benefits of Drinking-Water Supply and Sanitation Interventions to Reach MDG Target and Universal Coverage*, available at http://www.who.int/water_sanitation_health/publications/2012/globalcosts.pdf, (last accessed 19/03/17).
87. World Health Organization, *Key Facts from 2015 JMP Report*, available at http://www.who.int/water_sanitation_health/publications/JMP-2015-keyfacts-en-rev.pdf?ua=1, (last accessed 19/03/17).
88. World Health Organization, *WHO in the African Region*, available at http://www.afro.who.int/en/clusters-a-programmes/hpr/protection-of-the-human-environment/programmecomponents/index.php?option=com_content&view=article&id=24&Itemid=122, (last accessed 20/03/17).
89. World Resource Institute, *Earth Trends Environmental Information*, <http://www.wri.org/our-work/project/earthtrends-environmental-information>, (last accessed 19/03/17).
90. World Water Council, *Ministerial Declaration of The Hague on Water Security in the 21st Century* (Mar. 22, 2000), available at http://www.worldwatercouncil.org/fileadmin/world_water_council/documents/world_water_forum_2/The_Hague_Declaration.pdf, (last accessed 3/01/17).