An appraisal the use of policy agendas in lieu of legal norms to protect populations at risk from the global freshwater crisis Mariana Simon Cartaya

Introduction

In seeking to identify a coherent approach to the global freshwater crisis, this paper evaluates and counterbalances the role that international law and international policy can play in tackling its separate elements. The question of whether it is best to approach the crisis through legal norms or by international policy agendas is of an overtly normative nature, at the centre of which are the interests of affected individuals and the global community at large. An important analytical element will be an 'international rule of law' evaluation, as a means to assess some of the currently debated legal and policy measures.

I will begin by outlining the freshwater crisis as an issue of scarcity of natural resources essential to the entire world, often referred to as 'Global Commons'. The freshwater crisis has and will continue to have an immense impact on the world, encompassing the fields of natural resource distribution, human rights and environmental issues. I will focus on the goal of equitable distribution of natural resources as it is at the core of the issue from an international perspective, and look at human rights and environmental concerns as these have overlapping contributions, especially in their existing legal frameworks.

The analytical framework of this paper will be twofold, firstly outlining the policy and law alternatives, and secondly appraising these solutions under a rule of law framework.

1

The distinction between policy and law is one that is blurred and interconnected, especially within the international legal sphere. As such, a rule of law assessment is difficult to make because soft law and other binding but unenforceable agreements find themselves on the borderline between both categories; and as such, an alternative way to read into the law and policy dichotomy may be 'hard and soft international law'.

The paper operates under the assumption that the international rule of law (IROL) is a valuable framework for global governance and problem solving. Furthermore, both the formal and less formal elements of the IROL are generally and historically accepted criteria for proper governance, thus theoretically offering a non-ideological benchmark with which to evaluate proposed solutions. The rule of law ideals that will be used to assess whether law or policy are better suited are those of determinacy, flexibility, predictability and effectiveness. These ideals have been chosen as they include the formal elements of determinacy and predictability to highlight the supposed strengths that follow from law, and flexibility and effectiveness, arguably 'thicker', or more substantive rule of law concepts as 'barometers' to make the law easier to compare with policy.¹

It is almost impossible to overemphasise the breadth of the freshwater crisis today. The urgency of resolving the freshwater crisis has been stressed, as a combination of climate change and a poor management of natural resources has resulted in and exacerbated great human suffering.

¹ Simon Chesterman, 'An International Rule of Law?' (2008) 56(2) American Journal of Comparative Law 13

Global Freshwater Crisis

Putting things into perspective:

Although 70 per cent of the world's surface is covered by water, only a fraction of that — 2.5 per cent — is freshwater, of which 70 per cent is frozen in ice caps. The remainder is present as soil moisture. This leaves **less than one percent** of the world's freshwater resources accessible for human use.²

The Global Freshwater Crisis is the term used to describe the increasing scarcity of and difficult attainability of fresh water to populations around the world. It is a topic heavily touched upon from the 1990s onwards, leading to the Rio Declaration by the UN,³ which created the action plan dubbed Agenda 21 with regard to sustainable development. Specifically, to the freshwater crisis, it included the "Protection of the quality and supply of freshwater resources".⁴

The goals emanating from Agenda 21 were included in the Millennium Development Goals, proposed by SG Kofi Annan in the Millennial Report.⁵ These were later endorsed in the Millennium Declaration of the UN and pronounced as aiming "[...] to halve the proportion of people who are unable to reach or to afford safe drinking water"⁶ and "[t]o stop the unsustainable exploitation of water resources by developing

² UN Water Brochure http://www.un.org/events/water/brochure.htm> accessed 24 November 2017

³ United Nations Rio Declaration on Environment and Development (June 1992), UN Doc. A/CONF.151/26 (vol. I) 31 I.L.M. 874 (1992).

⁴ United Nations Conference on Environment & Development Rio de Janerio, Brazil, 3 to 14 June 1992 'AGENDA 21'. Section II: 18

⁵ Kofi Annan, *We the Peoples*' (United Nations Department of Public Information, 2000)

⁶ This goal was part of a larger MDG, namely the Eradication of Extreme Poverty and Hunger

water management strategies at the regional, national and local levels". ⁷ All Millennium Development Goals (MDGs) were set to reach their target within 15 years, by 2015. Both 'freshwater' goals were indeed achieved by 2015, the year that the MDGs came to a conclusion.⁸ 2016 ushered in the new Sustainable Development Goals (SDGs) envisioned in the New York Summit⁹ and adopted by the General Assembly in the 2030 Agenda for Sustainable Development.¹⁰ Here the current 17 Goals on Sustainable Development are laid out – Goal 6 **is** of particular relevance namely because it "ensur[es] availability and sustainable management of water and sanitation for all".¹¹

Specific challenges posed by the freshwater crisis:

Transboundary waters are bodies of water shared between two or more states, and whilst they are obviously an important resource, they are also a potential source of international conflict. It has been established by The Hague Institute for Global Justice that establishing a framework for water distribution is now considered a 'conflict prevention' initiative.¹² Such a framework can be exemplified by the Israeli and Palestinian situation; wherein Israeli authorities control commonly shared waters between Israeli and Palestinian territories.¹³

⁷ UNGA Res. 'United Nations Millennium Declaration' UN Doc A/RES/55/2 (18 September 2000) [19], [23]

⁸ 'Were the Millennium Development Goals a success? Yes! Sort of' *World Vision International* (July 2015) <www.wvi.org/united-nations-and-global-engagement/article/were-mdgs-success> accessed 25 November 2017

⁹ United Nations Sustainable Development Summit, New York, USA, 25-27 September 2015 ¹⁰ UNGA, Transforming our world: the 2030 Agenda for Sustainable Development. A/RES/70/1 (21 October 2015)

¹¹ UNGA, *ibid* (n 9) 14

¹² Georgios Kostakos & Ting Zhang, '*Equitable Distribution of Natural Resources: A Legal Principle, a Normative Guide, a Negotiating Tool, or a Pipe Dream?*' (July 2013, The Hague Institute for Global Justice)

¹³ Sharif S. Elmusa, 'Towards an Equitable Distribution of the Common Palestinian-Israeli Waters: An International Water Law Framework' 22 Journal of Palestinian Studies (1993) 57

UN Water puts forward the need for "a supranational, integrated approach to transboundary water resource management based on legal and institutional frameworks and shared benefits and costs."¹⁴ This takes on a natural resource law perspective as it combines the protection of environmental resources with managing the economic expectations of resource owners. Overexploitation of the world's aquifers, rivers and lakes exacerbate environmental disaster, as well as political strife. There therefore needs to be supranational cooperation of industry actors who rely on water (i.e. agriculture, energy, etc.).

Water Scarcity can imply either a scarcity in the availability of water due to an actual physical shortage, or it could be a scarcity of access to water as an effect of inadequate infrastructure or the failure of institutions to safeguard the regular supply of water.¹⁵ Water scarcity is a global problem and affects all continents. Its challenges are the constant increase in population and increased urbanization that drains local water resources. Furthermore, the demands set by climate control and bio-energy production create challenges in the relationship between water demand and scarcity and global development.¹⁶ Recognizing that there is currently no global water shortage, UN Water urges national and regional institutions to deal with these specific internal problems in order to address the distribution issue, and as a matter of prevention of a generalized scarcity in future.

It is important to therefore bear in mind that there is no general water scarcity, and as such it is the inequity of water distribution that must be addressed. Through a

¹⁴UN Water Publications 'Transboundary Waters' (*UN Water*) <http://www.unwater.org/water-facts/transboundary-waters/> accessed 24 November 2017

¹⁵ UN Water Publications 'Water Scarcity' (*UN Water*) <www.unwater.org/water-facts/scarcity/> accessed 24 November 2017

¹⁶ *ibid*; see also Göran Berndes, 'Bioenergy and water—the implications of large-scale bioenergy production for water use and supply' (2002) 12(4) Global Environmental Change 253

critical lens, we can see that the world is once again divided into two categories: the 'haves and have-nots'.¹⁷ A poignant example can be drawn from the conflict in the Middle East, where the manipulation of water, i.e. depriving a people of livelihood through water for agriculture and drinking, is being used as a tool of power for Israel over the Palestinian territories. It is therefore important to understand the fact that cooperation is not a 'given' in this field, and fresh water, like any other valuable resource ought to be regulated according to its importance. The challenge that comes with the tension between the scarcities of the natural resource of water that makes it such a valuable commodity is to manage for states to act within a fair pricing and distribution framework.

Generally, providing freshwater to populations is a matter for states, with few positive obligations towards individuals of other states. For the purposes of this paper we will consider the individuals in need (consumers) as the ultimate recipients of the good.

Equitable distribution of natural resources

Law

The main international law principle of natural resource distribution is that of '*equitable and reasonable utilization*'. This concept importantly hinges on the idea of equity, and although the principle of equity is invoked when there are transboundary issues of water allocation: there is no hegemonic or universal understanding of what this means. This principle is thus relatively unworkable due to its subjectivity and lack of codification in any significant piece of international legislation, and much less a

¹⁷ Anthony Turton & Roland Henwood 'Hydropolitics in the Developing World: A Southern African Perspective' (2002) African Water Issues Research Unit, Pretoria

specialized legal framework.¹⁸ An international legal framework for natural resource distribution has been idealized but described ultimately as a 'pipe dream'.¹⁹ The cause for cynicism is predominantly that there are too many hurdles in convincing states to relinquish their territorial integrity and sovereignty for a global project, which likely has little effect to their own populations. Professor Bodansky, a Sustainability Scholar underpins the difficulty of such a legal regime on the continuous state-centric basis of legitimacy of international environmental law, which ultimately does not allow for the fruition of 'flexible, non-consensus decision-making procedures' due to conflicting and politicized state interests.²⁰ It is therefore established that there is little in the way of telling states how to deal with their natural resources, as there is no positive obligation to give or sell these, and it is unlikely that such obligations would arise. As such, the prospects for law here is the feeble.

Protection for the environment has previously been stipulated in trade agreements such as the 1947 GATT agreement and the 1994 Agreement on the WTO.²¹ Examples of this can be seen in Article XX(g) of the GATT/WTO Agreement 1994, setting out conditions for restricting international trade in the interest of the conservation of natural resources.²² Such emphases in texts on trade show a general trend of consciousness oft denied. However, the question of how binding statements

¹⁸ Owen McIntyre, 'Utilization of shared international freshwater resources – the meaning and role of "equity" in international water law' (2013) 38(2) Water International 112

¹⁹ Georgios Kostakos & Ting Zhang, '*Equitable Distribution of Natural Resources: A Legal Principle, a Normative Guide, a Negotiating Tool, or a Pipe Dream?*' July 2013, The Hague Institute for Global Justice

²⁰ Daniel Bodansky, 'The Legitimacy of International Governance: A Coming Challenge for International Environmental Law' (1999) 93(3) American Journal of International Law pp. 596-624

²¹ Nico Schrijver, "International Environmental Law: Sovereignty versus the Environment?" *Sovereignty over Natural Resources: Balancing Rights and Duties* (CUP 1997) 219

²² WTO Agreement: Marrakesh Agreement Establishing the World Trade Organization, Apr. 15, 1994, 1867 U.N.T.S. 154, 33 I.L.M. 1144 (1994) Art. XX(g)

of respect are, and how effective they are in aligning business with sustainable development, is debatable.

Taking the example of the Israeli-Palestinian situation, Sharif Elmusa stipulates that international water law as it exists is an essential component to determining the amount of water that Palestine is entitled to by population size. He sets out that the wealthier nation, which has desalinization technologies and the capacity to perform in the water market, can and ought to agree to the equitable distribution on legal grounds but has not because it is ultimately lacks the political will to bend to the framework.²³ What this-shows is the relative weakness of international water law that, when met with state stubbornness, shows that it is not a feasible expectation to uphold.

Since there is a lack of a legal framework with binding obligations for states to redistribute their water sources, it seems that the most realistic 'solution' is to be found in incentivizing equitable redistribution. This is where certain policy tools have been drawn up to tackle the issue. This is of course not the only solution, but rather the result of several expert meetings in the field, namely the Hague Institute for Global Justice, and UN Water, whose proposed policy measures are outlined below.

Policy

Considering the issues surrounding the creation of a legal framework for water distribution, there has been a surge in water policy. Such policies have the purpose of facilitating the distribution in an equitable manner, through different mechanisms. Economic incentivization, changing water pricing regulations, technology transfer for desalinisation, and a normative framework of 'water diplomacy' are all possibilities on the table.

²³ Elmusa, *Ibid* (n12) 17

United Nations Global Compact

The UN Global Compact initiative, created as a supranational corporate social responsibility body, is relevant on two grounds; (i) upholding the sustainable development goal of access to clean water, and (ii) upholding the rule of law. The UN Global Compact contains ten principles, including the commitment to support and respect the protection of internationally proclaimed human rights²⁴, support a precautionary approach to environmental challenges²⁵, and encourage the development and diffusion of environmentally friendly technologies.²⁶ The Global Compact is a policy tool, not to be confused with a legal instrument enforcing compliance, and as such has been referred to as "a guide dog, not a watch dog".²⁷ The powers are of course limited, but as a UN initiative, it holds the normative appeal for participants, and is geared to follow the sustainable development goals. For interested industry members it is important to firstly provide guidance as to how to incorporate the SDGs into their operations, and a very soft tool lacks the coercion but facilitates participation in such 'futuristic' projects.

UN Water Roundtable on Financing Water: 'blended finance'

In April 2017 the World Water Council had a roundtable on the possible business approaches to address the freshwater crisis.²⁸ One of the main points put forward is that water has to be marketed as an attractive product, by giving it a higher buying

²⁸ World Water Council Report 'OECD-WWC-Netherlands Roundtable on Financing Water Inaugural meeting' (April 2017, Paris) http://www.worldwatercouncil.org/sites/default/files/2017-

10/Roundtable_on_Financing_Water_Summary.pdf> accessed 25 Nov 2017

²⁴ *Ibid*, Principle 1

²⁵ *Ibid*, Principle 7

²⁶ *Ibid*, Principle 9

²⁷ Janelle Dumalaon, Interview with Lise Kingo, UN Global Compact chief, (14 October 2015) <http://www.dw.com/en/global-compact-a-guide-dog-not-a-watchdog/a-18781065> accessed 23 Nov 2017

price –this would create more investors, resulting in better access. The committee argued, "Higher levels of future investment will be needed if the ambition of the Sustainable Development Goals is to be fulfilled".²⁹ Normally meeting sustainable development goals is a matter for states to organize, however, they refer to the private sector as the 'missing piece' of the Sustainable Development Goal (SDG) puzzle.³⁰

The OECD urges for policy reform in developing countries to attract private investment to further SDGs. Current policies in place are not designed to align the SDGs with a financial return for investors. SDG 6.1 is the target to "achieve universal and equitable access to safe and affordable drinking water for all" by 2030. The OECD policy would focus on investments in infrastructure which would counter the challenge identified by UN Water, namely the lack of adequate infrastructure which fuels the inaccessibility of water for many.³¹ An example of a policy method to help achieve this is the use of 'blended finance'. It allows for private investments in the sectors that are usually publicly controlled but need additional finance.³²

Privatizing water does not however come without its criticisms. Three 'crosscontinental' case studies of Bolivia, South Africa and the Philippines were done in 2015, drawing mixed results.³³ The most common problem was finding an alignment in the allocation of resources and the alleviation of poverty. The project in the Philippines managed to harmonize the political interests with those of the consumers

²⁹ OECD Roundtable on Financing Water, *Ibid* (n 25)

³⁰ 'The Private Sector: The Missing Piece of the SDG Puzzle' *OECD* (2017) <www.oecd.org/dac/financing-sustainable-development/development-finance-topics/Infographic> accessed 26 November 2017

³¹ OECD and Post-2015 Reflections, 'Investment for Sustainable Development' Element 11, Paper 3

<https://www.oecd.org/dac/Post%202015%20Investment%20for%20sustainable%20develop ment.pdf>

³² 'Blended Finance' *OECD Publications* <http://www.oecd.org/dac/financing-sustainabledevelopment/development-finance-topics/blended-finance.htm)>

³³ Tanya Kapoor, 'Is Successful Water Privatization a Pipe Dream?: An Analysis of Three Global Case Studies' (2015) 40 Yale Journal of International Law 157

because of the attention it paid to the potentially negative effects of privatization on the consumers (e.g. higher water rates) and introduced preventative schemes in order to keep prices fair by (i) raising rates gradually; (ii) implanting a progressive rate scheme based on income; and (iii) poverty alleviating programs by delivering water to the "extremely poor".³⁴ It is not always possible to align the interest of the private parties with those of the affected consumers and as such privatizing water often fails to be effective for those who it is intended for.³⁵

Technology transfer & desalinization

Desalinization, the process by which salt water is made potable, is the only hypothetically permanent solution to a lack of freshwater, bearing in mind that over 97 per cent of the Earth's water is saltwater. Amongst the alternative initiatives available to resolve the freshwater crisis are subsidies for the transfer of desalinization technology between states. In this field, this process is dubbed 'technology transfer'. The combination of business incentivization and long-term solutions that would eradicate the issue hypothetically makes this the most adequate policy tool. However, the process is also seen as energy-intensive, so it is not yet a 'green' industry, and much less an affordable one ³⁶, possibly countering the spirit of sustainable development goals. Since the technology is currently available and in use mostly by the wealthier states in need³⁷, the initiative proposed here encourages the transfer

³⁴ Who Are the Extremely Poor?, *World Bank*, <http://www.worldbank.org/en/news/video> *accessed on* 9th December 2017/2013/06/20/who-are-the-extremely-poor (last visited Dec. 4, 2014).

³⁵ Kapoor *ibid* (n33), 185-192

 ³⁶ Richard Martin, To Make Fresh Water without Warming the Planet, Countries Eye Solar Power' MIT Technology Review (May 2016)
https://www.technologyreview.com/s/601419/to-make-fresh-water-without-warming-the-planet-countries-eye-solar-power/> accessed 9 December 2017
³⁷ USA, Saudi Arabia, UAE, etc. in Martin, *Ibid* (n 36)

and distribution of desalinization technology as means to fulfill the equitable aspect of access to freshwater.³⁸

The initiative of technology transfer for desalinization fits into the view of the future of international law, as put by Professor David Kennedy.³⁹ He took a 'realist' perspective on what it looks like in practice for reaching global goals. This included favouring law as a political tool as opposed to an imposed supranational one, thus taking advantage of fragmentation to work on regional and local scales. He acknowledges that the legal privilege held by states is a hurdle to overcome certain global goals. In practice, what Kennedy was suggesting in his 2009 statement to the UN⁴⁰ would arguably be best realized through the fomentation of the technology transfer business in relation to sustainable water technologies. This has the combined power of business and normativity that harnesses the self-interest of private actors, with the altruism needed for equitable distribution.⁴¹ As Kennedy envisions, the idea is not for it to be a supranational advisory committee or body that organizes the exchanges, but rather decentralized, possibly regional systems that facilitate the coordination in a more locally sensitive and empowering manner.⁴²

Integrated Water Resource Management

Implementation of integrated water resources management (IWRM) is how the UN envisions water policy going forward – and to a certain degree it addresses natural resource, human rights and environmental law concerns. IWRM is a policy tool

³⁸ Helena van der Vegt, Ilian Iliev, Quentin Tannock, and Sarah Helm, '*Patent Landscape Report on Desalination Technologies and the Use of Alternative Energies for Desalination*' WIPO Publication No. 948/2E (November, 2011) 6

 ³⁹ Dialogue with Member States organized by the Rule of Law Unit "Rule of law at the international level" UN Headquarters 2009, Statement by Professor Kennedy.
⁴⁰ Ibid

⁴¹ Also encouraged in practice for the Israel-Palestine situation in Elmusa, *Ibid* (n12) 73 ⁴² *Ibid* (n 34) 6

advocated by UN Water in line with SDG 6.⁴³ It is to be introduced regionally, nationally and locally to find a balance between water scarcity and water demands. It's based on three principles; (1) ensuring the equal access to an adequate quantity of water of an adequate quality; (2) being economically efficient in trying to benefit the largest amount of users possible with the available financial capabilities and; (3) acknowledging that the resources of water need to be protected to sustain their proper functioning.⁴⁴ Although the systems works through a number of policy tools–e.g. institutional development, creation of an enabling environment, and specific management instruments—there is no single plan of the form in which it is to be implemented, though this plan will depend on the situation of the specific region, country or area.

The approach of integrated water management was greatly encouraged by the International Water Resources Association in the year 2000, with "tradeoffs among sectors" being the highlighted ideal.⁴⁵ However, it is seemingly difficult to implement in practice due to a lack of integration, pointing to the fragmentation of "sector-based development" as the leading cause for malfunction of the system. Not only has this been an ongoing issue for the last 50+ years, but also it is critical to harmonize because it is especially present in trans-boundary contexts.⁴⁶ The IWRM framework does not impose any coercive accountability on those adopting it and as such do not promote determinacy, and the 'pick-and-choose' character of the framework could lead to further lack of clarity. Furthermore, a specific risk of economic policies aiming

⁴³ UNDESA, 'Integrated Water Resources Management (IWRM)' (24 November 2014) http://www.un.org/waterforlifedecade/iwrm.shtml> accessed 26 November 2017

⁴⁴ UN Water, 'Regional Coordination Mechanisms for Water: A report of the UN-Water Task Force on Regional-level Coordination' (2014)

⁴⁵ Alfred Duda & Mohamed El-Ashry, 'Addressing the Global Water and Environment Crises through Integrated Approaches to the Management of Land, Water and Ecological Resources' (Water International, 25:1, March 2000) 115

at a higher inclusion rate of private actors could be unequal application of specific framework tools to abuse the policies in their favor.

Muhammad Rahaman of the Helsinki Water and Development Research Group elaborates on the degree that principles proposed by IWRM are found in international water law.⁴⁷ Rahaman argues that there is a great overlap, and that principles of "[...] equitable and reasonable utilization, obligation not to cause significant harm, cooperation, information exchange, notification, consultation and peaceful settlement of disputes" are widely acknowledged in the environmental law instruments and the agreements of the 1990s.⁴⁸ What this can mean is that there is at least a general consensus of the obligations put forward by international water law – a seeming amalgam of environmental law with diplomacy and sustainable development goals. It is then the lack of a coherently binding framework that makes the practice difficult.

The approach of international cooperation, such as that stipulated in Agenda 21's Chapter 18 "defies hydro-political reality: cooperation among states is not an option – it is an imperative".⁴⁹ In other words, Wouters favors a more stringent system of rules, not merely relying on the goodwill of states. Although in theory this is an attractive perspective to adhere to, it seems practically unrealistic in the current international climate. As such, incentivized and flexible legal tools and frameworks that are implemented on a domestic level in order to provide both compliance and efficacy provide a better solution.

⁴⁷ Muhammad Mizanur Rahaman 'Principles of international water law: creating effective transboundary water resources management' 1 International Journal of Sustainable Society (2009) 207

⁴⁸*Ibid* (n40) 222

⁴⁹ Wouters K, Rieu-Clarke S, '*The Role of International Water Law in Promoting Sustainable Development*' International Water Law Research Institute, Department of Law, University of Dundee (2003)

Human Rights Perspective

Law

In the context of the freshwater crisis, the human rights angle is relevant insofar as domestic distribution is concerned. The Committee on Economic, Social and Cultural Rights in 2002 issued a general comment elaborating the inclusion of the right to water within Article 11(1) of the ICESCR.⁵⁰ The committee interpreted the right to an adequate standard of living to be non-exhaustive and to include the right to water.⁵¹

The General Assembly had considered the right to water as springing out of the right to health, and the right to food. More explicitly the human right to water and sanitation was recognized by UNGA Resolution 64/292 in 2010.⁵² The UNGA in this instance called for specific action from states:

[T]o provide financial resources, capacity-building and technology transfer, through international assistance and cooperation, in particular to developing countries, in order to scale up efforts to provide [...] drinking water and sanitation for all.⁵³

The GA resolution emphasized the right to water in the context of the millennium goals, and encouraged state action. The human right to water and its binding legal obligations are important, but by nature lack extraterritorial obligations. If the holistic issue is then to be addressed through a human rights lens, and the above cited paragraph to be

⁵⁰ International Covenant on Economic, Social and Cultural Rights (New York, 16 Dec. 1966) 993 U.N.T.S. 3 Article 11(1)

⁵¹ Committee on Economic, Social and Cultural Rights, General Comment No. 15, *The Right to Water*, E/C.12/2002/11, 20 January 2003. [3]

⁵² UNGA Resolution 64/292 '*The human right to water and sanitation' adopted* by the General Assembly on 28 July 2010

⁵³ *Ibid*, 3

implemented, it is clear that it would be unworkable through traditional human rights obligations; and a turn to distribution policy remains logical. Nevertheless, there may be a role for the *rhetoric* of international human rights.

Policy

By way of policy, using the human right to water carries the power of human rights rhetoric that may encourage states and organizations to give aid and support as well as take up a basic domestic obligation on the matter– although it must be emphasized that this is not the end goal. Recognizing the freshwater crisis in right to water terms could thus serve the role of protecting an individual's necessities when it comes to the internal distribution, guaranteeing the domestic obligation, meanwhile the policy and technology needed to equitably redistribute the access on a global scale is being resolved. As such it takes a backseat in the actual realization of the equitable distribution of water.

Environmental Law and Policy

Law

The role of environmental law in the pursuit of the equitable distribution of water can be seen as a way of protecting and safeguarding the resources primarily through the establishment of negative obligations on states. It could directly aid the sustainability of resources however it lacks the mechanisms to positively require active steps to counter distribution problems.

There is plenty of law surrounding the environmental aspects of freshwater, however most of it is captured in bilateral agreements for transboundary waters.

16

The 1997 ICJ case *Gabčíkovo-Nagymaros Project* (Hungary/Slovakia)⁵⁴ elaborated on the protection of the environment and ecological systems in the context of transboundary freshwater. Most importantly this case established principle such as that it is to be considered an "essential interest" to safeguard ecological balances.⁵⁵ States were considered to hold an obligation to respect and protect their natural environment and avoid transboundary harm to the environments of other states. The majority decision unfortunately did not apply the precautionary principle of avoidance of long-term impacts. The Court refused to recognize "sustainable development" as a binding legal principle and instead categorized it as a mere concept. This exemplifies the lack of positive obligations that environmental law can create, which in turn does not fit into the progressive nature of sustainable goals.

Another example of this can be seen in Principle 21 of the Declaration of the United Nations Conference on the Human Environment 1972. Most importantly this created the well know principle of the sovereignty of states "to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environments of other States or of areas beyond the limits of national jurisdiction."⁵⁶

Professor Nico Schrijver in his text deals with the struggle between state sovereignty over national resources and international environmental law. This presents a limit to overcoming the natural hurdles we face. Schrijver pessimistically states that environmental law has a track record for negotiations not leading to

^{54 1997} I.C.J. 7

⁵⁵ *ibid* [53]

⁵⁶ UN Conference on the Human Environment, [Stockholm Declaration] (Stockholm, 16 June 1972), U.N. Doc. A/CONF.48/14, 11 I.L.M. 1416 (1972).

substantial outcomes because dispute resolution procedures are not ratified and used.⁵⁷

The shortcomings of environmental law to efficiently create positive obligations can be seen in the treaties on transboundary basins. Often these agreements are insufficiently effective to promote integrated water resources management due to problems at national and local levels such as weak capacity in countries to implement the agreements or shortcomings in the agreements themselves (e.g. lack of enforcement mechanisms or non-inclusion of important riparian States, which are States that border, or are situated near, and hold legal rights over, a body of water).⁵⁸

Policy

Despite the breadth of binding environmental law instruments, there is also room for policy in this field. Spijkers, a researcher for the Utrecht Centre for Water, Oceans and Sustainability Law, finds an intersection between SDG 6 and international water law, arguing that the former serves as a guiding principle coercing states to adopt and follow the law.59 Such coercion has been linked to the passing of resolutions at the UN. Dinah Shelton, in her book on non-binding international law uses the example of driftnet fishing and correlates that the UNGA measures against this were successful due to the context of sustainable development goals regarding the environment.60 She insists on the normative power of UNGA resolutions and recommended measures

⁵⁷ *Ibid* (n19) 234

⁵⁸ UN-Water, Transboundary Waters: Sharing Benefits, Sharing Responsibilities (UN 2008), 6 ⁵⁹ Otto Spijkers, 'The sustainable development goals as catalyst for the sustainable management of water resources' (2014) 24, The Journal of Water Law 115.

⁶⁰ Dinah Shelton '*Commitment and Compliance: The Role of Non-binding Norms in the International Legal System*' (OUP 2003) http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199270989.001.0001/acpr of-9780199270989-chapter-6> accessed 25 Nov 2017, 238.

as "facilitating and undergirding the rule of law in the polar South".61 As such we see that phrasing environmental issues as policy goals could potentially be received as having binding force.

Appraisal in Rule of Law Terms

Having outlined several policies and laws relevant to counter the freshwater crisis, they will now be evaluated on the basis of four rule of law elements: determinacy, predictability, flexibility and effectiveness. Whilst the terms may overlap, be interdependent, and in some instances appear contradictory; it is necessary to assess the countervailing normative ideals of the rule of law in this context for a holistic evaluation.

Determinacy

Determinacy, also referred to as legal certainty, is one of the most paramount and repeated features of the rule of law. It is said to include *inter alia* clarity, stability, accessibility, predictability and intelligibility of the law and legal norms. ⁶² A determinacy argument would always eschew towards legal protection.

For the purposes of the distribution of natural resource, a 'determinacy critique' would no doubt point in favour of instituting legal norms because the clarity of the law leaves no question as to obligations of states, corporations and maybe even individuals as to the behaviour required of them. Such legal instruments are key to protecting the established right to water, and ensure the state of obligations owed domestically and externally. Whilst legal norms prove the blatantly determinate

⁶¹ *Ibid* (n 41) 183.

⁶² Mark Fenwick, Mathias M Siems, Stefan Wrbka, '*The Shifting Meaning of Legal Certainty in Comparative and Transnational Law*' (1st edn. Hart Publishing, 2017) 8

safeguard for human rights and environmental law, this is less so the case for resource distribution. Though a legal framework may be idealised for distribution, it seems apparent from the above (Section III) that international law, no matter how determinate, would be irreconcilable with states' autonomy on the use of their resources.⁶³

Policies such as Integrated Water Resource Management (IWRM) contradict the need for clear determinacy required by the rule of law, and rather open up the conversation to move out of the inefficient yet determinate bilateral treaty system, which does not work towards SDG 6.

Predictability

Predictability of the law refers to a subject of the law's ability to be aware of, and thus predict, the consequences of the law upon them. As a rule of law element, it provides the subject security in terms of what they are bound to and protected from. In regards to the matter at hand, the prompt is phrased concerning the individuals affected by the freshwater crisis. The predictability provided through the use of legislation, especially in the area of human rights law affords these individuals the security and peace of mind sought by legislators. Were policy to be relied on, there would exist the fear that the non-binding nature, and the potential political changes, budget cuts etc. would 'stir the pot' and put at risk the guaranteed minimums.

A challenge in the matter of equitable distribution that could not be overlooked because of the inevitability of the challenge it presents to the privatization of water resources is the possibility that investments result in lopsided effects, thereby nulling the point of 'equitability'. More precisely, privatizing water resource distribution would

20

⁶³ *ibid* (n50), and Schrijver (n19)

still be contingent on state relationships; creating situations where sanctioned states in need would not receive the water due to politico-economic reasons. Furthermore, privatization introduces market dynamics of pricing that would undoubtedly be more onerous for some states than others. Not only would this undermine the rule of law notion of predictability, because results depend on self-interested investors, but it goes against the object itself. Therefore, if it is predictability we seek, policy seems to fall short since the proposed policy measures lie largely in the private sector, and thus are privy to elements of goodwill as well as the element of risk. As such, equality before the law is not guaranteed through the policy means explored, and one would have to rely on regulation and direction for the water business to ultimately rely on supranational systems that stand separate to the economic interest. This is another manifestation of the 'combined approach' that has been suggested throughout.

Flexibility

Flexibility can be read as an element in the international rule of law due to the necessarily consensual nature of international law and law-making itself. Flexibility is for example poignantly relevant in environmental law, where monetary resource allocation is truly an issue, states must feel as though they are part of a system that accommodates their interests, as opposed to being strained in domestic matters to deal with international compliance of broader international 'goals' and policy agendas. A move in the direction of flexibility shows a preference for soft law and the significance of state intent when contracting.⁶⁴ The flexibility desired in large-scale projects, that in theory do not hold an international obligation, is challenged by the want for

⁶⁴ Mattias Kumm, 'International Law in National Courts: The International Rule of Law and the Limits of the Internationalist Model', 44 (2003) Virginia Journal of International Law 30

accountability and determinacy sought in the international regime; thus, presenting a tension between the formal and less formal elements of the international rule of law.

The need for flexibility in freshwater treaty regimes has nevertheless been emphasised especially with bilateral treaties for transboundary river basins.⁶⁵ Whilst treaty systems provide stability and predictability, these are the same qualities that make international law an ill-suited instrument for a field that is ever changing, and depends strongly on political will and financial resources.⁶⁶ With this borne in mind, we can see that there is little in the way of international water law to deal with contentious cases of transboundary issues. These challenges therefore point towards the fact that alternative cooperative, business or technology measures should be prioritized. Nevertheless, there is room for development in the international legal field, if the concept of 'equitable and reasonable utilization' is applied, due to the cited inherent flexibility' of the concept of equity that scholars agree is a 'suitable cornerstone of international water resources law'.⁶⁷

Effectiveness

Effectiveness as an element of the rule of law comes from the idea that the law is present and binding only when broadly accepted, and as such has been described as a political ideal and not a legal rule *per se*.⁶⁸ Effectiveness essentially assesses the proper functioning of the law. In the case of a measure to counter the freshwater crisis, a norm (policy or law) would be effective when it is *actually* helping to distribute water equitably, in a reliable manner that does not detriment states, rather than *theoretically*

⁶⁵ Stephen C. McCaffrey 'The need for flexibility in freshwater treaty regimes' 27 Natural Resources Forum (2003) 156–162

⁶⁶ Ibid (n56) 161

 ⁶⁷ Owen McIntyre, 'Utilization of shared international freshwater resources – the meaning and role of "equity" in international water law' (2013) 38(2) Water International 127
⁶⁸ Brian Z Tamanaha, 'On the Rule of Law: History, Politics, Theory' (CUP 2004), 58

doing so. The bridge between reality and theory is where international law may tend to get lost. The standard of functionality for the effectiveness of an approach ought to ideally be qualified in order to also meet standards of determinacy and predictability, whilst implementing an economic interest element granting the flexibility and incentive desired in international situations.

In terms of effectiveness, the approaches considered throughout this paper lean in the way of policy measures such as technology transfer for desalinization⁶⁹ to address the international distributional concerns, and human rights law regimes to guarantee domestic distribution obligations. The measures of transboundary accords under environmental law seemingly fail to deliver the results they are designed for, because their effectiveness depends on contingent financial and political goodwill that is not always present. On the other hand, systems of regional cooperation following the IWRM model and blended finance have the potential to be effective for redistribution, because their success relies largely on economic interest. As such, the future of international water law will be limited to an organizational function to develop the institutions necessary for coping with the distributional demands.⁷⁰

⁶⁹ Though affordability is still a challenge to accomplishing this, successes have recently been recorded; in Suez Water Technologies & Solutions *'Africa's Largest Seawater Desalination Plant Eases Water Scarcity For City of Algiers*' (June 2016); Water World, *'First desalination plant in West Africa officially inaugurated*' (April 2015)

⁷⁰ Dan A. Tarlock, 'Four Challenges for International Water Law Changing Currents: Perspectives on the State of Water Law and Policy in the 21st Century' (2009) 23 Tulane Environmental Law Journal 408

Conclusion

If we identify the solution of the freshwater crisis to be sought in natural resource distribution, there would be a need for a 'combined approach'. The focus ought to be set on policy to incentivize the water business (in an equitable manner), whilst combining the already existing legal frameworks of human rights and environmental law as part of the overall goal.

What seems to be the most suited combination is to continue to uphold the human right of access to clean water, as the normative power of this assertion has the potential binding force that may increasingly beckon international aid, which would otherwise not exist, and would oblige governments to take on equitable distribution methods. Environmental law can similarly be used, as it is the most assured way of protecting natural resources from the free will of actors that do not have conservationist interests in mind.

There is however an inherently great challenge that arises with the optimistically novel policy measures. The challenge follows from the typical law of supply and demand. For 'equitability' to be satisfied in terms of distributing scarce freshwater, an increasingly valuable commodity, states and private actors must act within a fair pricing and distribution framework. As has been proven above, this task can arguably not be regulated by a comprehensive international water law. As such, it is important to push alternative initiatives such as technology transfer for desalinization, using blended finance to increase investment, and manage these policies through Integrated Water Resource Management. The industry ought to be a combination of public and private, with regulatory and organizational functions fulfilled by a supranational framework to sort out inequities.

24

I therefore see the legal frameworks in human rights and environmental law as temporary custodians of rights that we value on 'moral' grounds, using the determinacy and predictability of the law. Meanwhile, the policy instruments do the 'background work' to fix the inherent issues with distribution and pricing that promote the inequitable distribution of freshwater, bridging the issues of flexibility and lack of effectiveness that often plague international law.