

## UNDOING THE INHERITANCE: BUILDING A LEGAL RESPONSE TO WATER INSECURITY IN AFRICA

Erin Pervin\*

---

### I. INTRODUCTION

The *United Nations Millennium Declaration*<sup>1</sup> of 2000 set high development targets—the “Millennium Development Goals”—for its member states to reach by 2015. One goal was to “[h]alve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.”<sup>2</sup> Unfortunately, a progress report released in 2007 found that the target would likely be missed, and in fact, the number of people without access to sanitation in Sub-Saharan Africa (“SSA”) had actually increased within that period.<sup>3</sup> The Millennium Development Goals were replaced in 2016 by the “Sustainable Development Goals”, which include a target to “ensure availability and sustainable management of water and sanitation for all” by 2030.<sup>4</sup> However, redoubled efforts are needed by most countries to meet the deadline in better managing their water sources.<sup>5</sup> Despite admirable goals, water insecurity remains a serious, real, and growing problem for many people.

---

\* Erin Pervin is a 2020 JD Candidate at the University of Windsor Faculty of Law. This article was originally written as a paper submission for a course on law and development, taught by Associate Professor Paul D. Ocheje, but has since been altered for this journal. The author gives her sincere gratitude, in no particular order, to the WRLSI team for all of their hard work, support and encouragement; to the anonymous reviewers for their helpful recommendations; and to the professors, teachers, and staff at Windsor Law for continually sharing their knowledge and expertise.

<sup>1</sup> *Resolutions and Decisions Adopted by the General Assembly During Its 55th Session*, GA Res 55/2, UNGAOR, 55th Sess, Supp No 49, UN Doc A/55/49 (Vol 1) (2000) 4.

<sup>2</sup> UNDESA, *The Millennium Development Goals Report, 2007* (New York: UNDESA, 2007) at 4, 25.

<sup>3</sup> *Ibid* at 25.

<sup>4</sup> UNDESA, *The Sustainable Development Goals Report, 2018* (New York: UNDESA, 2018) at 7.

<sup>5</sup> *Ibid* at 20.

This article will discuss the specific social problem of water insecurity in SSA. It will canvass immediate and root causes of the issue, connecting it in particular to the history of colonialism, which created lasting economic and political institutions with detrimental effects on water security.<sup>6</sup> Thereafter, using this understanding of the legacy of colonialism, it will illustrate some legal responses taken to the situation in SSA and discuss how legal solutions can best facilitate the development of water security. While this article does not propose a specific legal response to water insecurity in SSA, it suggests the proper components that might comprise such an effective response.

## II. THE SOCIAL PROBLEM

Much commentary strives to address the problem of water insecurity. UN-Water, which coordinates the efforts of United Nations (“UN”) members and partners on water-related issues, proposed the following working definition of water security:

The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socio-economic development, for ensuring protection against water-borne pollution and water-related disasters, and for preserving ecosystems in a climate of peace and political stability.<sup>7</sup>

---

<sup>6</sup> Understanding water insecurity through a colonial lens is not new, however this article aims to provide a survey of legal responses taken in an attempt to redress the colonial legacy. The adequacy of these responses to the situation in SSA is especially pressing in the context of the increasing effect of climate change on water insecurity. Isabelle Niang et al, “Africa” in Vicente R Barros et al, eds, *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (New York: Cambridge University Press, 2014) 1199 at 1209–11, 1216–18 [*Intergovernmental Panel on Climate Change*].

<sup>7</sup> “What is Water Security? Infographic” (8 May 2013), online: *UN Water* <[www.unwater.org/publications/water-security-infographic/](http://www.unwater.org/publications/water-security-infographic/)> [UN-Water, “Water Security”].

Following the above definition, water insecurity would be understood within this paper as the incapacity of a society to safeguard adequate access to clean and safe water for these purposes.<sup>8</sup>

Water insecurity remains a serious problem throughout much of the world: “Over 2 billion people live in countries experiencing water stress, and about 4 billion people experience severe water scarcity during at least one month of the year.”<sup>9</sup> Twenty-two countries are under serious water stress,<sup>10</sup> which is an annual per capita supply of less than 1700 cubic metres of water.<sup>11</sup> In addition to physical water stress, economic water scarcity encompasses situations where water is limited due to a lack of infrastructure to provide safe and clean water.<sup>12</sup> Three in ten people worldwide have no access to safe drinking water, and six in ten people have no access to safely-managed sanitation services.<sup>13</sup>

Inequities in water security exist between Africa and the rest of the world, as well as between SSA countries and other developing regions. While 94% of those in Europe and North America are covered by safely-managed water services, this is only the case for 24% of people in SSA.<sup>14</sup> Around 58% of people globally who still collect untreated (and often contaminated) drinking water live in SSA.<sup>15</sup> Hygiene provides another stark discrepancy, as the coverage of basic

---

<sup>8</sup> This definition is accepted for the purposes of this article because its wide scope reflects the broad understanding of development which will be used below. However, the term “water security” has been defined in many and sometimes incommensurate ways, which is a challenge for water security research. Karen Bakker, “Water Security: Research Challenges and Opportunities” (2012) 337:6097 *Science* 914 at 914. For a review of the ways in which water security has been conceptualised in academic and policy circles, see generally Christina Cook & Karen Bakker, “Water security: Debating an Emerging Paradigm” (2012) 22:1 *Global Environmental Change* 94. For a consideration and critique of broad versus narrow definitions of water security, see Mark Zeitoun, “The Global Web of National Water Security” (2011) 2:3 *Global Policy* 286 at 287–90.

<sup>9</sup> UN-Water, *The United Nations World Water Development Report 2019: Leaving No One Behind*, UNESCO, 2019 at 1 [UN-Water, *Water Report 2019*].

<sup>10</sup> *Ibid* at 13.

<sup>11</sup> Terje Oestigaard & Nordiska Afrikainstitutet, “Water Scarcity and Food Security along the Nile: Politics, population increase and climate change” (2012) 49 *Current African Issues* 1 at 23.

<sup>12</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 14.

<sup>13</sup> *Ibid* at 1.

<sup>14</sup> *Ibid* at 18.

<sup>15</sup> *Ibid*.

handwashing facilities is only 15% in SSA, while it is 76% in Western Asia and Northern Africa.<sup>16</sup> There are further inequities between urban and rural dwellers in SSA, as those living in rural regions have significantly less coverage of basic water supply and sanitation.<sup>17</sup>

Variation also exists between and within the countries of SSA regarding water insecurity. For instance, Sierra Leone, South Africa, and Gabon have a basic (although not necessarily safely-managed) drinking water coverage of over 80%, while Eritrea, Ethiopia, and Uganda have a basic coverage of less than 40%, with the majority of their populations having drinking water coverage of only limited or worse availability.<sup>18</sup> Congo and Côte d'Ivoire provide some of the highest coverage of safely-managed drinking water (around 40%); nonetheless, another 30% of their populations do not even have access to basic drinking water coverage.<sup>19</sup> Regarding hygiene, Tanzania, Zimbabwe, and Namibia each boast a relatively high coverage of basic handwashing facilities at home (between 26-50%), while the Democratic Republic of the Congo, Ethiopia, and Cameroon have significantly worse coverage (less than 5%).<sup>20</sup>

As the above data demonstrates, water insecurity is an international, national, and regional problem. Africa is highly impacted, but SSA is especially affected, although even SSA does not provide a homogenous picture of the problem. Differences within and between countries of SSA in rates and forms of water insecurity demonstrate the complexity of the issue. That said, the numbers provide little doubt that a serious problem exists, and that SSA continues to be excluded from the high rates of water security that much of the rest of the world takes for granted.

The above statistics, however, do not fully demonstrate the extent of the issue, because water insecurity, at its heart, is a social problem. There is no singular accepted definition of a “social problem” but it can be generally defined as “one or more repetitive patterns of problematic social behaviours (that is, one

---

<sup>16</sup> *Ibid* at 21.

<sup>17</sup> *Ibid* at 7.

<sup>18</sup> *Ibid* at 143.

<sup>19</sup> *Ibid*.

<sup>20</sup> *Ibid* at 144.

or more dysfunctional institutions).”<sup>21</sup> The actions that contribute to water insecurity are the behaviours, and these behaviours are problematic because of the multiple negative effects of water insecurity within SSA. Adequate access to clean and safe water is vital for security, sustainability, development, and human well-being.<sup>22</sup> Water is needed for maintaining proper hygiene and sanitation; for drinking and food consumption; for food production and other manufacturing; for healthy ecosystems; and for human health and preventing disease.<sup>23</sup> Without water security, many social ills result.

Firstly, water insecurity contributes to food insecurity, as water is an essential component of agricultural production.<sup>24</sup> A lack of access to water in arid and semi-arid SSA is a barrier to food security, especially where the population relies on livestock production.<sup>25</sup> Irrigation is also highly dependent on water security through the availability of adequate groundwater.<sup>26</sup> Furthermore, food insecurity leads to poor nutrition, especially for women and children.<sup>27</sup> Additionally, agriculture is integral to African economies.<sup>28</sup>

For the above reasons and others, water insecurity contributes to the persistence of poverty.<sup>29</sup> It also results in a decline in both education and literacy rates.<sup>30</sup> Children, especially girls, are more likely to be absent or drop out of school where safe drinking water and hygiene facilities are lacking, which can also be tied to the low literacy rates present in SSA.<sup>31</sup> Water insecurity

---

<sup>21</sup> Ann Seidman & Robert B Seidman, “Instrumentalism 2.0: Legislative Drafting for Democratic Social Change” (2011) 5:1 *Legisprudence* 95 at 102 (this definition is chosen because it corresponds with the theoretical underpinning of this article: that is, the inheritance of institutions as the cause of water insecurity within SSA) [Seidman, “Instrumentalism 2.0”].

<sup>22</sup> UN-Water, “Water Security”, *supra* note 7.

<sup>23</sup> UNDP, *Human Development Report 2006. Beyond Scarcity: power, poverty and the global water crisis* (New York: UNDP, 2006) [UNDP, *Report 2006*].

<sup>24</sup> “Coping with water scarcity in agriculture: a global framework for action in a changing climate” (2016) at 1, online (pdf): *Food and Agriculture Organization of the United Nations* <[www.fao.org/3/a-i6459e.pdf](http://www.fao.org/3/a-i6459e.pdf)>.

<sup>25</sup> *Ibid* at 6.

<sup>26</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 142.

<sup>27</sup> *Ibid* at 27–28.

<sup>28</sup> *Ibid* at 142.

<sup>29</sup> *Ibid*.

<sup>30</sup> *Ibid* at 28.

<sup>31</sup> *Ibid*.

additionally contributes to the increased marginalisation of certain groups. In fact, around the world, water insecurity disproportionately impacts the rights and interests of women and girls, indigenous peoples, migrants, ethnic or other minorities, persons with disabilities, and persons of increased age.<sup>32</sup>

Water insecurity also contributes to illness and mortality within Africa. Unsafe water, sanitation, and hygiene services were responsible for 829,000 deaths from diarrhoeal disease in 2016, and 17 of the 20 countries with the highest number of deaths are located in Africa.<sup>33</sup> Africa also had the highest number of reported cases of cholera.<sup>34</sup> The mortality rate due to these unsafe services in Africa is four times that of the global rate.<sup>35</sup> It is estimated that as increasing global water consumption puts greater pressure on water resources, poor and marginalized populations will be most affected, thus worsening inequities.<sup>36</sup>

### III. IMMEDIATE AND ROOT CAUSES

The abovementioned facts have demonstrated the existence of water insecurity as a social problem, its effects on societies and individuals within SSA, and the prevalence of the problem within SSA compared to the rest of the world. While heterogeneity certainly exists between and within many countries of SSA in the rates and forms of water insecurity, some causes of water insecurity have had a pervasive and historical effect upon SSA generally.

This article uses the terms “immediate causes” and “root causes” when illustrating the impact of colonialism upon water insecurity. Key immediate causes include inadequate infrastructure, poverty, and environmental and population factors, as will be explained in the sections that follow. Immediate causes are the most visible and obvious causes, and are distinguishable from root causes, which provide a greater understanding of how these immediate

---

<sup>32</sup> *Ibid* at 39–40.

<sup>33</sup> World Health Organization, “Mortality and burden of disease from water and sanitation” (2019) at no 1, online: *WHO* <[www.who.int/gho/phe/water\\_sanitation/burden/en/](http://www.who.int/gho/phe/water_sanitation/burden/en/)>.

<sup>34</sup> *Ibid* at no 2.

<sup>35</sup> *Ibid* at no 4.

<sup>36</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 14.

causes came to exist. Root causes can be directly linked to the continent's experience with colonialism and they form part of Africa's colonial inheritance.

A major part of this inheritance includes the institutions—that is, “the repetitive patterns of behaviour”<sup>37</sup>—established during colonialism. These institutions “are defined by norms, supported by sanctions, expressing how the members of society are expected to behave.”<sup>38</sup> Some of the institutions that, established below, are relevant to Africa's inheritance include ineffective political institutions, exploitative trade relationships, and inadequate social services. Each of these institutions is made up of repetitive behaviours that were introduced during colonialism.

With a few exceptions, the legal order of African countries post-independence remained largely unchanged,<sup>39</sup> as these institutions introduced through colonialism were perpetuated through the law of “reproduction of institutions.”<sup>40</sup> This law, as formulated by Robert B Seidman, provides that institutions within society will largely reproduce themselves unless the law is used to induce desirable social change.<sup>41</sup> While it is true that societies and institutions constantly and inevitably change, states have the opportunity to use the legal order to induce positive change in the repetitive patterns of behaviour.<sup>42</sup> If state officials simply accept the existing colonial institutions, however, the colonial situation is largely maintained, even post-independence.<sup>43</sup>

Institutions were reproduced within Africa in a number of ways. The individuals in charge were replaced, but the institutions remained, partly because colonial authorities had hand-picked their successors among a growing African elite who had been educated and trained in the same way as these authorities.<sup>44</sup> Constitutional documents at independence generally held that colonial-era laws would remain in effect until amended, and case law of the

---

<sup>37</sup> Robert B Seidman, *The State, Law and Development* (New York: St. Martin's Press, 1978) at 44 [Seidman, *The State*].

<sup>38</sup> *Ibid* at 16.

<sup>39</sup> *Ibid* at 37–38.

<sup>40</sup> *Ibid*.

<sup>41</sup> *Ibid* at 44–46.

<sup>42</sup> *Ibid* at 44–45.

<sup>43</sup> *Ibid* at 45.

<sup>44</sup> *Ibid* at 41.

previous colonial authority was inherited into African judicature.<sup>45</sup> Additionally, the economy of African states continued to be split in two, between an impoverished countryside and the “export enclave”<sup>46</sup> where international markets and multinational corporations ruled.<sup>47</sup> As such, the colonial legacy continues to affect Africa’s social, political, and economic institutions today, including the more observable immediate causes of water insecurity: inadequate infrastructure, poverty, environmental, and population factors.

*a. Inadequate Infrastructure*

Infrastructure includes both the physical and organizational capacities to provide services to a population, including water storage, supply, and sanitation services. The dearth of adequate infrastructure perpetuates poverty within SSA.<sup>48</sup> Rural regions suffer the most: in rural areas of SSA, coverage of basic (but not necessarily safely-managed) drinking water services amounts to just over 40%. This stands in contrast to urban regions, where coverage of basic or safely-managed drinking water is over 80%.<sup>49</sup> Similar inequities exist for sanitation services, as rural regions have around 20% coverage of basic sanitation services, while urban regions have 40% coverage.<sup>50</sup>

Unprecedented urban population growth in SSA has also presented unique challenges to water security, as water infrastructure cannot keep pace with a rising non-rural population. This growth has often resulted in unplanned and informal settlements around cities (also known as “slums” or “peri-urban

---

<sup>45</sup> *Ibid* at 37.

<sup>46</sup> *Ibid* at 38; see also *Ibid* at 30 (within the export enclave during the colonial era, impoverished black African workers produced raw materials for export, while Africans living in the hinterlands continued subsistence farming. European expatriates living within the export enclave reaped the financial benefits of the export market. The hinterlands came to depend on the export enclave, having been made unlivable under colonialism, and the country as a whole became dependent on an import/export economy that reinforced dependency on the capitalist market).

<sup>47</sup> *Ibid*.

<sup>48</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 7.

<sup>49</sup> *Ibid* at 143.

<sup>50</sup> *Ibid*.



settlements”) with highly inadequate water-related services.<sup>51</sup> There is substantial inequality in access to infrastructure between those living in peri-urban households versus urban households: those who are poorer and living around cities often pay more for lesser service, as compared to wealthier urban dwellers.<sup>52</sup> Approximately 62% of urban dwellers in SSA live in these underdeveloped settlements.<sup>53</sup> Spatial inequity persists because the location of formal water services does not adequately overlap with the locations of consumer demand.<sup>54</sup>

Inadequate financing is one of the main common barriers to establishing the appropriate infrastructure in countries and communities.<sup>55</sup> However, this merely scratches the surface of the real issue. Strong infrastructure requires strong institutions; after all, infrastructure is not created in an apolitical vacuum. Rather, it requires both adequate resources and the political will and ability to utilise those resources. Unfortunately, many African states have inherited weak political institutions from colonialism,<sup>56</sup> which reduces their ability to create the required water infrastructures today.

Colonial states had been authoritarian, bureaucratic, and dominated through coercion; their aim was not to be legitimate in the eyes of their African subjects, nor to represent their wishes, but to control and expropriate resources and land.<sup>57</sup> Before independence, imperial powers sought to fashion last-minute liberal constitutional democracies within the states before relinquishing control.<sup>58</sup> Despite these “democratic trappings”, the colonial institutions were already well entrenched and bureaucratic authoritarianism was the true political institutional legacy left from colonialism.<sup>59</sup> Developing governments used laws

---

<sup>51</sup> Stephanie Dos Santos et al, “Urban Growth and Water Access in Sub Saharan Africa: Progress, Challenges, and Emerging Research Directions” (2017) 607–08 *Science Total Environment* 497 at 499.

<sup>52</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 5.

<sup>53</sup> Dos Santos et al, *supra* note 51 at 499.

<sup>54</sup> *Ibid* at 500.

<sup>55</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 65.

<sup>56</sup> Alex Thomson, *An Introduction to African Politics*, 3rd ed (New York: Routledge, 2010) at 21.

<sup>57</sup> *Ibid.*

<sup>58</sup> *Ibid.*

<sup>59</sup> *Ibid.*

to maintain the status quo, reproducing poverty and powerlessness.<sup>60</sup> Bureaucratic obstacles, such as inertia and corruption, still stand in the way of water security.<sup>61</sup> Unfortunately, corruption and distrust between society and the state persists, due in part to a continuing colonial “legacy of exploitation and oppression”<sup>62</sup> by states.

Even where post-independence countries experienced economic growth, the rural poor remained poor.<sup>63</sup> When states sought to develop, the urban bias resulted in capital, skills, and administrative attention being allocated by governments towards urban areas, rather than rural areas, which has perpetuated rural poverty.<sup>64</sup> Overall, a greater quantity and quality of infrastructure, particularly in rural communities, is required to address water security.

### ***b. Poverty***

Water scarcity is “first and foremost a poverty issue.”<sup>65</sup> This is because water insecurity is a function of poverty and poverty, in turn, perpetuates water insecurity. In 2013, 41% of people in SSA were living in extreme poverty (below \$1.90 USD per day)<sup>66</sup> and, worldwide, 80% of the extreme poor live in rural areas, the overwhelming majority of whom live in either SSA or Southern Asia.<sup>67</sup>

Even where safe and clean water is available, affordability can continue to be a barrier to access.<sup>68</sup> The vulnerable and disadvantaged are less likely to be connected to piped water services and often pay more for access to safe

---

<sup>60</sup> Robert B Seidman, “The Fatal Race: Law-Making and the Implementation of Development Goals” [1992] *Third World Leg Studies* 79 at 81 [Seidman, “The Fatal Race”].

<sup>61</sup> Elizabeth Burleson, “Water Is Security” (2008) 31:2 *Environmental L & Pol’y J* 197 at 199.

<sup>62</sup> Paul D Ocheje, “When Law Fails: A Theory of Self-Enforcing Anti-Corruption Legislation in Africa” (2011) 4:3 *L & Development Rev* 237 at 252 [Ocheje, “When Law Fails”].

<sup>63</sup> Michael Lipton, *Why Poor People Stay Poor: Urban Bias in World Development* (Cambridge, MA: Harvard University Press, 1977) at 28.

<sup>64</sup> *Ibid* at 70–71.

<sup>65</sup> Oestigaard & Afrikainstitutet, *supra* note 11 at 23.

<sup>66</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 24.

<sup>67</sup> *Ibid*.

<sup>68</sup> *Ibid* at 35.

drinking water than those who are connected.<sup>69</sup> For instance, in Ethiopia and Nigeria, poorer households tend to use more contaminated water source types; in Nigeria, there was nearly a 60% difference between access to piped or other improved water sources by the poorest and richest socio-economic status groups.<sup>70</sup> Poverty thus reduces water security both at a personal, regional, and state level.

The existence of poverty in SSA can be largely attributed to the economic inheritance from colonialism.<sup>71</sup> Two schools of thought are highly relevant for explaining how inadequate economic institutions were created and continued to be maintained post-independence, namely the dependency theory of development and world systems analysis.

Dependency theory states that the underdevelopment of certain countries is due to the development of other countries—due to the way in which colonizing countries underdeveloped colonized countries for their own economic benefit.<sup>72</sup> This theory arose out of Marxism and Latin American structuralism with Andre Gunder Frank generally considered to be one of the founders of the theory.<sup>73</sup> To Frank, underdevelopment is not the traditional state of affairs, nor a stage of economic growth towards a developed capitalism. Rather it is a necessary (and highly problematic) product of capitalist development.<sup>74</sup> He “linked transnational exploitation with internal colonialism” by considering the unequal exchange between the metropolitan core and periphery satellite regions.<sup>75</sup> Through capitalist development, a significant part of the economic surplus produced within the periphery is expropriated, then

---

<sup>69</sup> *Ibid* at 4.

<sup>70</sup> Hong Yang et al, “Water Safety and Inequality in Access to Drinking-water between Rich and Poor Households” (2013) 47:3 *Environmental Science & Technology* 1222 at 1226–27.

<sup>71</sup> Thomson, *supra* note 56 at 18–21.

<sup>72</sup> Andre Gunder Frank, “The development of underdevelopment” (June 1989) 41:2 *Monthly Rev* 37.

<sup>73</sup> Joseph T Love, “The Origins of Dependency Analysis” (1990) 22:1 *J Latin American Studies* 143 at 143.

<sup>74</sup> Andre Gunder Frank, *Capitalism and Underdevelopment in Latin America: Historical Studies of Chile and Brazil* (New York: Monthly Review Press, 1969) at 3 [Frank, *Capitalism and Underdevelopment*]

<sup>75</sup> Love, *supra* note 73 at 164.

appropriated, by the external capitalist monopoly of the core.<sup>76</sup> The capitalist system results in the polarisation of world states between the core and periphery, as the core develops economically at the expense of the suffering, oppression, and underdevelopment of the periphery.<sup>77</sup> This system of development and dependency maintains itself and the generation of underdevelopment spreads on a global scale.<sup>78</sup>

The second school of thought, world-systems analysis, considers the world to be an interactive system, linking together all of the economic, political, social, and cultural relations around the world.<sup>79</sup> According to this analysis, the system is structured into a power hierarchy, in which wealthy “core” countries exploit poor “periphery” countries through an international division of labour, which constrains periphery countries so they remain underdeveloped.<sup>80</sup> The modern world-system is understood as being a capitalist world economy, in which the system’s priority is the endless accumulation of capital.<sup>81</sup> Immanuel Wallerstein writes that all states exist within this interstate system and that strong states relate to weak states by pressuring them in multiple ways, including within trade and the production of goods.<sup>82</sup> He considers the weakest states to be colonies, which originated when core states expanded their economies within the world-system.<sup>83</sup> To Wallerstein who was writing in the 1970s, the world-system was based around the exchange of food and raw materials.<sup>84</sup> As colonial states were given the least amount of autonomy, core states could more easily exploit them for this purpose.<sup>85</sup>

Both schools of thought apply here to demonstrate how colonialism facilitated the underdevelopment of SSA. In the nineteenth century, the

---

<sup>76</sup> Frank, *Capitalism and Underdevelopment*, *supra* note 74 at 6–7.

<sup>77</sup> *Ibid* at 8–9.

<sup>78</sup> *Ibid* at 12–13.

<sup>79</sup> Christopher Chase-Dunn & Peter Grimes, “World-Systems Analysis” (1995) 21 Annual Rev Sociology 387 at 389.

<sup>80</sup> *Ibid*.

<sup>81</sup> Immanuel Wallerstein, *World-Systems Analysis: An Introduction* (Durham, NC: Duke University Press: 2004) at 23–24.

<sup>82</sup> *Ibid* at 55.

<sup>83</sup> *Ibid*.

<sup>84</sup> Chase-Dunn & Grimes, *supra* note 79 at 389.

<sup>85</sup> Wallerstein, *supra* note 81 at 56.

mercantilist slave trade from Africa to the West began to be replaced by a full capitalist colonial system.<sup>86</sup> Through the extraction of large amounts of wealth from Africa, by exploiting African labourers and exporting raw materials to the West, colonial authorities ensured that Western industry benefitted to the great detriment of African local economies.<sup>87</sup> The price that colonial powers paid for African labour and natural resources, if any, was so low that it “did not enable alternative activities to replace them when they were exhausted.”<sup>88</sup> Colonial powers took multiple measures to force Africans into cheap labour to produce materials for export. For example, they dispossessed traditional African farmers of their land, driving them into small, unproductive regions in order to distort and impoverish African economic and social systems.<sup>89</sup> In addition, they levied taxes on Africans, requiring them to earn money within the capitalist colonial system. If Africans failed to comply, they would simply use the coercion of the colonial administration to force labour.<sup>90</sup> Colonies would produce only one or two resources for exports, creating a dependency on European powers to purchase their goods.<sup>91</sup> Traditional industries that had survived the slave trade, such as handicraft production, were decimated under colonialism, and other technological development in Africa was put on hold as African labour turned to resource production.<sup>92</sup> Today, many African states continue to be dependent on “monocrop” export economies, in which their main source of revenue derives from a single product—such as cocoa or copper—sold on the international market, creating a highly vulnerable and dependent economy.<sup>93</sup>

The exploitation of labour for extraction of wealth was not the only way colonialism facilitated underdevelopment. European powers divided the continent among themselves without considering African interests, resulting in

---

<sup>86</sup> Samir Amin, “Underdevelopment and Dependence in Black Africa – Origins and Contemporary Forms” (1972) 10:4 *J Modern African Studies* 503 at 516.

<sup>87</sup> Thomson, *supra* note 56 at 19.

<sup>88</sup> Amin, *supra* note 86 at 518.

<sup>89</sup> *Ibid* at 519.

<sup>90</sup> *Ibid* at 520.

<sup>91</sup> Walter Rodney, *How Europe Underdeveloped Africa* (Washington, DC: Howard University Press, 1982) at 234–35.

<sup>92</sup> *Ibid* at 232–33.

<sup>93</sup> Thomson, *supra* note 56 at 20.

multiple landlocked countries which today suffer from increased impoverishment and dependency.<sup>94</sup> Additionally, social services, health care, communications and transportation infrastructure were only developed to the extent that it served colonial interests.<sup>95</sup> Such services were preferably given to white Europeans living in Africa<sup>96</sup> or to regions that created a large amount of wealth through cash crops for colonizers.<sup>97</sup> Roads and railways were constructed to bring extracted resources to the sea, not to connect Africans with each other.<sup>98</sup> Banks built in Africa did little local lending, and insurance companies served the interests of white settlers.<sup>99</sup> Even colonial school systems were built with the purpose of training Africans to work within and perpetuate the colonial administration.<sup>100</sup> The above is not to suggest that Africa desired or needed European social services or economic systems, but to demonstrate how any apparent growth during colonialism was purposefully taken without an eye to development.<sup>101</sup>

The negative impact of structural adjustment programs (“SAPs”) on poverty after African independence is also relevant. Introduced by the International Monetary Fund (“IMF”) and the World Bank, SAPs were loan programs with strings attached, requiring borrowing countries to liberalize their economies and public policies in an attempt to trigger economic growth.<sup>102</sup> The results were mixed but largely poor. As many countries continued their economic decline, the SAPs’ strategies focused on increasing primary-goods exports, thus perpetuating the core-periphery dependency and failing to develop a stronger, more diverse economy.<sup>103</sup> SAPs also worsened poverty by forcing states to curtail government spending, resulting in increased unemployment and reduced expenditure on public services.<sup>104</sup> Spending on health care, education,

---

<sup>94</sup> Ieuan Ll Griffiths, *The African Inheritance* (London, UK: Routledge, 1995) at 100–01.

<sup>95</sup> Rodney, *supra* note 91 at 206–09.

<sup>96</sup> *Ibid* at 206–07.

<sup>97</sup> *Ibid* at 208.

<sup>98</sup> *Ibid* at 209.

<sup>99</sup> *Ibid* at 210.

<sup>100</sup> *Ibid* at 240.

<sup>101</sup> *Ibid* at 234.

<sup>102</sup> Thomson, *supra* note 56 at 199–200.

<sup>103</sup> *Ibid* at 199.

<sup>104</sup> *Ibid* at 200–01.

and state food subsidies were often significantly reduced, resulting in services that had once been free—for instance, primary schools—becoming too costly for many, especially the poor, to access.<sup>105</sup> Evidently, the combined effect of colonialism and the subsequent SAPs have reduced many persons' abilities to purchase, and the state's ability to finance, water security.

*c. Environmental and Population Factors*

Although Africa is home to many diverse climates and biomes with unique environmental challenges, there are a few environmental causes that reduce water quality and access, and thus water security, throughout much of SSA. For one, untreated wastewater, nutrient loadings from agricultural runoff, and other pollutants can seriously impact water quality.<sup>106</sup> Also, water access is increasingly pressured by climate change as the severity and frequency of weather events, such as flooding and drought, worsen.<sup>107</sup> Annual precipitation amounts have decreased in many areas of Africa; for instance, the seasonal rainfall over eastern Africa has declined, as has summer monsoon precipitation over much of the Great Horn of Africa.<sup>108</sup> Southern Africa has been largely drying, a trend associated with the warming of the surface of the Indian Ocean.<sup>109</sup> In addition, precipitation patterns have become less predictable, as seasonal rainfall onset and duration, frequency of dry spells, and rainfall intensity have changed.<sup>110</sup> With climate change, a future decrease in water abundance is predicted, and areas already suffering from lessened rainfall may experience reduced available groundwater.<sup>111</sup>

One example of serious water insecurity resulting from environmental factors can be found at Lake Chad, which normally provides freshwater to over 40 million people in Cameroon, the Central African Republic, Chad, Niger, and

---

<sup>105</sup> *Ibid.*

<sup>106</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 15.

<sup>107</sup> *Ibid* at 15–17.

<sup>108</sup> *Intergovernmental Panel on Climate Change*, *supra* note 6 at 1209.

<sup>109</sup> *Ibid.*

<sup>110</sup> *Ibid.*

<sup>111</sup> *Ibid* at 1217.

Nigeria.<sup>112</sup> Over the last half century, due to a combination of variations in rainfall and agricultural and urban runoff, the surface of the lake has shrunk by nearly 90%, resulting in a humanitarian crisis in 2018.<sup>113</sup> The Nile Basin region is also expected to be particularly vulnerable to climate change: around 98% of Egypt's freshwater comes from the Nile, as the country receives practically no rainfall.<sup>114</sup> Many states in that region have some of the highest rates of poverty and population growth—a dangerous combination for areas already experiencing water stress or scarcity.<sup>115</sup>

The tools at the state's disposal to respond to climate change and other environmental factors are the institutions inherited from colonialism, and these institutions are often a barrier to effective environmental adaptation. Domestic obstacles such as water pollution or population growth are not unique to SSA, but “are particularly profound as they interact with the historic patterns and external forces which are largely outside the control of African nations.”<sup>116</sup> As explained above, weak or ineffective political institutions were inherited from colonialism and they may reduce the ability or willingness of the state to respond to environmental stressors. Most countries have enough water to meet their needs, but the problem is often mismanagement of water resources by institutions—actual absolute water scarcity is exceptional.<sup>117</sup> Poverty, another inheritance, is a barrier to adaptation, as solutions to increase water security often require a large up-front financial investment.<sup>118</sup> Poor countries lack the financial resources to reduce climate change risks at the large scale required.<sup>119</sup> The inheritances from colonialism continue to create inequity in water security, worsened by the increasing effects of climate change.

---

<sup>112</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 145.

<sup>113</sup> *Ibid.*

<sup>114</sup> Oestigaard & Afrikainstitutet, *supra* note 11 at 28.

<sup>115</sup> *Ibid* at 33.

<sup>116</sup> MBK Darkoh, “The Underlying Causes of the Food Crisis in Africa” (1989) 18 *Transafrican J History* 54 at 60.

<sup>117</sup> UNDP, *Report 2006*, *supra* note 23 at 133.

<sup>118</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 149.

<sup>119</sup> UNDP, *Report 2006*, *supra* note 23 at 134.



#### IV. RECENT LEGAL RESPONSES

Inadequate infrastructure, poverty, environmental and population factors are some of the immediate causes of water insecurity, but to truly combat water insecurity requires an understanding of the root causes—that is, the colonial institutional inheritance. Society changes when repetitive behaviours change, generally after state officials create new rules concerning these behaviours,<sup>120</sup> and individuals choose to follow these sanctioned norms<sup>121</sup> or follow the repetitive patterns of behaviour of others.<sup>122</sup> Without fundamental changes to Africa's institutions, the continent risks remaining dependent on the West in a form of neo-colonialism.<sup>123</sup> Improving access to water supply and sanitation services, vital components of water security, are necessary to address existing social and economic inequities.<sup>124</sup> Various legal measures have been put in place in an attempt to increase water security and some of those responses are considered below.

##### *a. A Human Right to Water in International Law*

The conceptualisation of water as a human right cannot be taken for granted, as this is not the only way that water has been conceived internationally.<sup>125</sup> The commodity approach, which conceived of water as an economic good, dominated starting in the 1980s.<sup>126</sup> This approach supported the interests of the World Bank, the IMF, and multinational water companies.<sup>127</sup> Water would be priced on the open market, and water resources would be privately owned.<sup>128</sup> In 2000, the World Water Forum, attended by UN officials and government

---

<sup>120</sup> Seidman, *The State*, *supra* note 37 at 16–17.

<sup>121</sup> *Ibid* at 16.

<sup>122</sup> *Ibid* at 35.

<sup>123</sup> *Ibid* at 45–46.

<sup>124</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 142.

<sup>125</sup> Malcolm Langford, “The United Nations Concept of Water as a Human Right: A New Paradigm for Old Problems?” (2005) 21:2 *Water Resources Development* 273 at 274.

<sup>126</sup> *Ibid*.

<sup>127</sup> *Ibid*.

<sup>128</sup> *Ibid*.

representatives, continued to support the commodity approach.<sup>129</sup> Convened by leading for-profit water corporations and other business lobbyists, including the World Bank and Global Water Partnership, the conference confirmed that water would be recognised as a need rather than as a universal human right.<sup>130</sup> As a result, the private sector would have the responsibility of providing access to water on a for-profit basis.<sup>131</sup>

Various conceptualisations of water contrast with the “water as an economic good” approach. Public approaches promote public ownership and government control of water resources; community or local approaches support the role of local governments, non-government organisations, and indigenous peoples in managing sustainable water use; and a social or human rights approach emphasizes the need for universal access to sufficient water as the priority.<sup>132</sup> Environmental thinker and activist Vandana Shiva emphasizes the role of ecology over that of markets, arguing that water rights are natural rights, having evolved “out of a given ecological context of human existence.”<sup>133</sup> According to Shiva, water should be considered “a commons”<sup>134</sup> because it is necessary for life, and because “sustainability and equitable allocation depend[s] on cooperation among community members.”<sup>135</sup>

Until very recently, a right to water had not been explicitly recognized by the UN. Earlier conventions such as the *Convention on the Elimination of All Forms of Discrimination against Women*<sup>136</sup> and the *Convention on the Rights of the Child*<sup>137</sup> asserted the right under certain circumstances. Although a right to water is not stated outright within any of the documents under the *International*

---

<sup>129</sup> Maude Barlow & Tony Clarke, *Blue Gold: The Fight to Stop the Corporate Theft of the World's Water* (New York: The New Press, 2002) at 79–80.

<sup>130</sup> *Ibid.*

<sup>131</sup> *Ibid* at 80.

<sup>132</sup> Langford, *supra* note 125 at 274–75.

<sup>133</sup> Vandana Shiva, *Water Wars: Privatization, Pollution and Profit* (Cambridge, MA: South End Press, 2002) at 20.

<sup>134</sup> *Ibid* at 24.

<sup>135</sup> *Ibid.*

<sup>136</sup> *Convention on the Elimination of All Forms of Discrimination against Women*, 18 December 1979, 1249 UNTS 13, art 14 at para 2(h) (entered into force 3 September 1981).

<sup>137</sup> *Convention on the Rights of the Child*, 20 November 1989, 1577 UNTS 3, art 24 at paras 1, 2(c) (entered into force 2 September 1990).

*Bill of Human Rights*,<sup>138</sup> the UN Committee on Economic, Social and Cultural Rights (“the Committee”) adopted *General Comment No 15* in 2003, which provided that a right to water is inherent in the rights to adequate standards of living, to the highest attainable standard of health, to adequate housing and adequate food, and to life and human dignity.<sup>139</sup> While not legally binding, such comments can be very persuasive when the Committee interprets the *International Covenant on Economic, Social, and Cultural Rights*<sup>140</sup> (“ICESCR”) concerning its enforcement and the realisation of its rights.<sup>141</sup>

In drafting the *General Comment No 15*, the content of the right to water was at issue.<sup>142</sup> The Committee recognised water as a common and public good, but agreed on a relatively narrow definition, with the focus on water for personal and domestic uses.<sup>143</sup> The right included five key elements of water: sufficient quantity for personal and domestic needs, adequate quality, physical accessibility, equality and non-discrimination in access, and affordability.<sup>144</sup> Declining to state that water should be free was in line with a middling approach taken to most other economic and social rights by the Committee.<sup>145</sup> Its narrow and explicit nature was intended to encourage states to accept and implement the right.<sup>146</sup> As such, the right to water was limited, providing minimum protection for basic human needs, and it was thus relative to what was

---

<sup>138</sup> *International Bill of Human Rights*, GA Res 217(III), UNGAOR, 3rd Sess, UN Doc A/810 (1948) 71.

<sup>139</sup> *General Comment No 15 (2002): The right to water (arts 11 and 12 of the International Covenant on Economic, Social and Cultural Rights)*, UNESCOR, 29th Sess, Annex, Agenda Item 3, UN Doc E/C.12/2002/11 (2003) at para 3.

<sup>140</sup> *International Covenant on Economic, Social, and Cultural Rights*, 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976).

<sup>141</sup> The Rt Hon Lady Justice Arden, “Water for All? Developing a Human Right to Water in National and International Law” (2016) 65:4 ICLQ 771 at 784.

<sup>142</sup> Langford, *supra* note 125 at 276.

<sup>143</sup> *Ibid.*

<sup>144</sup> *Ibid* at 276–77.

<sup>145</sup> *Ibid* at 277.

<sup>146</sup> Vanessa Rügger, “Water Distribution in the Public Interest and the Human Right to Water: Swiss, South African and International Law Compared” (2014) 10:1 L Environment & Development J 16 at 28.

considered necessary for an adequate standard of life, rather than being an absolute right.<sup>147</sup>

Since July 2010, the human right to water and sanitation has been explicitly included within the content of a resolution—Resolution 64/292—which recognizes how essential a role water plays to the realisation of all human rights.<sup>148</sup> In September 2010, the Human Rights Council also passed its own Resolution 15/9, which states that the human right to safe drinking water and sanitation is “derived from the right to an adequate standard of living and inextricably related to the right to the highest attainable standard of physical and mental health, as well as the right to life and human dignity.”<sup>149</sup> Although neither of these resolutions is legally binding, their existence supports a trend in the international legal community towards acceptance of the human right to water.<sup>150</sup>

However, after Resolution 64/292 was passed, the international community remained uncertain about the normative status and content of the right to water and whether the resolution created clear legal obligations.<sup>151</sup> This was especially so considering the lack of a dedicated treaty instrument or further support for the right through customary international law.<sup>152</sup> Recognition of the right under customary international law could allow states who had not ratified the *ICESCR* to be bound by the right.<sup>153</sup> Some argue that even today, the situation internationally is one of legal uncertainty and unpredictability as the “specific content and meaning of the right to water under international law

---

<sup>147</sup> *Ibid.*

<sup>148</sup> *The human right to water and sanitation*, GA Res 64/292, UNGAOR, 64th Sess, Supp No 49, UN Doc A/64/49 (2010) at 2; Takele Soboka Bulto, “The Emergence of the Human Right to Water in International Human Rights Law: Invention or Discovery?” (2011) 12:2 *Melbourne J Intl L* 290 at 294 (it is arguable that a human right to water had existed in a latent form since the adoption of the *ICESCR*, when considering the *ICESCR* in conjunction with rules and principles of international water law and environmental law).

<sup>149</sup> *Human rights and access to safe drinking water and sanitation*, HRC Res 15/9, UNGAOR, 15th Sess, UN Doc A/HRC/RES/15/9 (2010) at 2.

<sup>150</sup> Arden, *supra* note 141 at 786.

<sup>151</sup> Owen McIntyre, “The human right to water as a creature of global administrative law” (2012) 37:6 *Water Intl* 654 at 660.

<sup>152</sup> *Ibid* at 661.

<sup>153</sup> Arden, *supra* note 141 at 786.

continue to be rather abstract and unclear, especially in relation to the type and extent of the obligations emerging from the right.”<sup>154</sup>

Fortunately, developments since Resolution 64/292 was passed have further affirmed a human right to water. One such development is the 2030 Agenda for Sustainable Development by the General Assembly, which includes a right to water and sanitation as a goal.<sup>155</sup> In addition, the UN established a Special Rapporteur on the Human Rights to Safe Drinking Water and Sanitation to examine issues around water and sanitation and to provide recommendations to governments, the UN, and other stakeholders.<sup>156</sup> A statement issued by the Special Rapporteur emphasised the importance of accountability of states and non-state actors, transparency of information by accountable actors, and enforceability in fulfilling the human rights to water and sanitation.<sup>157</sup> Multiple obligations upon states, for example, could flow from the human right to water, such as the adoption and implementation of legislation to ensure the right is realised.<sup>158</sup> Overall, a human right to water has many strengths: it allows law to focus on vulnerable populations with the greatest need, it is empowering and provides an entitlement for everyone, and it is enforceable through the UN human rights system.<sup>159</sup>

---

<sup>154</sup> Antti Belinskij, Louis J Kotzé & Oliver Fuo, “Domestic Manifestations of International Law’s Right to Water: A Comparative Analysis of Emerging Rights Obligations in Finland and South Africa” (2017) 25:2 *African J Intl & Comparative L* 261 at 261–62.

<sup>155</sup> Arden, *supra* note 141 at 787.

<sup>156</sup> “Overview of the mandate”, online: *United Nations Human Rights Office of the High Commissioner*

<[www.ohchr.org/EN/Issues/WaterAndSanitation/SRWater/Pages/Overview.aspx](http://www.ohchr.org/EN/Issues/WaterAndSanitation/SRWater/Pages/Overview.aspx)>.

<sup>157</sup> “Statement by Special Rapporteur on the human rights to safe drinking water and sanitation at the seventy-third session of the General Assembly” (19 October 2018), online: *United Nations Human Rights Office of the High Commissioner*

<[www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=23744&LangID=E](http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=23744&LangID=E)>.

<sup>158</sup> Belinskij, Kotzé & Fuo, *supra* note 154 at 267.

<sup>159</sup> Arden, *supra* note 141 at 788. An extensive commentary on the human right to water is beyond the scope of this article, however for further arguments supporting such a right, see generally Waseem Ahmad Qureshi, “The Emerging Human Right to Water in International and Domestic Law” (2018) 21:2 *U Denver Water L Rev* 137.

**b. Right to Water within the African Charter**

Although the *African Charter on Human and Peoples' Rights*<sup>160</sup> (“*African Charter*”) does not explicitly guarantee a right to water, the African Commission on Human and Peoples' Rights (“*African Commission*”) has implied the existence of the right from other explicit rights since 2010 through case law,<sup>161</sup> including as part of the rights to dignity, health, and a healthy environment.<sup>162</sup> Other African human rights instruments, such as the *African Charter on the Rights and Welfare of the Child*,<sup>163</sup> provide for the right but only under a limited basis, and often lack important specifics such as what quantity of water is required for beneficiaries in order to satisfy the right.<sup>164</sup>

The utility of the *African Charter* in increasing access to water and sanitation appears to be controversial. On the one hand, the *African Charter* may represent “a significantly new and challenging normative framework for the implementation of economic, social, and cultural rights”<sup>165</sup> compared to the previous international rights instruments of Europe and the Americas.<sup>166</sup> In particular, the Preamble recognises that economic, social, and cultural rights are necessary for the realisation of civil and political rights,<sup>167</sup> suggesting that both classes of rights are interrelated, and also possibly that economic, social, and cultural rights take priority.<sup>168</sup> The *African Charter* treats both classes of rights within an interdependent framework under the same text,<sup>169</sup> which may allow the African Commission to see “human rights as an interconnected set of

---

<sup>160</sup> 27 June 1981, OAU Doc CAB/LEG/67/3 rev 5, 21 ILM 58 (1982) (entered into force 21 October 1986) [*African Charter*].

<sup>161</sup> Belinskij, Kotzé & Fuo, *supra* note 154 at 261.

<sup>162</sup> Takele Soboka Bulto, “The human right to water in the corpus and jurisprudence of the African human rights system” (2011) 11:2 African Human Rights LJ 341 at 345 [Bulto, “The human right”].

<sup>163</sup> 11 July 1990, OAU Doc CAB/LEG/24.9/49 (1990) (entered into force 29 November 1999).

<sup>164</sup> Bulto, “The human right”, *supra* note 162 at 344.

<sup>165</sup> Chidi Anselm Odinkalu, “Analysis of Paralysis or Paralysis by Analysis? Implementing Economic, Social, and Cultural Rights under the African Charter on Human and Peoples' Rights” (2001) 23:2 Hum Rts Q 327 at 335.

<sup>166</sup> *Ibid* at 333–35.

<sup>167</sup> *African Charter*, *supra* note 160.

<sup>168</sup> Odinkalu, *supra* note 165 at 337.

<sup>169</sup> *Ibid* at 340.

obligations.”<sup>170</sup> Therefore, even if specific social or economic rights are lacking under the *African Charter*, the African Commission can utilise its imagination and political will to interpret and implement non-explicit rights.<sup>171</sup> For example, in a case involving Zaire (now the Democratic Republic of the Congo), the African Commission found that “[t]he failure of the government to provide basic services necessary for a minimum standard of health, such as safe drinking water ... constitutes a violation of Article 16 [the right to health].”<sup>172</sup> In addition, certain rights underlie all rights within the *African Charter*, including dignity and the prohibition against discrimination.<sup>173</sup> This breaks down artificial barriers between rights and creates unique possibilities for implementing rights,<sup>174</sup> such as a right to water.

On the other hand, it is also arguable that the *African Charter* offers poor support for a right to water. Without an explicit guarantee, the African Commission has failed to provide the normative basis and content of the right to water and has “grounded the human right to water on a narrowly defined and usually shifting legal basis.”<sup>175</sup> Justiciability and enforcement of the socioeconomic rights, such as those relating to health, is generally minor in comparison to that of the enshrined political and civil rights, and there are relatively few socioeconomic rights provided for within the *African Charter*.<sup>176</sup> Unfortunately, the African Commission has evaded declaring an independent right to water, despite prime cases in which to do so, and has treated the right as an auxiliary right that may be raised only where it can be linked to a violated explicit right.<sup>177</sup> Outside of the African Commission’s underutilised initiative, the usefulness of mechanisms within the *African Charter* relies on state and non-state parties to act, and states may choose not to participate or report despite

---

<sup>170</sup> *Ibid* at 366.

<sup>171</sup> *Ibid* at 341.

<sup>172</sup> *World Organisation Against Torture v Zaire*, Comm 25/89, 47/90, 56/91, 100/93 9th ACHPR AAR Annex VIII (1995-1996) at para 47.

<sup>173</sup> *African Charter*, *supra* note 160, arts 5, 2.

<sup>174</sup> Odinkalu, *supra* note 165 at 366.

<sup>175</sup> Takele Soboka Bulto, *The Extraterritorial Application of the Human Right to Water in Africa* (Cambridge, UK: Cambridge University Press, 2014) at 67.

<sup>176</sup> *Ibid* at 66.

<sup>177</sup> *Ibid* at 70–71.

their obligations.<sup>178</sup> In addition, in light of the transboundary nature of water, the question remains as to whether states can be held responsible for violations or for the realisation of other states' right to water as interpreted under the *African Charter*.<sup>179</sup> It is arguable that such a duty may exist if the *African Charter* is interpreted in the context of the *ICESCR*.<sup>180</sup>

**c. Right to Water within African Constitutions and Legislation**

A right to water had been recognized by many African states before it was recognized internationally or within the *African Charter*. Of 39 African countries surveyed in 2015, 29 have included a human right to water, and 25 have included a right to sanitation, in either their constitutions or legislations.<sup>181</sup> For instance, the *Constitution of the Republic of Uganda, 1995* states that “all Ugandans enjoy rights and opportunities and access to ... clean and safe water”<sup>182</sup> and that the “[s]tate shall take all practical measures to promote a good water management system at all levels.”<sup>183</sup> This puts a clear onus on the government to act within “practical” bounds.

One positive aspect of constitutionalizing a right to water is that constitutions generally supersede all other laws in the state and they create obligations upon the states towards their citizens, so that citizens may directly rely on explicitly-stated rights for redress when there have been violations by the state.<sup>184</sup> A constitutional, or even legislative, right to water may not guarantee water security, but it can be a powerful tool to help transform past

---

<sup>178</sup> Odinkalu, *supra* note 165 at 366–67.

<sup>179</sup> Takele Soboka Bulto, “Towards Rights-Duties Congruence: Extraterritorial Application of the Human Right to Water in the African Human Rights System” (2011) 29:4 *Nethl QHR* 491 at 503.

<sup>180</sup> *Ibid* at 504.

<sup>181</sup> World Health Organization, *Investing In Water and Sanitation: Increasing Access, Reducing Inequalities, GLAAS 2014 findings – Special report for Africa* (Geneva, Switzerland: WHO Press, 2015) at 5 [WHO, *Investing in Water and Sanitation*].

<sup>182</sup> *Constitution of the Republic of Uganda, 1995*, No 2 of 2005, art XIV(b).

<sup>183</sup> *Ibid*, art XXI.

<sup>184</sup> Caiphas Brewsters Soyapi, “Water Security and the Right to Water in Southern Africa: An Overview” (2017) 20 *Potchefstroom Electronic LJ* 1 at 6.



colonial injustices.<sup>185</sup> However, even apparently explicit constitutional rights may be at the mercy of strict judicial interpretation.<sup>186</sup>

One difficulty with implementing a right to water lies in the distinction between positive and negative rights. A positive right puts an obligation on the state to act in order to fulfill a right, while a negative right only requires non-interference by the state towards expressions of that right.<sup>187</sup> Of course, implementing a positive right to water is easier said than done. It requires “allocation of resources, reference to the right in the legal system, enabling local authorities, and political will.”<sup>188</sup> Also, judicial interpretations of constitutional rights may be less favourable to social rights that require greater intervention, while more generous towards negative rights.<sup>189</sup> If that is the case in SSA, it is arguable that states should therefore focus on negative rights.<sup>190</sup> Then again, considering that the hope in constitutionalising a right is to change institutions and leave the colonial inheritance behind, in the African context, positive rights may be more ideal for water security.

Depending on how the water right is framed—as either a positive or negative right—different obligations may result. Obligations to respect the right to water (a negative right) require the state not to interfere with the right; this may include refraining from polluting the water, from otherwise decreasing its quality, or from decreasing its quantity by reallocating water resources in a way that denies access.<sup>191</sup> In contrast, obligations to protect the right to water impose a positive obligation. Through legislation and regulation, states should prevent third parties from infringing the right, for example, by preventing private parties from extracting large amounts of the water,<sup>192</sup> or from polluting water

---

<sup>185</sup> *Ibid* at 6–7.

<sup>186</sup> *Ibid* at 9.

<sup>187</sup> Ran Hirschl, “‘Negative’ Rights vs. ‘Positive’ Entitlements: A Comparative Study of Judicial Interpretations of Rights in an Emerging Neo-Liberal Economic Order” (2000) 22:4 *Hum Rts Q* 1060 at 1071–72.

<sup>188</sup> Qureshi, *supra* note 159 at 162.

<sup>189</sup> Hirschl, *supra* note 187 at 1098 (while this review of jurisprudence considered three non-African countries, judiciaries that arose from colonial states could also follow this trend).

<sup>190</sup> *Ibid*.

<sup>191</sup> Qureshi, *supra* note 159 at 159.

<sup>192</sup> *Ibid*.

sources.<sup>193</sup> In addition, obligations to fulfill the right to water create another positive obligation upon the state, by ensuring that people can enjoy this right.<sup>194</sup> States must properly and equitably allocate water resources, such as by installing the necessary infrastructure and considering accessibility and affordability.<sup>195</sup>

South Africa has expressly constitutionalised the right to water within the *Constitution of the Republic of South Africa, 1996*.<sup>196</sup> The country has dealt with serious water problems for two main reasons: water scarcity and the legacy of apartheid.<sup>197</sup> During apartheid, water access and use was linked to land ownership, which in turn was legislatively restricted to white persons, resulting in inequalities in access to water.<sup>198</sup> This uneven distribution marked South Africa's colonial legacy.<sup>199</sup> While the constitutional right does not put an absolute obligation on the state to provide a minimum amount of water, it does require the state to act reasonably with its resources.<sup>200</sup> It has, also, provided a space for legislation and policies to build upon this constitutional right, as is explained in the next section. That said, South Africa's current reality, including challenges in water management and a water deficit,<sup>201</sup> demonstrates that a constitutional right with supporting legislation and policy is not a cure-all to water insecurity.

Nevertheless, this constitutional right has had positive results for water access within South Africa's jurisprudence. For example, the High Court found a breach of the constitutional duty and granted interim relief in *Residents of Bon*

---

<sup>193</sup> *Ibid* at 160.

<sup>194</sup> *Ibid*.

<sup>195</sup> *Ibid*.

<sup>196</sup> *Constitution of the Republic of South Africa, 1996*, No 108 of 1996, art 27 [*South African Constitution*].

<sup>197</sup> Arden, *supra* 141 at 776.

<sup>198</sup> Rügger, *supra* note 146 at 20.

<sup>199</sup> Arden, *supra* note 141 at 776.

<sup>200</sup> *Ibid*.

<sup>201</sup> Anja du Plessis, *Water as an Inescapable Risk: Current Global Water Availability, Quality and Risks with a Specific Focus on South Africa* (Switzerland: Springer International Publishing, 2019) at 287–89.

*Vista Mansions v Southern Metropolitan Local Council*.<sup>202</sup> In this case, a local council had disconnected the water supply to residents, and the High Court reasoned that the right of existing access to water was violated by understanding the duty in the same way as duties under the ICESCR.<sup>203</sup> Also, in *City of Cape Town v Strümpher*,<sup>204</sup> the Supreme Court of Appeal of South Africa held that the municipality could not shut off water service to the respondent, who was behind on payments, due to constitutional and statutory provisions.<sup>205</sup>

Although a right to water could be read into existing rights within a constitution, this generally requires a court process with no guarantee of success.<sup>206</sup> A Zambian case provides one example where the court successfully read a right to water into its constitution.<sup>207</sup> Residents of a town had been relying on a nearby stream as their water source, but a mining company had polluted the stream, resulting in illness among the people.<sup>208</sup> In *Nyasulu v Konkola Copper Mines Plc*,<sup>209</sup> the court held that the company had violated Zambia's environmental legislation and had denied the residents their constitutional "right to life".<sup>210</sup>

#### **d. Water Management Legislation**

Legislation aimed at ensuring adequate quality and quantity of water could be helpful where the problem is not absolute water scarcity, but water mismanagement. However, effective legislation requires strong and accountable institutions. For instance, Nigeria established multiple River Basin Development Agencies through the River Basins Development Authorities Decree of 1976 ("Decree"), with the goal of integrating control of water

---

<sup>202</sup> [2002] 6 B Const LR 625 (W) (High Court, Witwatersrand Local Div), cited by Arden, *supra* note 141 at 776–77.

<sup>203</sup> Arden, *supra* note 141 at 776–77.

<sup>204</sup> [2012] ZASCA 54 at paras 16, 18.

<sup>205</sup> Soyapi, *supra* note 184 at 15.

<sup>206</sup> *Ibid* at 7–8.

<sup>207</sup> *Ibid* at 12–13.

<sup>208</sup> *Ibid* at 12.

<sup>209</sup> [2011] ZMHC 86 at 20.

<sup>210</sup> Soyapi, *supra* note 184 at 12–14.

resources to improve supplies for agricultural, industrial and domestic purposes.<sup>211</sup> Unfortunately, the country's institutions have not provided the proper support to implement this integrated water management approach; political and economic instability, poor funding, manpower problems and project underutilization, and corruption are some of the relevant institutional barriers.<sup>212</sup> The River Basin Development Agencies may have domain over ecological issues, but they lack the necessary enforcement power.<sup>213</sup>

South Africa is a prime case study for demonstrating how well-intentioned water management legislation conflicts with institutional realities. To implement the country's constitutional right to water, the government adopted a policy with three objectives: "equitable access to water, sustainable use of water, and efficient and effective water use,"<sup>214</sup> and issued multiple pieces of legislation to implement these objectives.<sup>215</sup> The legislation aimed to improve water quality, water access, water allocation, basic sanitation, and health and hygiene.<sup>216</sup> South Africa decided to provide water at subsidized or no cost and implemented consumption-based water billing; created policies setting a minimum daily per capita amount of water for all, and a maximum distance for water access from a person's home; and developed departments to inspect the success of these policies.<sup>217</sup> These did result in significant changes: increased water access and sanitation facilities for millions.<sup>218</sup>

Despite these improvements, especially in the rural sector, many apartheid-era patterns of inequality, inefficiency, and inadequacy in access to

---

<sup>211</sup> Emmanuel M Akpabio, "Integrated water resources management in the cross river basin, Nigeria: How can we reconcile institutional boundaries and interests?" (2008) 6:3 Intl J River Basin Management 267 at 268–69.

<sup>212</sup> *Ibid* at 275.

<sup>213</sup> *Ibid*.

<sup>214</sup> "Why Invest in Watershed Management?" (2007) at 23, online (pdf): *Food and Agriculture Organization of the United Nations* <[www.fao.org/3/a1295e/a1295e00.pdf](http://www.fao.org/3/a1295e/a1295e00.pdf)> [FAO, "Why Invest?"].

<sup>215</sup> Céline Dubreuil, *The Right to Water: From Concept to Implementation* (World Water Council, 2006) at 17–18.

<sup>216</sup> *Ibid* at 17–19.

<sup>217</sup> Qureshi, *supra* note 159 at 162–63.

<sup>218</sup> Dubreuil, *supra* note 215 at 17–19.

water persist.<sup>219</sup> While inadequate rainfall and aquifers certainly play a part,<sup>220</sup> institutional dynamics resulting from apartheid-era legislation have left a lasting mark. For example, the *Native Land Act (1913)* entrenched the segregation of water access along racial lines by severely restricting the property rights of black South Africans.<sup>221</sup> Progress in rectifying the inequitable distribution of access to water has slowed and there are still too many poor South Africans without access to water.<sup>222</sup> Some reasons include ill-defined responsibilities and institutional roles in the water sector;<sup>223</sup> a lack of financial, capacity, skills and expertise resources to implement well-meaning strategies;<sup>224</sup> a lack of water management infrastructure, particularly in rural areas;<sup>225</sup> and poor coordination or even conflicting approaches towards improving water quality.<sup>226</sup> Considering that segregation had been the norm for longer than the modern state of South Africa has existed, it is no surprise that institutional legacies including inadequate infrastructure and capacities and political mismanagement continue to hamper progress on water security.

*e. River Basin Organisation Agreements*<sup>227</sup>

The above example of Nigeria's Decree concerned the river basin within Nigeria's boundaries. In contrast, international river basin organisations ("RBOs") harness the capacities of multiple states under the support of

---

<sup>219</sup> Patricia Kefilwe Madigele, "South Africa's water regulatory and policy framework: a new institutional economic review" (2018) 4 Sustainable Water Resources Management 129 at 131.

<sup>220</sup> *Ibid* at 129.

<sup>221</sup> *Ibid* at 131.

<sup>222</sup> *Ibid* at 134, citing Department of Water Affairs, Pretoria, *Managing water for an equitable and sustainable future* (2012) [DWA, *Managing water*] and Department of Water Affairs, Pretoria, *National water resource strategy: water for an equitable and sustainable future* (2013) [DWA, *National strategy*].

<sup>223</sup> *Ibid*, citing DWA, *Managing water*, *supra* note 222.

<sup>224</sup> *Ibid* at 135, citing DWA, *National strategy*, *supra* note 222.

<sup>225</sup> du Plessis, *supra* note 201 at 287.

<sup>226</sup> *Ibid*.

<sup>227</sup> I give my thanks to an anonymous reviewer for bringing these institutions to my attention.

international water law.<sup>228</sup> They are “institutionalized forms of cooperation that are based on binding international agreements covering the geographically defined area of international river or lake basins characterized by principles, norms, rules and governance mechanisms.”<sup>229</sup> RBOs became especially common in Africa after the end of the colonial period.<sup>230</sup> This type of management requires strong capacities and abilities to negotiate various interests and priorities of the multiple parties reliant upon a particular river basin.<sup>231</sup> Success has been mixed: some RBOs seemingly lead to cooperation and conflict reduction, while others faltered due to a lack of institutional capacity and political commitment.<sup>232</sup>

One example includes the Orange-Sengu River Commission (“ORASECOM”), established by Agreement<sup>233</sup> in 2000 by four states sharing the water’s boundaries—Lesotho, South Africa, Namibia, and Botswana—to mutually address the development, use, and conservation of the system.<sup>234</sup> ORASECOM has improved knowledge about environmental problems related to the basin through reports and analyses, and has more directly addressed issues by conducting surveys, creating programs, and formulating guidelines.<sup>235</sup> However, while ORASECOM has had some success in environmental

---

<sup>228</sup> Andrea K Gerlak & Susanne Schmeier, “Cooperation for the Sustainable Governance of International Watercourses: The Role of River Basin Organisations” (2013) 15:2 *Global Dialogue* 54 at 58.

<sup>229</sup> Susanne Schmeier, Andrea K Gerlak & Sabine Schulze, “Who Governs Internationally Shared Watercourses? Clearing the Muddy Waters of International River Basin Organisations” (2013) *Earth System Governance Project Working Paper No 28* at 8.

<sup>230</sup> Davison Saruchera & Jonathan Lautze, “Transboundary river basin organizations in Africa: assessing the secretariat” (2016) 18:5 *Water Policy* 1053 at 1055.

<sup>231</sup> FAO, “Why Invest?”, *supra* note 214 at 26.

<sup>232</sup> Saruchera & Lautze, *supra* note 230 at 1056.

<sup>233</sup> *Agreement Between the Governments of the Republic of Botswana, the Kingdom of Lesotho, the Republic of Namibia and the Republic of South Africa on the Establishment of the Orange-Senqu River Commission*, 3 November 2000 (entered into force 3 November 2000), online: <[orasecom.org/about/agreements.aspx](http://orasecom.org/about/agreements.aspx)> [[web.archive.org/web/20190727205342/http://orasecom.org/about/agreements.aspx](http://web.archive.org/web/20190727205342/http://orasecom.org/about/agreements.aspx)].

<sup>234</sup> Gerlak & Schmeier, *supra* note 228 at 58.

<sup>235</sup> Sabine Blumstein, “Managing Adaptation: International Donors’ Influence on International River Basin Organizations in Southern Africa” (2017) 15:4 *Intl J River Basin Management* 461 at 464.

protection, “it has not made any significant contributions to improving the livelihoods of the basin riparians.”<sup>236</sup>

Another example is the Permanent Okavango River Basin Water Commission (“OKACOM”), whose basin it concerns is shared by Angola, Botswana, Namibia, and Zimbabwe.<sup>237</sup> It was established in 2004 with the Agreement on the Permanent Okavango River Basin Commission,<sup>238</sup> similar to the purpose of ORASECOM.<sup>239</sup> Although it has contributed knowledge about the river basin and the impacts of development, it has had less success with environmental protection, and has not made contributions toward the livelihoods of people reliant upon the basin.<sup>240</sup> While OKACOM established a protocol to address the impact of unpredicted floods on agriculture and sanitation, implementation has been a failure due to a lack of human resources, technical staff, and measuring stations.<sup>241</sup>

#### *f. Nationalisation of Water Services*

Some legislation may help states regain control over their water resources. Due to pressure from the World Bank and the IMF, the apartheid government of South Africa had privatised its water delivery and sanitation services.<sup>242</sup> This trend was reversed by the post-apartheid government through the *National Water Act*,<sup>243</sup> with the aim to address inequalities in water access and the

---

<sup>236</sup> *Ibid* at 465.

<sup>237</sup> *Ibid* at 466.

<sup>238</sup> *Agreement Between the Governments of the Republic of Angola, the Republic of Botswana and the Republic of Namibia on the Establishment of a Permanent Okavango River Basin Water Commission (OKACOM)*, 15 September 1994 (entered into force 15 September 1994), online: <[www.okacom.org/site-documents/key-documents/1994-agreement-between-the-governments-of-the-republic-of-angola-the-republic-of-botswana-and-the-republic-of-namibia-on-the-establishment-of-a-permanent-okavango-river-basin-water-commission-okacom-agreement/view](http://www.okacom.org/site-documents/key-documents/1994-agreement-between-the-governments-of-the-republic-of-angola-the-republic-of-botswana-and-the-republic-of-namibia-on-the-establishment-of-a-permanent-okavango-river-basin-water-commission-okacom-agreement/view)>.

<sup>239</sup> Blumstein, *supra* note 235 at 467.

<sup>240</sup> *Ibid*.

<sup>241</sup> *Ibid* at 467–68.

<sup>242</sup> Danwood Mzikenge Chirwa, “Water Privatisation and Socio Economic Rights in South Africa” (2004) 8:2 *L Democracy & Development* 181 at 182.

<sup>243</sup> (S Afr), No 36 of 1998.

country's overall water stress.<sup>244</sup> The legislation made two significant changes. It abolished the distinction between private and public water, recognizing that water belongs to all the South African people by making the government the public trustee of the nation's water.<sup>245</sup> It also replaced exclusive rights of water use with water allowances to be granted with discretion by government authorities.<sup>246</sup> This reflects the rights concerning water within the *Constitution of the Republic of South Africa, 1996*: everyone has the right to have access to sufficient food and water, and the state must take reasonable steps within its available resources to realise that right.<sup>247</sup> Nationalisation may promote better regulated and more accountable water services,<sup>248</sup> particularly where there is a constitutional right to water, as there is in South Africa.

This shift in the understanding of a right to water and the relationship between water and people is an example of a state purposefully rejecting part of its colonial inheritance. The change in the repetitive patterns of behaviour can be observed in the differential treatment of water in post-apartheid South Africa. The previous civil law tradition, inherited from Dutch colonizers, understood ownership as “the most comprehensive real right ... [and] the origin or source of all limited real rights.”<sup>249</sup> This tradition considers ownership to be the most desirable and natural land right, while other rights are less valuable.<sup>250</sup> However, considering the inequitable balance in land ownership due to apartheid, and the limited water resources available, a more realistic and appreciative understanding of other land rights was required.<sup>251</sup> The emphasis changed from “ownership” to “rights in property”, with the constitutional property understanding that rights to water belong to everyone, but only to the extent of sufficient use of available resources.<sup>252</sup> This example shows that understanding

---

<sup>244</sup> GJ Pienaar & Elmarie van der Schyff, “The Reform of Water Rights in South Africa” (2007) 3:2 L Environment & Development J 179 at 181.

<sup>245</sup> *Ibid* at 183.

<sup>246</sup> *Ibid* at 181.

<sup>247</sup> *South African Constitution*, *supra* note 196, arts 27(1)(b), s 27(2).

<sup>248</sup> Chirwa, *supra* note 242 at 192–96.

<sup>249</sup> AJ van der Walt, “The Fragmentation of Land Rights” (1992) 8:3 SAJHR 431 at 434.

<sup>250</sup> *Ibid*.

<sup>251</sup> *Ibid*.

<sup>252</sup> Pienaar & van der Schyff, *supra* note 244 at 188.



water not as an object to be privately owned and controlled for personal use, but as a resource which all people require for life, can shift the paradigm of understanding water insecurity and also create new rights-based legal recourses for a population.

***g. State Policy Solutions***

While not a legal measure *per se*, policy and legislative measures are highly interrelated. Changes in policy are reflected in changes in legislation. For example, the transformation to post-apartheid water law reform reflected the changing socio-economic and political landscape of South Africa and the goals and philosophy of equity and economic development behind modern water policy.<sup>253</sup> Therefore, a few examples are relevant for demonstrating how state policy in practice can improve water security.

Ethiopia experienced significant improvements between 1990 and 2012 in drinking water supply, sanitation, and reducing open defecation, due to a successful national strategy that mobilized multiple institutions.<sup>254</sup> The World Health Organisation (“WHO”) identified three key elements to this success: strong political will and commitment to increasing sanitation coverage through its policy, programs, and plans; human resources and education institutions to implement these programs, educate, and change behaviours; and an accepted financing plan and budget for these programs.<sup>255</sup> The government has implemented various programs, including their Health Extension Program, National Hygiene and Sanitation Strategy, a national step-by-step protocol and Sanitation Action Plan, and the subsequent One Wash National Program.<sup>256</sup> It also used its educational institutions to teach communities about sanitation to create positive cultural change, and the government provides university education in fields of sanitation and public health and water.<sup>257</sup> WHO further

---

<sup>253</sup> C Chikozho, L Danga & D Saruchera, “Articulating the history and major departure points evident in post-apartheid South African national water policy and law” (2017) 100 *Physics & Chemistry Earth* 270 at 276–77.

<sup>254</sup> WHO, *Investing in Water and Sanitation*, *supra* note 181 at 8.

<sup>255</sup> *Ibid.*

<sup>256</sup> *Ibid.*

<sup>257</sup> *Ibid.*

found in 2014 that Ethiopia had performed a national assessment for sanitation relatively recently (in the past two to four years) which had involved between six to nine ministries or national institutions.<sup>258</sup> Ethiopia's situation is thus a prime example of good governance and public participation in combatting water insecurity, two important factors which are discussed below. Rwanda had similar success increasing access to improved sanitation and nearly eliminating open defecation through its own strategic plan, allocating over 4% of its national budget towards water, sanitation, and hygiene.<sup>259</sup>

## V. FUTURE LEGAL SOLUTIONS

The foregoing describes only a few of the responses that have been implemented in an attempt to improve water security. Creating innovative and effective legal solutions is not a simple process—it requires consideration of many factors. Security is best achieved through development,<sup>260</sup> so it is important to understand the proper approach to development when crafting legal solutions. The following considers the proper components of a response to water insecurity within the framework of law and development.

As considered above, poverty is part of Africa's colonial inheritance. Therefore, one aspect of development is the eradication of poverty. A proper solution to water insecurity should be careful not to address one type of poverty at the expense of another, as different forms of poverty are interconnected. Poverty from a human development perspective considers not only income and material wealth, but also human poverty: the denial of choices and opportunities for one to lead a good life and “enjoy a decent standard of living, freedom, dignity, self esteem and the respect of others.”<sup>261</sup> In the water insecurity context, both income and human poverty must be addressed. Income poverty reduces

---

<sup>258</sup> *Ibid* at 10.

<sup>259</sup> *Ibid* at 20.

<sup>260</sup> “‘Water Security’: Experts Propose a UN Definition on Which Much Depends” (26 March 2013), online: *United Nations University* <[unu.edu/media-relations/releases/water-security-a-proposed-un-definition.html#info](http://unu.edu/media-relations/releases/water-security-a-proposed-un-definition.html#info)>.

<sup>261</sup> United Nations Development Programme, *Human Development Report 1997* (New York: Oxford University Press, 1997) at 5.

one's ability to purchase clean and safe water,<sup>262</sup> which leads to human poverty, as choices are reduced and one's standard of living falls. Human poverty reduces one's choices in accessing water, which leads to income poverty. For instance, African women or girls often spend inordinate amounts of time obtaining clean water, time which could be spent earning income or attending school.<sup>263</sup>

In addition, the solution to reduce water insecurity and thus facilitate development must be by way of law,<sup>264</sup> with the goal to change current institutions. Constructing the issue of water insecurity as merely a physical problem is both overly deterministic and unrealistic, because understanding the issue as a lack of rainfall for an increasing population, for example, tells only one piece of a complex and historic story. Instead, the main problem is the repetitive patterns of behaviour—the institutions—that were inherited through colonialism and have led to water insecurity today.<sup>265</sup> Fortunately, this means that water insecurity has the potential to be rectified, whereas geography and climate may not be so malleable. Lawmakers are in the best position to change the received colonial legal order and create better institutions, through changing the behaviour of those in society.<sup>266</sup> Therefore, to effectively combat water insecurity, the law must not be used to merely reproduce the status quo.

The theory of legal instrumentalism provides that law may be used as an instrument for social change<sup>267</sup>—in this case, as a means to change institutions,

---

<sup>262</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 35.

<sup>263</sup> UNDP, *Report 2006*, *supra* note 23 at 47.

<sup>264</sup> Thank you to an anonymous reviewer for raising the point that the law may have limited power to change institutions where there is no political will. For more on the requirement of political will in legislative oversight, and in the specific example of anti-corruption legislation specifically, see (respectively) Riccardo Pelizzo & Rick Stapenhurst, "Oversight Effectiveness and Political Will: Some Lessons from West Africa" (2014) 20:2 J Legislative Studies 255; Ocheje, "When Law Fails", *supra* note 62. For an argument that political will and good governance are not sufficient for legislative or policy transformation toward sustainable land use, especially where the private sector holds a lot of influence, see Corrine Cash, "Good governance and strong political will: Are they enough for transformation?" (2016) 58 Land Use Policy 545.

<sup>265</sup> Seidman, "The Fatal Race", *supra* note 60 at 81.

<sup>266</sup> *Ibid* at 82.

<sup>267</sup> Brian Z Tamanaha, "The Tension Between Legal Instrumentalism and the Rule of Law" (2005) 33:1 Syracuse J Intl L & Com 131 at 131.

and thus to improve water security. An instrumentalist view challenges the legal status quo—the rule of law as it stands.<sup>268</sup> It can be contrasted with a formalist view of the law, which assumes that the law is rational and internally consistent.<sup>269</sup> Instead, instrumentalism accepts that law is created by people, and there is no pre-determined set of logically-structured legal rules.<sup>270</sup> The focus should be on the results the law achieves,<sup>271</sup> by commanding, prohibiting, or permitting specific behaviours that may have desirable indirect effects.<sup>272</sup> In sum, “a law works if it induces the behaviours it prescribes, and if those behaviours help to ameliorate the targeted social problem.”<sup>273</sup>

Instrumentalism is highly relevant in the African context. As laws were inherited from colonialism, the idea that the rule of law somehow represents African values and priorities is highly flawed.<sup>274</sup> To shake off the colonial inheritance of Eurocentric law thus requires an instrumentalist approach.<sup>275</sup> If we accept that the law can be used as a tool to problem-solve and create social change,<sup>276</sup> rather than to further entrench the inherited institutions that led to the problem of water security, we will be one step closer to building legal solutions.

Furthermore, legal solutions should be developed within the context of the particular time and place in which they will be applied, with analysis and empirical research<sup>277</sup> relevant to that region, rather than being blindly transplanted from one state to another.<sup>278</sup> Solutions must prescribe behaviours appropriate to that region and they must be able to induce that behavior through sanctions or rewards.<sup>279</sup> Increasing water security in Africa would thus be best

---

<sup>268</sup> *Ibid* at 133.

<sup>269</sup> *Ibid* at 144.

<sup>270</sup> *Ibid* at 142.

<sup>271</sup> *Ibid* at 143.

<sup>272</sup> Seidman, “Instrumentalism 2.0”, *supra* note 21 at 104, 107.

<sup>273</sup> *Ibid* at 99, citing John Griffiths, “Is Law Important?” (1979) 54 NYUL Rev 339.

<sup>274</sup> Paul D Ocheje, “Creating an anti-corruption norm in Africa: Critical reflections on legal instrumentalization for development” (2017) 10:2 L & Development Rev 477 at 480–81.

<sup>275</sup> *Ibid* at 481.

<sup>276</sup> *Ibid* at 479.

<sup>277</sup> See Part IV-d, above, for more on this topic and a brief example of how legal obligations, institutional capacity, and limited resources interact.

<sup>278</sup> Seidman, “The Fatal Race”, *supra* note 60 at 79–80.

<sup>279</sup> *Ibid* at 81.

facilitated through the philosophy of “African solutions to African problems,” which has become a common mantra for Africa policy-makers but has its ties to pre-independence Pan-African movements.<sup>280</sup> The aim is to enhance Africa’s capacity and self-determination and to realize African solutions in African states.<sup>281</sup> Using this philosophy will help ensure that solutions are relevant and developed within the proper legal and societal context to be effective. Such solutions would also likely be highly anti-colonial, as the inherited colonial institutions had not been developed with an African context or interest in mind.

Finally, any sustainable and legitimate solution will require public participation and good governance on the part of the state. These measures would include African interests in the solution and further reject the inherited colonial order. Meaningful public participation and engagement should help ensure that those from different segments of society, especially the rural and urban poor, have their concerns addressed.<sup>282</sup> Good governance requires “accountability, transparency, legitimacy, public participation, justice and efficiency,”<sup>283</sup> and good water governance should thus “promote effective policy implementation along with sanctions against poor performance, illegal acts and abuses of power.”<sup>284</sup> Such governance would require an adaptive system in place to effectively monitor the legal solution to determine whether it is having the proper effect, or whether changes should be made. Currently, although many African countries have policies in place to help vulnerable segments of their population, less than 40% of countries have monitoring progress to track access and service provision for sanitation and drinking water.<sup>285</sup>

For these reasons, it is difficult to propose an innovative solution for all of SSA. A proper legal solution must be cognizant of both human and income

---

<sup>280</sup> Ndubuisi Christian Ani, “Three Schools of Thought on ‘African Solutions to African Problems’” (2019) 50:2 J Black Studies 135 at 136.

<sup>281</sup> *Ibid* at 137–38.

<sup>282</sup> Brett A Gleitsmann, Margaret M Kroma & Tammo Steenhuis, “Analysis of a rural water supply project in three communities in Mali: Participation and sustainability” (2007) 31:2 Natural Resources Forum 142 at 149.

<sup>283</sup> UN-Water, *Water Report 2019*, *supra* note 9 at 4.

<sup>284</sup> *Ibid*.

<sup>285</sup> WHO, *Investing in Water and Sanitation*, *supra* note 181 at 4.

poverty; it must work to strengthen the institutions inherited from colonialism; it must prescribe appropriate behaviours; and it hinges on meaningful public engagement by a state committed to good governance. All of these factors must be considered within the specific context of the state or region within which the solution is being developed. One solution that aims to provide clean and safe water to rural communities through a specific infrastructure or policy program may not work in all states, taking into account each state's economic and political inheritances and the specific environmental challenges being faced. Further research is needed from within African states.

The above legal responses can be analysed for the extent that they contain the components of an effective solution. Few of the responses consider the eradication of poverty as part of their strategy to increase water security. For instance, a right to water, in and of itself, does not restructure the inherited dependant economy of Africa that has perpetuated poverty post-colonialism. However, state policy and legislative solutions can address poverty indirectly by harnessing the power of a right to water to actively ensure marginalised groups have equal access to water infrastructure. The nationalisation of water services is another method for states to address poverty by taking control of access to water out of the hands of the private market. Of course, this requires strong political institutions to implement the right for the people.

Good governance and public participation, particularly when performed with an eye for context, have an important role to play in crafting effective national responses. Legislative responses, including the nationalisation of water, require good governance in implementation and public participation in creation, in order to be relevant to the various needs of marginalised groups. Ethiopia crafted a strong solution by working directly with communities, harnessing its educational institutions to create change in the repetitive patterns of behaviour of its people. Public engagement may be stronger on a local level, in comparison to the international level, where the global community has long debated the precise meaning and obligations of a right to water.

This also ties into the need for a solution to be highly contextual. For instance, a human right to water in international law, in comparison to the right within a specific state's constitution, is likely much further removed from the realities of that state. Legislative and policy responses also have the opportunity

to be highly contextual, created within a specific time and space to address an issue—and good governance and public participation create a space for the contextual milieu to be brought to the fore.

Finally, some of the above responses try to use law as a means to change institutions. South Africa provided a strong example of this, through its constitutional right to water, its nationalisation of water, and its legislation. The post-apartheid state has actively taken multiple and intersecting measures to reduce the impact of colonial institutions and create more equitable access to water security. While not as strong a case, it could also be argued that RBOs attempt to change institutions by creating new institutions that encourage international action to protect river and lake basins through the repetitive patterns of behaviour of sharing knowledge or conducting surveys. In addition, rights to water—international, constitutional, or implied within the *African Charter*—may encourage states or judiciaries to change national legislation, and the changes in repetitive patterns of behaviour that result, to be in compliance with these rights.

## VI. CONCLUSION

The above analysis of the various responses already taken, and their use of some of the proposed components to an effective legal solution, shows that no single legal response can completely address the varied colonial inheritances of African states. These include the social, political, and economic institutions that were formed during colonialism, and have led to inadequate infrastructure, poverty, and the inability to respond to population and environmental factors that stress water security. The problem is simply too large and complex for an easy fix. However, using the law in multiple forms, as South Africa has done, can strengthen a state's ability to change institutions for the better.

This article has demonstrated the social problem of water insecurity in SSA, connecting its disproportionate impact upon SSA to its colonial inheritance. In doing so, I surveyed the legal solutions which have already been used, their strengths and/or weaknesses, and, flowing from this, offered a discussion of the necessary components required for building a proper legal solution. Such a solution must aim to dismantle the colonial inheritance by

remaining relevant to African interests and being constructed by an African population. Furthermore, as Africa is certainly not homogenous, the solution must be crafted with a keen understanding of the particular time, place, and people it seeks to address.

As a final note, it might sound patently unfair to put the responsibility of fixing deeply-entrenched and ill-intended inheritances upon African states and—by extension when considering the need for public participation—the broader African population. Of course, there was nothing fair about colonialism, and there continues to be nothing fair about the way it has institutionalised dependency and poverty on a global scale. However, as the canvassed legal responses demonstrate, African states have not been content to wait around for Western colonial states to take responsibility for the past and continued impact of their actions on the continent.

SSA need not be at the mercy of its colonial inheritance: it has the strength and resources available to regain control of its environment and enhance water security through innovative solutions, not by way of inherited law, but by law created by Africans on their land. Inherited institutions, in contrast, do not provide the answers to water insecurity, because the colonial imperative was not sustainability, and the health and wellbeing of Africans was obviously not apposite to colonialism. Going forward, SSA has an opportunity to be at the forefront of advancing creative legal solutions to water security, while much of the developed world lags behind in its response.