

**Analysis of the Sustainable Development Goals  
from the Perspective of the Human Rights to Safe Drinking Water and Sanitation**

Prepared by Sharmila L. Murthy  
Assistant Professor, Suffolk University Law School

Prepared for the Sisters of Mercy on behalf of the  
NGO Mining Working Group at the United Nations

June 16, 2016

## Contents

I.	Introduction / Executive Summary .....	3
II.	Responses to Questions Posed .....	6
1.	What elements of the HRTWS are represented in SDG 6 Goal and its targets? .....	6
	Goal 6. Ensure availability and sustainable management of water and sanitation for all .....	6
2.	What critical aspects of the HRTWS are missing or open to misinterpretation in these targets? .....	24
3.	What are the most critical elements of Goal 6 and its targets to enable a realization of the HRTWS?.....	25
4.	How can the reference to the HRTWS in the Vision of the Declaration ( #7) and the general references to a human rights based realization of the SDGs ensure a rights-based interpretation and implementation of SDG 6? .....	25
5.	Although the implementation of SDGs is nationally focused and voluntary in nature, what HR mechanisms could be used to report on progress made or not on the realization of HRTWS in the SDGs over the next 15 years?.....	28
6.	Other SDGs: What elements of the HRTWS are represented in targets 3.2, 3.3 and 10.2, 10.3 and 11.5 and 11.6 and 12.4, 15.1 and 15.3 (and any other targets)?.....	29
	Goal 3. Ensure healthy lives and promote well-being for all at all ages .....	29
	Goal 10. Reduce inequality within and among countries .....	30
	Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable .....	30
	Goal 12. Ensure sustainable consumption and production patterns .....	32
	Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss .....	32
	Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels .....	33
	Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development .....	33
III.	Conclusion .....	34

## I. Introduction / Executive Summary

This report analyzes the Sustainable Development Goals (SDGs) from the perspective of the human rights to safe drinking water and sanitation (HRTWS).<sup>1</sup> The analysis focuses on five key questions posed by the Sisters of Mercy on behalf of the NGO Mining Working Group at the United Nations:

1. What elements of the HRTWS are represented in SDG 6 Goal and its targets and in targets 3.2, 3.3 and 10.2, 10.3 and 11.5 and 11.6 and 12.4, 15.1 and 15.3?
2. What critical aspects of the HRTWS are missing or open to misinterpretation in these targets?
3. What are the most critical elements of Goal 6 and its targets to enable a realization of the HRTWS?
4. How can the reference to the HRTWS in the Vision of the Declaration (#7) and the general references to a human rights based realization of the SDGs ensure a rights-based interpretation and implementation of SDG 6?
5. Although the implementation of SDGs is nationally focused and voluntary in nature, what HR mechanisms could be used to report on progress made or not on the realization of HRTWS in the SDGs over the next 15 years?

The SDGs have the potential to further the realization of human rights, especially economic and social rights, such as the rights to food, health and water. As a result of strong advocacy efforts, the Preamble and Declaration preceding the SDGs mention human rights in several places, including an explicit mention of the human right to safe drinking water and sanitation. Moreover, in December 2015, the UN General Assembly explicitly welcomed the reaffirmation of the HRTWS in the 2030 Agenda.<sup>2</sup> Although the goals and targets are not framed in human rights language, the human rights community has influenced the way in which some of the SDG targets will be monitored, which will ultimately have a powerful, if less obvious, impact.

The real interpretation of the SDGs comes not simply in the language of the goals and targets, but in the indicators that will be used to measure them. As UN Water has observed, “[a] clear lesson from the MDGs is that we cannot manage what we do not measure, and what gets measured is far more likely to get done.”<sup>3</sup> However, there are inherent tensions in quantification. As observed by the Center for Economic and Social Rights, calls by some diplomats and official statisticians to limit the number of indicators to only one per target could severely undercut the

---

<sup>1</sup> An evolving question has been whether we should refer to the “human right to safe drinking water and sanitation” (singular) or the “human rights to safe drinking water and sanitation” (plural). The former Special Rapporteur on the human right to safe drinking water and sanitation, Catarina de Albuquerque, made a point of using the plural form when not referring to official UN documents. However, the UN General Assembly Resolution 70/169, which was adopted in December, 2015, is entitled “The human rights to safe drinking water and sanitation,” which suggests further international consensus that these rights are related but distinct.

<sup>2</sup> G.A. Res. 70/169, U.N. Doc. A/RES/70/169 (Feb. 22, 2016), 169.

<sup>3</sup> UN WATER, MONITORING WATER AND SANITATION IN THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT: AN INTRODUCTORY GUIDE 3 (2016), [http://www.unwater.org/fileadmin/user\\_upload/unwater\\_new/docs/Monitoring%20Water%20and%20Sanitation%20in%20the%202030%20Agenda%20C2%AD%20An%20introductory%20guide\\_2016-02-08.pdf](http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/Monitoring%20Water%20and%20Sanitation%20in%20the%202030%20Agenda%20C2%AD%20An%20introductory%20guide_2016-02-08.pdf).

scope and ambition of the SDGs.<sup>4</sup> Fortunately for the water sector, the former Special Rapporteur on the human right to safe drinking water and sanitation (hereinafter, “Special Rapporteur”) worked closely with the Joint Monitoring Program (JMP) run by the WHO and UNICEF and headed the group on Equality and Non-Discrimination.

This analysis relies on two important sources of information:

- JMP, *Methodological note: Proposed indicator framework for monitoring SDG targets on drinking-water, sanitation, hygiene and wastewater*, available at [http://www.wssinfo.org/fileadmin/user\\_upload/resources/Methodological-note-on-monitoring-SDG-targets-for-WASH-and-wastewater\\_WHO-UNICEF\\_8October2015\\_Final.pdf](http://www.wssinfo.org/fileadmin/user_upload/resources/Methodological-note-on-monitoring-SDG-targets-for-WASH-and-wastewater_WHO-UNICEF_8October2015_Final.pdf)
- IAEG-SDGs, *Compilation of Metadata for the Proposed Global Indicators for the Review of the 2030 Agenda for Sustainable Development*, available at <http://unstats.un.org/sdgs/iaeg-sdgs/metadata-compilation/> (viewed as of March 2016).

The short summary is that the JMP is interpreting Targets 6.1 and 6.2 relating to access to water, sanitation and hygiene (WASH) in a manner that is largely consistent with the normative content of the HRTWS. As defined in General Comment 15, the right to water “entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.”<sup>5</sup> Because the JMP expressly refers to these criteria in its interpretation of SDG Targets 6.1 and 6.2,<sup>6</sup> this memo does as well. The monitoring of the SDGs will generally examine the extent to which the WASH services meet the availability, accessibility, quality and acceptability criteria of the HRTWS. Because JMP calls for “affordable” water, the JMP plans to disaggregate data by wealth quintile and affordability. However, it is not yet clear exactly how that will be measured, so this is a potential area for advocacy.

---

<sup>4</sup> CENTER FOR ECONOMIC AND SOCIAL RIGHTS, *THE MEASURE OF PROGRESS: HOW HUMAN RIGHTS SHOULD INFORM THE SUSTAINABLE DEVELOPMENT GOALS* 4 (2015).

<sup>5</sup> Economic and Social Council, Committee on Economic, Social and Cultural Rights, *Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights; General Comment No. 15, The right to water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights, U.N. Doc. E/C.12/2002/22)*, , Para 2 (2002). (In Article 12, General Comment 15 describes the content of the right as requiring: (1) availability; (2) quality; and (3) accessibility, the last of which was further divided into four sub-categories: (a) physical accessibility; (b) economic accessibility; (c) non-discrimination; and (d) information accessibility.”). See also *Progress Report*, *supra* note **Error! Bookmark not defined.**, at 6-9 (defining the “normative content” of the human right to water and sanitation consists of five criteria: (1) availability; (2) quality/safety; (3) acceptability; (4) accessibility; and (5) affordability

<sup>6</sup> WHO/UNICEF, *METHODOLOGICAL NOTE: PROPOSED INDICATOR FRAMEWORK FOR MONITORING SDG TARGETS ON DRINKING- WATER, SANITATION, HYGIENE AND WASTEWATER* (2015), [http://www.wssinfo.org/fileadmin/user\\_upload/resources/Methodological-note-on-monitoring-SDG-targets-for-WASH-and-wastewater\\_WHO-UNICEF\\_8October2015\\_Final.pdf](http://www.wssinfo.org/fileadmin/user_upload/resources/Methodological-note-on-monitoring-SDG-targets-for-WASH-and-wastewater_WHO-UNICEF_8October2015_Final.pdf); IAEG-SDGs, *GOAL 6 ENSURE AVAILABILITY AND SUSTAINABLE MANAGEMENT OF WATER AND SANITATION FOR ALL (METADATA ON SUGGESTED INDICATORS FOR GLOBAL MONITORING OF THE SUSTAINABLE DEVELOPMENT GOALS)* (2016), <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-6.pdf>. (Note: The Metadata Goal 6 version dated March 3, 2016 was relied upon for this analysis; subsequently, a March 31, 2016 version was made available. However, there appears to be no difference in the text, except that a list of references was added for Indicator 6.4.2; the two documents also have slightly different formatting and pagination).

Because the SDG Targets 6.1 and 6.2 intend to provide universal and equitable access to WASH services for all, they are conceptually consistent with the human rights principles of non-discrimination and equality. However, unless countries know that they will be evaluated based on how sub-groups within their populations progress, there will not be sufficient incentive to ensure that *all* groups are helped. The JMP is taking steps to disaggregate data pursuant to Target 17.18 but more work remains. Now is also a critical time to push for how data will be disaggregated, which may vary by region and country as different sub-populations exist. This will be essential for ensuring that inequalities are reduced.

Target 6.a and 6.b are intended to identify the means for implementation, but they are very limited. In particular, the indicator used to assess participation in Target 6.b is deficient from a human rights standpoint because it has a very narrow view of participation, focusing only whether there are policies and procedures in place. Moreover, there are no indicators to assess local accountability and transparency. At a global level, the Universal Periodic Review is probably the best human rights mechanism to help enforce compliance of the SDGS.

The SDG target indicators can also be discussed in terms of the three types of human rights monitoring:

Structural indicators monitor whether the legislative, policy and regulatory frameworks of a State or government (at all levels) provide an environment that encourages the realisation of human rights. Process indicators monitor the action taken to realise human rights; for example, the allocation of resources to services for disadvantaged individuals and groups. Outcome indicators monitor actual access to water and sanitation services; for example, whether households have access to a latrine or whether water is of adequate quality.<sup>7</sup>

Targets 6.1 and 6.2 will be measured by outcome indicators. Target 6.a will be measured by a process indicator, and Target 6.b will be measured by a structural indicator.

At the same time, monitoring for the SDGs is not the same as monitoring for human rights compliance, which cannot always be reduced to quantifiable measures. Even with the best efforts to disaggregate data, the experiences of certain marginalized individuals may not be adequately represented in the aggregate statistics. More detailed, qualitative studies, including shadow reports by NGOs, would be useful complements to even the best statistics.

---

<sup>7</sup> CATARINA DE ALBUQUERQUE, MONITORING COMPLIANCE WITH THE HUMAN RIGHTS TO WATER AND SANITATION 7 (2014), [http://www.ohchr.org/Documents/Issues/Water/Handbook/Book5\\_Monitoring.pdf](http://www.ohchr.org/Documents/Issues/Water/Handbook/Book5_Monitoring.pdf).

## II. Responses to Questions Posed

### 1. What elements of the HRTWS are represented in SDG 6 Goal and its targets?

#### Goal 6. Ensure availability and sustainable management of water and sanitation for all

##### *6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all*

*Summary:* The definition of Target 6.1 as defined by the JMP in its Methodological Note is largely consistent with the normative content of the human right to water. It is an “outcome indicator” that explicitly incorporates accessibility, availability and quality, but only indirectly incorporates acceptability. It will begin to address affordability through benchmarking, but this could be an important area for advocacy. Because Target 6.1 commits to “universal and equitable access . . . for all,” it is consistent in theory with the human rights notions of universality and non-discrimination. However, in practice, ensuring that the poor and marginalized are being reached requires that the data be disaggregated by sub-population, so this is another key dimension for advocacy. Finally, water access will be measured primarily in households and secondarily at schools and health centers; however, places of employment and public centers could also be important.

Here is how the JMP interprets Target 6.1:<sup>8</sup>

Target language	Normative definitions of target elements
6.1 – By 2030, achieve	
universal	Implies all exposures and settings including households, schools, health facilities, workplaces, etc.
and equitable	Implies progressive reduction and elimination of inequalities between population sub-groups
access	Implies sufficient water to meet domestic needs is reliably available close to home
to safe	Safe drinking water is free from pathogens and elevated levels of toxic chemicals at all times
and affordable	Payment for services does not present a barrier to access or prevent people meeting other basic human needs
drinking water	Water used for drinking, cooking, food preparation and personal hygiene

<sup>8</sup> WHO/UNICEF, *supra* note 6 at 5.

for all	Suitable for use by men, women, girls and boys of all ages including people living with disabilities
---------	--

The JMP will measure progress of this target through Indicator 6.1:

population using a basic drinking water source ('improved' sources of drinking water used for MDG monitoring i.e. piped water into dwelling, yard or plot; public taps or standpipes; boreholes or tubewells; protected dug wells; protected springs and rainwater) which is located on premises and available when needed and free of faecal (and priority chemical) contamination.<sup>9</sup>

The JMP's own rationale and interpretation is informative:

MDG target 7C called for 'sustainable access' to 'safe drinking water'. At the start of the MDG period, there was a complete lack of nationally representative data about drinking water safety in developing countries, and such data were not collected through household surveys or censuses. The JMP developed the indicator use of 'improved' water sources, which was used as a proxy for 'safe water', as such sources are likely to be protected against faecal contamination, and this metric has been used since 2000 to track progress towards the MDG target. International consultations since 2011 have established consensus on the need to build on and address the shortcomings of this indicator; specifically, to address normative criteria of the human right to water including accessibility, availability, and quality.

### *Normative Criteria*

The proposed indicator for SDG Target 6.1 is an "outcome indicator" that improves on the MDG definition by explicitly including the accessibility, availability and quality criteria of the HRTWS. The term "access" encompasses the concept of access and availability in the human rights to water and sanitation: "Implies sufficient water to meet domestic needs is reliably available close to home."<sup>10</sup> The term "safe" means that the water "is free from pathogens and elevated levels of toxic chemicals at all times."<sup>11</sup>

As noted above, the JMP specifically revised the MDG indicators to better encompass human rights criteria. While human rights do not specify exact quantities or distances or locations, the inclusion of "located on premises" captures the notion of adequate access because it implies that someone will not have to travel far in order to access water. Similarly, the inclusion of "available when needed" captures the concept of "availability," i.e. that there is access to sufficient quantities of water to meet household needs. It is not clear how this question will be asked and whether the answers will correspond to specific overall quantities. For example, the WHO has indicated that 50 liters per capita per day is sufficient to meet basic needs, but this would likely not be considered sufficient in a place like the United States where people are used

<sup>9</sup> IAEG-SDGs, *supra* note 6.

<sup>10</sup> WHO/UNICEF, *supra* note 6 at 5.

<sup>11</sup> *Id.* at 5.

to a higher level of access. Finally, as noted above, the MDGs also called for the expansion of access to “safe” water, but the accompanying indicator used a proxy (“improved”) that did not adequately capture the safety dimension.<sup>12</sup> The new indicator for Target 6.1 includes testing for faecal and some chemical contamination.

The JMP will continue to use a “ladder” approach to show different stages of service levels.<sup>13</sup> For household water, the proposed water service ladder for SDG monitoring has four levels: at the top is “safely managed water,” which meets the normative criteria of the human right to water; next is “basic water,” which is the old definition of “improved water” under the MDG monitoring (as noted in the excerpt above) with a total collection time of no more than 30 minutes for a roundtrip, including waiting time; the third level is “unimproved water,” which is either an “unimproved source” (i.e. unprotected dug well, unprotected spring, cart with small tank/drum, bottled water) or an “improved source” with a total collection time of over 30 minutes; and the last run of the ladder is surface water.<sup>14</sup> During the MDG monitoring period, the JMP used a slightly different water ladder approach that did not incorporate water quality nor wait times. The four categories were: piped water on premises, other improved water, unimproved sources and surface water.<sup>15</sup>

Although the SDGs targets and goals do not specify *where* water should be provided, the JMP has defined the term “universal” to include “all exposures and settings including households, schools, health facilities, workplaces, etc.”<sup>16</sup> In practice, however, the JMP is not actually going to survey all of these locations. The JMP will primarily measure household water access and it will secondarily measure availability at schools and health care facilities because these are locations where data is more readily available.<sup>17</sup> According to the information currently available online, it is not planning to measure water access at places of employment or in other public places.

SDG Target 6.1 also calls for “affordable” water access. Affordability is perhaps the most controversial aspect of the human right to water. Although many water justice advocates argue that water should be provided for free via public funding, human rights law only requires that water and sanitation be affordable. However, if people are unable to afford even a minimum

---

<sup>12</sup> U.N. GENERAL ASSEMBLY, INTEGRATING NON-DISCRIMINATION AND EQUALITY INTO THE POST-2015 DEVELOPMENT AGENDA FOR WATER, SANITATION AND HYGIENE, A/67/270 (AUGUST 8, 2012) para 19.

<sup>13</sup> WHO/UNICEF, *supra* note 6 at 6. The JMP has also used a ladder approach to report disparities in service levels, such as between rural, urban and total populations at the subnational, country, regional and global levels. UNICEF/WHO, PROGRESS ON SANITATION AND DRINKING WATER: 2015 UPDATE AND MDG ASSESSMENT 42 (2015), [http://www.wssinfo.org/fileadmin/user\\_upload/resources/JMP-Update-report-2015\\_English.pdf](http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-Update-report-2015_English.pdf). UN Water also describes a ladder approach to monitoring to allow for more flexible methodologies that allow countries to monitor at levels corresponding to their national capacity and resources. UN WATER, *supra* note 3 at 7.

<sup>14</sup> WHO/UNICEF, *supra* note 6 at 6.

<sup>15</sup> *Id.* at 42.

<sup>16</sup> *Id.* at 5.

<sup>17</sup> *Id.* at 6.

payment, then the state must make these services available for free<sup>18</sup> and it cannot disconnect individuals for failure to pay.<sup>19</sup>

Numerous policy mechanisms exist to ensure affordability, such as providing a basic amount for free (i.e. “lifeline” tariffs), adopting inclining block rates, and tying water rates to a percentage of household income, etc.<sup>20</sup> However, the exact policy approach is a context-specific decision, as noted in a 2015 report on affordability by the current Special Rapporteur on the human right to safe drinking water and sanitation, Leo Heller:

It is impossible to set a generally applicable affordability standard at the global level. Any such standard would be arbitrary and cannot reflect the challenges people face in practice and the context in which they live, including how much they need to spend on housing, food and the realization of other human rights. The affordability of water and sanitation services is highly contextual, and States should therefore determine affordability standards at the national and/or local level. The human rights framework stipulates important parameters for the process of doing so, in particular in terms of participation.<sup>21</sup>

In Target 6.1, the JMP defines “affordable” as “payment for services [that do] not present a barrier to access or prevent people meeting other basic human needs.”<sup>22</sup> This is consistent with human rights because fulfilling the right to water should not compromise the meeting of other basic needs, like the right to food.<sup>23</sup> However, the proposed Indicator 6.1.1 does not specifically measure affordability. Instead, this information is supposed to be provided as part of the disaggregated data. The IAEG-SDG report notes that disaggregation will occur by “Place of residence (urban/rural) and socioeconomic status (wealth, affordability) if possible for all countries.”<sup>24</sup> In its Methodological Note, the JMP expands on its plans, noting that it will “use available data on household expenditure, tariffs, income and poverty to start benchmarking affordability across countries and reporting national, regional and global trends.”<sup>25</sup>

---

<sup>18</sup> Special Rapporteur on the human right to safe drinking water and sanitation, *Report of the Special Rapporteur on the human right to safe drinking water and sanitation (hereinafter Affordability report)*, UN DOC AHRC3039, para 7 (2015).

<sup>19</sup> *Id.* at para 33. (“Disconnection of services due to an inability to pay for the service is a retrogressive measure and constitutes a violation of the human rights to water and sanitation (Committee on Economic, Social and Cultural Rights, General Comment No. 15 (2002) (E/C.12/2002/11), para. 44a).”).

<sup>20</sup> See generally EPA, DRINKING WATER AND WASTEWATER UTILITY CUSTOMER ASSISTANCE PROGRAMS (2016), [https://www.epa.gov/sites/production/files/2016-04/documents/dw-ww\\_utilities\\_cap\\_combined\\_508.pdf](https://www.epa.gov/sites/production/files/2016-04/documents/dw-ww_utilities_cap_combined_508.pdf); WATER RESEARCH FOUNDATION & EPA, BEST PRACTICES IN CUSTOMER PAYMENT ASSISTANCE PROGRAMS (2010), <http://www.waterrf.org/publicreportlibrary/4004.pdf>; NATIONAL CONSUMER LAW CENTER, REVIEW AND RECOMMENDATIONS FOR IMPLEMENTING WATER AND WASTEWATER AFFORDABILITY PROGRAMS IN THE UNITED STATES (2014); Sharmila Murthy, *A New Constitutive Commitment to Water*, BOSTON COLL. J LAW SOC. JUSTICE (forthcoming) (2016).

<sup>21</sup> Special Rapporteur on the human right to safe drinking water and sanitation, *supra* note 18 at para 28.

<sup>22</sup> WHO/UNICEF, *supra* note 6 at 5.

<sup>23</sup> Special Rapporteur on the human right to safe drinking water and sanitation, *supra* note 18 at 8, 25.

<sup>24</sup> IAEG-SDGs, *supra* note 6 at 3.

<sup>25</sup> WHO/UNICEF, *supra* note 6 at 3, 6.

The collection of this disaggregated data is crucial for understanding whether water is truly being provided in an affordable manner. Data reported should be collected at the most granular level possible and reported by income quintile. Household water expenditures reported only by median household income could mask inequalities within a population. In addition, human rights advocates should also push for the collection of data relating to water disconnections. With austerity measures being implemented around the world, more municipalities may disconnect household water services as a way to incentivize payment. However, where a household is unable to pay for the water services, the disconnection represents a retrogressive measure that violates the HRTWS.<sup>26</sup> This is a critical aspect of affordability that may be overlooked.

Of the normative content of the HRTWS, the only aspect that is not explicitly addressed by the JMP is acceptability. However, to a certain degree, the acceptability of the water could be inferred by whether the other criteria are met. If the water has a bad odor or taste, for example, then that could influence how respondents answer survey questions about the availability and accessibility of water. To the extent that contamination causes the water to be undrinkable or to have a bad odor, that aspect would be captured by the microbiological testing and quality component.

#### *Non-Discrimination and Equality*

The commitment in Target 6.1 to achieving “universal and equitable access . . . for all” is consistent in theory with the human rights principles of non-discrimination and equality. In its Methodological Note, the JMP expressly states that it will focus on water services that are suitable for use by men, women, girls and boys of all ages including people living with disabilities. It defines “equitable” as the “elimination of inequalities between population sub-groups.” In this respect, equitable is being defined to embrace the concept of non-discrimination, which is a key tenet found in all human rights treaties.<sup>27</sup>

Technically, equity is not legally binding human rights concept. As the former Special Rapporteur explained, “Equity is the moral imperative to dismantle unjust differences based on principles of fairness and justice,” which requires focusing on the disadvantaged and poor.<sup>28</sup> In contrast, a closely related term, “equality,” is a legal concept that means that people must be treated equal under the law. Where needed, it requires the adoption of measures to overcome barriers and to ensure that certain individuals or groups are not denied access to their rights.

---

<sup>26</sup> Special Rapporteur on the human right to safe drinking water and sanitation, *supra* note 18 at para 33.

<sup>27</sup> Article 1 of CEDAW: For the purposes of the present Convention, the term "discrimination against women" shall mean any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field; Article 2 of the UDHR: Everyone is entitled to all rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status [...]; Article 2 of CRDP (definitions): "Discrimination on the basis of disability" means any distinction, exclusion or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field. It includes all forms of discrimination, including denial of reasonable accommodation;

<sup>28</sup> U.N. GENERAL ASSEMBLY, *supra* note 12 at para 29.

However, equality under the law does not mean equal access to technical solutions or identical treatment. “While universality is about ensuring access for all — even the hardest to reach — equality is about “levelling up” or progressively working to improve the quality and levels of service for groups that lag behind.”<sup>29</sup>

The only way to ensure that inequalities between sub-groups decrease is by disaggregating data collected through monitoring so that disparate impacts over time can be ascertained.<sup>30</sup> The key for the SDGs is to ensure that the monitoring adequately informs us about how various sub-populations within a country are doing. A focus on simply the average number of people impacted can obscure great disparities within a population.

The JMP plans to collect data for the entire population but then disaggregate it, which is critical for understanding whether the human rights to water and sanitation are being achieved.<sup>31</sup> The current categories for disaggregation are currently urban/rural; wealth; and affordability; the others are to be determined. The JMP has pointed out that it is not possible to accurately measure inequalities within a given household according to sex, age, or disability; however, it can estimate gender equality based on time spent for water collection.<sup>32</sup> Although Target 6.1 relating to water access does not mention women and girls, the JMP interprets the phrase “paying special attention to the needs of women and girls” in Target 6.2 to encompass reducing the burden of collecting water.<sup>33</sup>

Target 17.18 of the SDGs commits “to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.” The JMP has taken note of this mandate and plans to “continue to develop its reporting of inequalities and their progressive reduction.”<sup>34</sup>

***6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations***

*Summary:* The “outcome indicator” that JMP will use to measure SDG Target 6.2 is essentially consistent with the accessibility, availability and quality aspects of the HRTWS. As with Target 6.1, acceptability is not explicitly measured but could be addressed indirectly through the other criteria. Although the target does not call for “affordable” access to sanitation and hygiene, cost (of building toilets, of buying menstrual pads, etc.), the JMP recognizes that affordability is an

---

<sup>29</sup> *Id.* at para 29.

<sup>30</sup> *Id.* at para 29.

<sup>31</sup> WHO/UNICEF, *supra* note 6 at 3.

<sup>32</sup> IAEG-SDGs, *supra* note 6 at 3.

<sup>33</sup> *See, e.g.*, WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, JMP REPORT: PROGRESS ON DRINKING WATER AND SANITATION: 2012 UPDATE 31 (2012), [http://www.wssinfo.org/fileadmin/user\\_upload/resources/JMP-report-2012-en.pdf](http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-report-2012-en.pdf) (last visited Mar 23, 2012). (noting that in 2010, women and girls were responsible for collecting water 71% of the time when they lived in households without running water in Sub-Saharan Africa.)

<sup>34</sup> WHO/UNICEF, *supra* note 6 at 3.

important consideration. It is not clear, however, whether its attempts to benchmark affordability will include sanitation and hygiene. Although Target 6.2 does not explicitly use the word “universal,” it commits to expanding access “for all,” consistent with human rights and also highlights the need to focus on vulnerable populations.

Target language	Normative definition of target elements
6.2 – By 2030, achieve	
to adequate	Implies a system which hygienically separates excreta from human contact as well as safe
access (for all)	Implies facilities close to home that can be easily reached and used when needed reuse/treatment of excreta in situ, or transport to a treatment plant
and equitable	Implies progressive reduction and elimination of inequalities between population sub-groups
sanitation	Sanitation is the provision of facilities and services for safe management and disposal of human urine and faeces
and hygiene	Hygiene is the conditions and practices that help maintain health and prevent spread of disease including hand washing, menstrual hygiene management and food hygiene
for all	Suitable for use by men, women, girls and boys of all ages including people living with disabilities
end open defecation	Excreta of adults or children are: deposited (directly or after being covered by a layer of earth) in the bush, a field, a beach, or other open area; discharged directly into a drainage channel, river, sea, or other water body; or are wrapped in temporary material and discarded
paying special attention to the needs of women and girls	Implies reducing the burden of water collection and enabling women and girls to manage sanitation and hygiene needs with dignity. Special attention should be given to the needs

	of women and girls in ‘high use’ settings such as schools and workplaces, and ‘high risk’ settings such as health care facilities and detention centres.
and those in vulnerable situations	Implies attention to specific WASH needs found in ‘special cases’ including refugee camps, detention centres, mass gatherings and pilgrimages

Indicator 6.2.1 used to measure Target 6.2 is: “Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water.” The sanitation component will be defined as:

Population using a basic sanitation facility at the household level (‘improved’ sanitation facilities used for MDG monitoring i.e. flush or pour flush toilets to sewer systems, septic tanks or pit latrines, ventilated improved pit latrines, pit latrines with a slab, and composting toilets, the same categories as improved sources of drinking water used for MDG monitoring) which is not shared with other households and where excreta is safely disposed in situ or treated off-site. This is therefore a multipurpose indicator also serving the household element of the wastewater treatment indicator (6.3.1).

The JMP explained how the current indicator has enhanced the prior “improved” sanitation metric used to monitor the MDG goals:

International consultations since 2011 have established consensus on the need to build on and address the shortcomings of this indicator; specifically, to address normative criteria of the human right to water including accessibility, acceptability, and safety. Furthermore, the safe management of faecal wastes should be considered, as discharges of untreated wastewater into the environment create public health hazards.<sup>35</sup>

### *Normative Content – Sanitation*

The JMP explicitly sought to incorporate the accessibility, acceptability and safety elements of the HRTWS. In the JMP’s interpretation of Target 6.2, “access” incorporates the human rights concept of physical accessibility because it is defined as “easily reached.” The criterion of availability is implied by “used when needed.” In practice, these will be measured by asking people about use of facilities that are not shared with other households, which implies that they are located close to the residence.<sup>36</sup> The JMP interprets “adequate” in a way that is consistent

<sup>35</sup> IAEG-SDGs, *supra* note 6 at 5.

<sup>36</sup> The former Special Rapporteur made the following observations about the MDG indicator for sanitation: “For sanitation, availability is implicitly addressed in the indicator framework since shared facilities are not considered improved. However, from a human rights perspective, facilities such as those shared with neighbours (i.e., only a

with the quality/safety element of the human rights to water & sanitation because it is requiring that the excreta be hygienically separated from human contact. The indicator reflects this interpretation because as part of its surveys, it will assess whether “excreta is safely disposed in situ or treated off-site.”

The “acceptability” element of the right to sanitation can be interpreted out of the “for all” language in SDG Target 6.1 because it is intended to be “[s]uitable for use by men, women, girls and boys of all ages including people living with disabilities.” While this definition may seek to be all-inclusive, an open question is whether it adequately includes transgendered persons who do not identify with their birth gender or as only one gender.

Similar to its reporting for water, the JMP plans to continue using a ladder approach for reporting access to sanitation. At the top of the ladder is “safely managed sanitation,” which incorporates key aspects of the normative criteria of the human right to sanitation; the next level is “basic sanitation,” which is the old definition of “improved” under the MDG monitoring (as noted in the excerpt above); the third level is “shared sanitation,” which is a shared “improved” facility; the fourth level is an “unimproved facility” (i.e. flush/pour flush not going to sewer/septic/pit, pit latrines without a slab, hanging and bucket latrine); and the last rung of the ladder is open defecation.<sup>37</sup> During the MDG monitoring period, the JMP used a sanitation ladder that consisted of the four lower categories;<sup>38</sup> the top category of “safely managed sanitation” will be new to the SDG monitoring period.

The “affordability” element of the right to sanitation (otherwise known as “economic accessibility”) is not mentioned, even though this is a critical issue. Even where subsidies exist to help construct toilets, the long-term maintenance costs can be a barrier to usage. The homeowner either needs to pay the fees associated with a networked sewer system or assume the costs of building and maintaining a pit latrine, septic tank or other on-site option.<sup>39</sup> For example, once a pit latrine becomes full, either the pit needs to be emptied or the latrine needs to be moved to a new site, all of which costs money.<sup>40</sup> Additional water may be needed for flushing, which can further increase costs. Similarly, shared facilities, such as public toilets, may have fees associated with them, which may dissuade individuals from using them. Collecting and disaggregating data on the costs of sanitation access is critical to ensuring that the right to sanitation is realized.

Data collection efforts for sanitation are focused at the household level. As with water, the JMP is unable to disaggregate data to assess intra-household inequalities such as sex, age or disability. The JMP is exploring other ways to access this information, such as through “[n]ovel data sources, like rapid assessment methods, or crowd-sourced data.”<sup>41</sup>

---

small number of people), which are accessible, safe, hygienic and well kept, may be acceptable.” U.N. General Assembly, *Report of the Independent Expert on the Issue of Human Rights Obligations Related to Access to Safe Drinking Water and Sanitation, Catarina de Albuquerque, Sixty-fifth session, A/65/254*, , para 24 (2010). (para 24)

<sup>37</sup> WHO/UNICEF, *supra* note 6 at 11.

<sup>38</sup> UNICEF/WHO, *supra* note 13 at 42.

<sup>39</sup> Special Rapporteur on the human right to safe drinking water and sanitation, *supra* note 18 at para 16.

<sup>40</sup> *Id.* at para 16.

<sup>41</sup> IAEG-SDGs, *supra* note 6 at 6.

## *Normative Content – Hygiene*

The ICESCR explicitly includes the “improvement of all aspects of environmental and industrial hygiene” as part of the right to health in Article 12(2)(b). General Comment 15 not only discusses the importance of water for environmental hygiene as part of the right to health,<sup>42</sup> but it also indicates that sufficient water needs to be available to meet a variety of basic needs including for “personal and household hygiene”<sup>43</sup> which is defined as “personal cleanliness and hygiene of the household environment.”<sup>44</sup> The human right to water entitles everyone access to sufficient water for meeting their personal needs, which includes sufficient water for hygiene. Menstrual hygiene management, in particular, is increasingly recognized as interrelated with the realization of many human rights. As Winkler and Roaf elaborate in a recent article, menstrual hygiene management is essential for realizing human dignity and the right to privacy; gender equality; the right to education; the right to work and just and favorable work conditions; the right to health; and the rights to water and sanitation<sup>45</sup> (even though General Comment 15 does not explicitly discuss menstrual hygiene).

The MDGs had been criticized for not explicitly including a reference to hygiene, despite the fact that clear links exist between good health and hygiene. Thus, its inclusion in the SDGs is significant. Building on the recommendations of a post-2015 working group, JMP interprets the term hygiene in Target 6.2 as “the conditions and practices that help maintain health and prevent spread of disease including hand washing, menstrual hygiene management and food hygiene.”<sup>46</sup> However, because data on handwashing is more readily available than is data on menstrual hygiene management or food hygiene, the JMP plans to use handwashing with soap at home as the core indicator for tracking target 6.2.<sup>47</sup> It will be included as part of the definition of “safely managed sanitation services.”

With respect to sanitation and hygiene, the JMP notes that “[s]pecial attention should be given to the needs of women and girls in ‘high use’ settings such as schools and workplaces, and ‘high risk’ settings such as health care facilities and detention centres.”<sup>48</sup> As such, hand-washing and menstrual hygiene management will be monitored through supporting indicators in two locations: schools and health-care facilities. It is still developing methods for measuring food hygiene at home.

Currently, the indicators for hygiene are simple yes/no binaries: is handwashing (or menstrual hygiene management) available at home, at school or at a health care facility? A ladder approach might provide more important information about whether access to these services meets the criteria of a right to hygiene that is implicit within the human rights to water and sanitation. For example, are water and soap always available? What types of materials are used

---

<sup>42</sup> Economic and Social Council, Committee on Economic, Social and Cultural Rights, *supra* note 5 at para 6, 8.

<sup>43</sup> *Id.* at para 12a.

<sup>44</sup> *Id.* at n.13.

<sup>45</sup> Inga Winkler & Virginia Roaf, *Taking the Bloody Linen out of the Closet – Menstrual Hygiene as a Priority for Achieving Gender Equality*, 21 CARDOZO J LAW GEN. 1, 13–21 (2015).

<sup>46</sup> WHO/UNICEF, *supra* note 6 at 9.

<sup>47</sup> *Id.* at 10.

<sup>48</sup> *Id.* at 9.

for menstrual hygiene management, and are these always available? Are they safe and of acceptable quality; for example, if menstruation products are reused, are they clean? Are soap, cleaning products and menstruation products affordable? These are important dimensions that are not yet captured by the current indicators. In addition, monitoring for intra-household disparities is also critical from a human rights perspective.

### *Non-Discrimination and Equality*

Although Target 6.2 does not explicitly use the term “universal,” it commits to providing “equitable” sanitation and hygiene “for all.” The mandate under Target 17.18 is to disaggregate by “income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.” However, just as with water, the JMP plans to disaggregate data by urban/rural, wealth, affordability and other categories that are not yet determined.

Target 6.2 also expressly requires that “special attention” be given “to the needs of women and girls and those in vulnerable situations.” This is particularly important from a human rights perspective to ensure that the marginalized sections of society are considered. Moreover, as discussed previously, the reference to “women and girls” strengthens the inclusion of menstrual hygiene and the link to the right to education.

### ***6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally***

While many efforts to expand sanitation have focused on the provision of toilets, there is increasing recognition that the entire waste stream needs to be considered. Indeed, the right to sanitation must mean more than simply the provision of a toilet; the waste must be safely disposed of and treated.<sup>49</sup> However, Target 6.3 only commits to halving the proportion of untreated wastewater, which necessarily means that the human right to water may not be fully achieved.

Indicator 6.3.1 is the percentage of wastewater safely treated, which will be “calculated by combining the percentage of household (sewage and faecal sludge) wastewater and the percentage of wastewater from hazardous industries treated.”<sup>50</sup> This indicator incorporates content collected from Target 6.2.

Indicator 6.3.2 will measure the “percentage of receiving water bodies with good ambient water quality.”<sup>51</sup> By seeking to improve water quality, Target 6.3 could also enhance the availability of freshwater for drinking and household purposes. Doing so may also address the affordability component of the human right water by reducing the need for costly technical treatments. Similarly, water can also be conveyed to water-scarce areas or even “created” through

---

<sup>49</sup> DE ALBUQUERQUE, *supra* note 7 at 18.

<sup>50</sup> IAEG-SDGs, *supra* note 6 at 8.

<sup>51</sup> *Id.* at 10.

desalination techniques, but doing so usually requires significant energy costs, which increases the financial and environmental price.

***6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity***

To the extent that Target 6.4 seeks to ensure a supply of freshwater and reduce the number of people suffering from water scarcity, it will enhance the realization of the HRTWS. However, the way that this target is framed and will be measured poses concerns about equitable access to water resources, which in turn could compromise livelihoods and the realization of other human rights, such as the right to food.

Indicator 6.4.1 is the “change in water use efficiency over time,”<sup>52</sup> which will be measured by through the FAO AQUASTAT as part of GEMI. Water efficiency in irrigated agriculture, for example, will be calculated by measuring the gross value added by irrigated agriculture and dividing that by the difference between the amount withdrawn by the sector and returned to the hydrologic system. This focus on “efficiency” alone could obscure important social and environmental factors, such as the kind of crops selected (cash crops for export versus for local consumption), the inputs (like pesticides and fertilizers) used, the type of farming practices implemented (intensive versus more traditional), and the impact on the local ecosystem. For example, a water-intensive cash crop may appear to be environmentally sustainable simply because it fetches a high price on the global markets. The target indicator also ignores the distributional consequences of water use, such as the impact of water management decisions on small and subsistence farmers, and on local communities who might depend on that same water supply for their basic needs.

Similar concerns also exist for the indicators for industrial water efficiency, energy (power) water efficiency, and municipal water efficiency. For example, industrial efficiency would be measured by the gross value added by industry per the unit of net water used. The environmental and social consequences of a bottling company’s activities would not be captured if their profits were high. Not only would this show greater water efficiency because of the way the indicator is measured, but it would not capture the impacts on the local communities that are also dependent on the aquifer.

Municipal water efficiency, which is directly relevant to the HRTWS, will be calculated as the “ratio between water effectively distributed to the municipal users and the water withdrawn for municipal use by water supply utilities (i.e. distribution efficiency, size of network losses).”<sup>53</sup> Distribution efficiency is only explicitly considered here, but FAO clarifies that it could be made explicit for other sectors. This may be an avenue worth exploring to the extent that more nuanced data as to *where* the distribution occurs can be captured. That would enable a more detailed understanding of the key actors in society that have access to water, and highlight who does not.

---

<sup>52</sup> *Id.* at 20.

<sup>53</sup> *Id.* at 21.

It is critical that Target 6.4's focus on efficiency be interpreted together with the other targets enumerated in Goal 6 that prioritize social and environmental impacts. The FAO recognizes this in that it says that this Indicator alone does not give an exhaustive picture and that it should be complemented by other targets (Targets 1.1, 1.2, 2.1, 2.2, 5.4, 5.a, 6.1, 6.2, 6.3, 6.5), and combined with the water stress indicator 6.4.2.<sup>54</sup>

Indicator 6.4.2 is the “Level of water stress: freshwater withdrawal in percentage of available freshwater resources.”<sup>55</sup> This is an important indicator because it will assess the pressure on a country's resources – and to a certain degree, could provide an important counterbalance to some of the concerns raised in the discussion of Indicator 6.4.1 (i.e. the unsustainability of a water usage is masked because it has a profitable output). To determine the percentage of water stress, the total freshwater withdrawn will be divided by the difference between the total renewable freshwater resources and the environmental water requirements. Although the FAO has expressed some methodological concerns,<sup>56</sup> it is an important step in the right direction. While the data will be reported at an aggregate national level data, disaggregation may be important in order to assess variations across a country and across different sectors.

### ***6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate***

Target 6.5 will be measured in part by Indicator 6.5.1, which is the “degree of integrated water resources management (IWRM) implementation.”<sup>57</sup> For the past several decades, IWRM has been the dominant paradigm of global water management.<sup>58</sup> As defined by the Global Water Partnership, IWRM is “process which promotes the coordinated development and management of water, land and related resources in order to maximise economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.”<sup>59</sup> IWRM is intended to address tensions across an otherwise fragmented water sector by promoting an integrated and bottom-up approach.<sup>60</sup> However, IWRM has been critiqued for being an unrealistic “nirvana” concept because it has been seen as a way to “solve the water problems everywhere in the world, in spite of the different physical, economic, social and environmental conditions of a very heterogeneous world, and irrespective of the rapidly increasing complexities

---

<sup>54</sup> *Id.* at 22.

<sup>55</sup> *Id.* at 25.

<sup>56</sup> *Id.* at 27.

<sup>57</sup> *Id.* at 30.

<sup>58</sup> UN WATER, A COMPILATION OF ASPECTS ON THE MEANS OF IMPLEMENTATION: WATER AND SANITATION: A LOOK AT GOAL 6 AND GOAL 17 14 (2015).

<sup>59</sup> Global Water Partnership, What is IWRM? <http://www.gwp.org/the-challenge/what-is-iwrn/>

<sup>60</sup> François Molle, *Nirvana concepts, narratives and policy models : insights from the water sector*, 1 WATER ALTERN. 131–156, 132 (2008). (“IWRM evolved from the correct perception that water management has been unintegrated, or fragmented: economic sectors and ministries have managed water independently while interventions in, and development of, water resources in upper catchments have taken place without adequate consideration of impacts on downstream areas; water quality issues have been often either disregarded or disconnected from quantity issues; groundwater has frequently been exploited without concern for its hydrological linkages with surface water (and vice versa), and land-water interactions have been overlooked; and last, ecosystems have been impaired and social equity often disregarded.”).

of water management practices and processes.”<sup>61</sup> The vagueness and flexibility of IWRM are both its selling point and inherent weakness.<sup>62</sup> In theory, IWRM’s focus on decentralization, capacity building and women’s empowerment is aligned with a human-rights based approach to development. However, in practice, IWRM has been criticized for failing to address power dynamics and prioritize needs of poor people.<sup>63</sup>

The inclusion of IWRM in the SDGs assures its continued dominance in global water management. If the concept is in fact implemented in a way that promotes local capacity building and women’s empowerment, then it has the potential to contribute to a human-rights based approach to water management. Where individuals in local communities seek an active role in the management of water resources that directly impact access to water for household uses, the achievement of Target 6.5 will enhance the realization of the HRTWS. At the same time, if IWRM is deployed in a way that prioritizes “high value” uses, as seen in some case studies, it is possible that a community’s access to water source could be compromised by a more profitable activity, such as a bottling operation. While this might not be the intended goal of IWRM promoters, such a consequence needs to be considered in advance.

Although the “right to water” may be used in varying circumstances, the right as recognized by the United Nations focuses on water for drinking and other personal needs (food preparation, hygiene and sanitation). For example, to the extent that a human right to water for agriculture exists, it would fall under the right to food.<sup>64</sup> Indeed, General Comment 15 refers to Comment 12 on the Right to Food when noting “the importance of ensuring sustainable access to water resources for agriculture.”<sup>65</sup> It emphasizes the need of disadvantaged and marginalized farmers to have “equitable access to water and water management systems” and that States “should ensure that there is adequate access to water for subsistence farming and for securing the livelihoods of indigenous peoples.”<sup>66</sup>

However, more broadly, the recognition of the human right to water has spurred interest in how a human rights based approach could influence water management allocation decisions.<sup>67</sup> This is

---

<sup>61</sup> Asit K. Biswas, *Integrated Water Resources Management: Is It Working?*, 24 INT. J. WATER RESOUR. DEV. 5–22, 6–7 (2008).

<sup>62</sup> Biswas, *supra* note 61; KEN CONCA, GOVERNING WATER: CONTENTIOUS TRANSNATIONAL POLITICS AND GLOBAL INSTITUTION BUILDING (2006).

<sup>63</sup> Lyla Mehta et al., *The politics of IWRM in Southern Africa*, 30 INT. J. WATER RESOUR. DEV. 528–542, 530, 537 (2014). (noting that “the emphasis on increasing women’s participation in IWRM processes reveals an oversimplistic notion of the power relations underlying structures of gender, race, class, etc.”); D. J. Merrey et al., *Integrating “livelihoods” into integrated water resources management: taking the integration paradigm to its logical next step for developing countries*, 5 REG. ENVIRON. CHANGE 197–204 (2005). ((arguing that IWRM prioritizes cost recovery, reallocation of water to “higher value” uses and environmental conservation over the livelihoods of poor people).

<sup>64</sup> U.N. Office of the High Commissioner for Human Rights, THE RIGHT TO WATER: FACT SHEET NO. 35 12 (2010), <http://www.ohchr.org/Documents/Publications/FactSheet35en.pdf>.

<sup>65</sup> Economic and Social Council, Committee on Economic, Social and Cultural Rights, *supra* note 5 at 7.

<sup>66</sup> *Id.* at 7.; See also International Network for Economic, Social & Cultural Rights, THE RIGHT TO WATER ESCR-NET (2006), [http://www.escr-net.org/resources/resources\\_show.htm?doc\\_id=405623](http://www.escr-net.org/resources/resources_show.htm?doc_id=405623). (“This right implies that priority must be given to subsistence uses of water (drinking, hygiene, food preparation, and subsistence agriculture) over commercial and industrial use, especially in times of drought or scarcity.”).

<sup>67</sup> UNITED NATIONS DEVELOPMENT PROGRAM & KENYA & UNDP WATER GOVERNANCE FACILITY, IMPROVING WATER GOVERNANCE IN KENYA THROUGH THE HUMAN RIGHTS-BASED APPROACH: A MAPPING AND BASELINE

an important development considering that globally, agriculture is the largest consumer of water (70%), followed by industry (16%) and then domestic use (14%).<sup>68</sup> In some rural areas, a local community's access to a water source—often for agriculture—may compete with large-scale agriculture, mining, bottling activities or other industry. If power dynamics are not adequately considered, “higher value” water activities might be prioritized over the community's access to water. Because IWRM is such a broad and flexible concept, it is critical that IWRM is implemented in a way that aligns with a human rights-based approach to water management.

Target 6.5 will also be measured in part by proposed Indicator 6.5.2, which is the “Percentage of transboundary basin area with an operational arrangement for water cooperation.” For communities who depend on a transboundary water supply for their basic needs, effective cross-border cooperation could enhance the realization of the human rights to water and sanitation. Although the extent to which human rights obligations are extraterritorial is a controversial area, General Comment 15 posits that “[d]epending on the availability of resources, States should facilitate realization of the right to water in other countries,”<sup>69</sup> and that “[a]ny activities undertaken within the State party's jurisdiction should not deprive another country of the ability to realize the right to water for persons in its jurisdiction.”<sup>70</sup> This has been interpreted to mean that cross-boundary water depletion and pollution should be prevented.<sup>71</sup> The General Comment cites to the UN Convention on the Law of Non-Navigational Uses of Watercourses, which is widely regarded as codifying the fundamental rules of customary international water law. In the absence of agreement or custom to the contrary, disputes as to watercourse use should be resolved with “special regard being given to the requirement of vital human needs”<sup>72</sup> – a declaration that appears consistent with the human right to water.

The discussions leading up to the Rio+20 UN Conference on Sustainable Development in 2012 highlight the contentiousness of extending the human right to water to transboundary issues. The Rio+20 draft outcome document stated that “[w]e recognize our commitments regarding the human right to safe drinking water and sanitation. . . , affirming the need to focus on local and national perspectives in considering the issue and leaving aside questions of all transboundary water issues.”<sup>73</sup> It was criticized by NGOs like Amnesty International for its specific exclusion of transboundary issues.<sup>74</sup> Notably, the final document did not specifically exclude transboundary issues.<sup>75</sup>

---

REPORT (2007),

[http://www.waterrg.org/documents/Resources/Reports/BASELINE\\_REPORT\\_HRBA\\_Kenya.pdf](http://www.waterrg.org/documents/Resources/Reports/BASELINE_REPORT_HRBA_Kenya.pdf).

<sup>68</sup> 2030 WATER RESOURCE GROUP, CHARTING OUR WATER FUTURE: ECONOMIC FRAMEWORKS TO INFORM DECISION-MAKING 12 (2009),

[http://www.mckinsey.com/App\\_Media/Reports/Water/Charting\\_Our\\_Water\\_Future\\_Exec%20Summary\\_001.pdf](http://www.mckinsey.com/App_Media/Reports/Water/Charting_Our_Water_Future_Exec%20Summary_001.pdf).

<sup>69</sup> Economic and Social Council, Committee on Economic, Social and Cultural Rights, *supra* note 5 at ¶ 34.

<sup>70</sup> *Id.* at ¶ 31.

<sup>71</sup> Malcolm Langford, *The United Nations Concept of Water as a Human Right: A New Paradigm for Old Problems?*, 21 INT. J. WATER RESOUR. DEV. 273–282, 280 (2005).

<sup>72</sup> SALMAN M.A. SALMAN & SIOBHAN MCINERNEY-LANKFORD, THE HUMAN RIGHT TO WATER: LEGAL AND POLICY DIMENSIONS 12 (2004).

<sup>73</sup> Draft of UN Rio+20 main text - 16 June 2012, 5:45 pm, SCRIBD 20, <http://www.scribd.com/doc/97339996/Draft-of-UN-Rio-20-main-text-16-June-2012-5-45-pm> (last visited Jan 21, 2013).

<sup>74</sup> AMNESTY INTERNATIONAL, UNITED NATIONS: RIO+20 MUST AFFIRM RIGHTS TO WATER AND SANITATION ARE LEGALLY BINDING - WITHOUT ARBITRARY TERRITORIAL EXCLUSIONS 1 (2012),

**6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes**

To the extent that Target 6.6 enhances the availability of freshwater and creates more “green infrastructure” that helps to dissipate the negative impacts of untreated sewage, it supports the realization of the HRTWS.

**6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies**

The proposed indicator for Target 6.a is the “amount of water and sanitation related ODA that is part of a government coordinated spending plan.”<sup>76</sup> Although Target 6.a is intended to capture support for “water- and sanitation-related activities and programmes,” the list of specific items suggests that the target was intended to focus more on water resource management and technology—and not necessarily WASH activities. However, the proposed indicator focuses on WASH activities because it relies in data collected by GLAAS and the specific initiative “Tracking financing to sanitation, hygiene and drinking-water” (TrackFin). In this respect, the indicator could provide more information about support for the realization of the HRTWS than the target might otherwise suggest. It is also in line with countries’ obligations under Article 2 of the ICESCR, which requires each state “to take steps, individually and through international assistance and cooperation, especially economic and technical, to the maximum of its available resources” to progressively realize the rights recognized under the Covenant.

From a human rights perspective, the key question is whether the additional investment in ODA will enhance access to water, sanitation and hygiene for all persons in a non-discriminatory manner, including the most vulnerable and disadvantaged members of the population. Although the human rights framework does not require a country to manage its economy in a particular manner, it is relevant to questions relating to public expenditure.<sup>77</sup> The ICESCR imposes obligations on states to protect, respect and fulfill human rights. This means that if a state engages a non-state actor to provide water and/or sanitation services, it still retains the

---

<http://www.amnesty.org/en/library/asset/IOR40/014/2012/en/4accf929-b4e3-4a8d-9902-fe08b669e7c0/ior400142012en.pdf>.

<sup>75</sup> Human Rights Watch, RIO + 20: OUTCOME DOCUMENT UNDERMINED BY RIGHTS OPPONENTS, <http://www.hrw.org/news/2012/06/22/rio-20-outcome-document-undermined-rights-opponents>. (“It is unfortunate that some governments attempted arbitrarily to exclude transboundary water issues from the scope of the right to water,” said Savio Carvalho, Demand Dignity program director of Amnesty International. “That these attempts were unsuccessful is a win for human rights.”).

<sup>76</sup> IAEG-SDGs, *supra* note 6 at 39.

<sup>77</sup> Catarina de Albuquerque, *Financing, budgeting and budget tracking for the realisation of the human rights to water and sanitation*, in REALISING THE HUMAN RIGHTS TO WATER AND SANITATION: A HANDBOOK BY THE UN SPECIAL RAPPORTEUR CATARINA DE ALBUQUERQUE, 17 (2014), <http://www.righttowater.info/wp-content/uploads/BOOK-3-FINANCE-22FEB.pdf>. (“While human rights do not dictate macroeconomic policies, the human rights framework provides certain parameters regarding the prioritisation of public expenditure within the overall economy, including how taxes will be raised, the role of the private sector in the provision of public goods and services and other policy choices.”).

responsibility to ensure that the human right to safe drinking water and sanitation are being realized. Without appropriate oversight and regulation, private corporations could prioritize providing services to those geographic areas or communities that are the easiest to reach and the most profitable.<sup>78</sup> While the overall rate of access would improve, the most vulnerable populations would remain without access, in contravention of human rights. Thus, ODA should support countries' ability to provide services directly or to ensure effective and comprehensive oversight. In addition, ODA should be used to avoid austerity measures that might otherwise result in a retrogression of human rights, such as the widespread disconnection of water service due to unaffordability.

To ensure that ODA assistance is actually being targeted to the most vulnerable and helping to realize the human rights to water and sanitation for all, the data needs to be disaggregated by sub-population and geographic sub-regions.<sup>79</sup> In addition, funding for water and sanitation services should be separately reported, especially considering that the MDG target for sanitation was not met. If this information is already collected through TrackFin, then it needs to simply be integrated into the SDG monitoring process.

However, Indicator 6.a.1 is necessarily limited because it only measures support and not capacity-building. According to GLAAS, the water and sanitation sector suffers from a human resources shortage due to lack of financial resources available to pay the salaries and benefits of staff; lack of desire by skilled workers to live and work in rural areas; and lack of skilled workers knowledgeable about water and sanitation services.<sup>80</sup> For example, rural water supplies may be managed by ordinary community members who are untrained and unpaid.<sup>81</sup>

### ***6.b Support and strengthen the participation of local communities in improving water and sanitation management***

The goal of SDG Target 6.b is to “Support and strengthen the participation of local communities in improving water and sanitation management.” Participation is a critical human rights concept, so the reference to it in the SDGs is important. However, the way that it is being interpreted and monitored leaves room for significant improvement.

Currently, this target will be monitored through Indicator 6.b.1, which is the “Percentage of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management.”<sup>82</sup> The “structural indicator” will build upon data already gathered by UN-Water GLAAS on the existence of clearly defined procedures

---

<sup>78</sup> See generally Sharmila Murthy, *The Human Right(s) to Water and Sanitation: History, Meaning and the Controversy over Privatization*, 31 BERKELEY J. INT. LAW, 113 (2013). (discussing tensions between human rights and privatization).

<sup>79</sup> UN WATER & WHO, INVESTING IN WATER AND SANITATION: INCREASING ACCESS, REDUCING INEQUALITIES: UN-WATER GLOBAL ANALYSIS AND ASSESSMENT OF SANITATION AND DRINKING-WATER (GLAAS 2014 REPORT) 41 (2014), [http://apps.who.int/iris/bitstream/10665/139735/1/9789241508087\\_eng.pdf?ua=1&ua=1](http://apps.who.int/iris/bitstream/10665/139735/1/9789241508087_eng.pdf?ua=1&ua=1).

<sup>80</sup> *Id.* at 10.

<sup>81</sup> *Id.* at 8.

<sup>82</sup> IAEG-SDGs, *supra* note 6 at 42.

in national laws or policies for participation by intended users.<sup>83</sup> The national-level data will only be disaggregated by usage and geography, i.e. urban/rural sanitation, urban/rural drinking water, and hygiene promotion.<sup>84</sup>

This indicator is deficient from a human rights standpoint because it has a very narrow view of participation, focusing only whether there are policies and procedures in place. While it is a useful “structural indicator”, it should also be complemented by “process indicators” and “outcome indicators” so that we know the steps being taken to implement the policies. Moreover, even if they are implemented, this might not actually provide a meaningful vehicle for local community involvement in decision-making, so we would also want to know the outcome. Who is selected from the community and how? To what degree do the decision-makers actually consider the input of the community? And *who* exactly is the local community? The indicator will not sufficiently address human rights concerns because it implicitly assumes that all community members have the same interests. But at any scale, there are power paradigms and certain sub-populations may be marginalized or excluded from decision-making power. To the extent that the SDGs help to shape national and local policy decisions, this indicator could simply lead to a proliferation of policies that might not lead to meaningful change.

One of the challenges of the SDGs is that it attempts to create a global way of evaluating outcomes when human rights would tell us that there is no one-size-fits-all solution. Different means of participation and community involvement are needed for different contexts. It would be important to collect data on other means of soliciting community input and to learn how the policies actually work in practice.

Given that water and sanitation facilities usually require technical knowledge, to what degree is the general community informed about the treatment process, infrastructure, quality, rate-setting, etc.? What are the general ways in which information is conveyed to the community—through a website, mobile device, water bill,<sup>85</sup> etc.? How transparent and forthcoming is the service provider when asked to provide information? Meaningful participation goes hand-in-hand with transparency and accountability. Increased transparency and accountability can also reduce corruption, which is common in the water sector; in turn, this can enhance affordability because people will not be charged above the official price.<sup>86</sup>

Moreover, who from the community is actually participating in the existing process. Disaggregation of data by gender, age, disability, race, ethnicity and other such dimensions would enhance understanding of whether marginalized and vulnerable groups are having a voice in the participatory structures in place. To some extent, gender may already be incorporated into the monitoring, at least with respect to monitoring local participation in water resources management. That is because Indicator 6.b.1 indicator will build on data collected for SDG

---

<sup>83</sup> *Id.* at 42.

<sup>84</sup> *Id.* at 42.

<sup>85</sup> *See, e.g.*, UNECE & WHO, NO ONE LEFT BEHIND: GOOD PRACTICES TO ENSURE EQUITABLE ACCESS TO WATER AND SANITATION IN THE PAN-EUROPEAN REGION 21 (2013), [http://www.unece.org/fileadmin/DAM/env/water/publications/PWH\\_No\\_one\\_left\\_behind/No\\_one\\_left\\_behind\\_E.pdf](http://www.unece.org/fileadmin/DAM/env/water/publications/PWH_No_one_left_behind/No_one_left_behind_E.pdf). (describing practice in Walloon region of Belgium where utilities insert into the water bill a chart showing how water consumption has evolved over a three-year period and inform users if consumption increases rapidly).

<sup>86</sup> Special Rapporteur on the human right to safe drinking water and sanitation, *supra* note 18 at paras 19-20.

Target 6.5 on the status of Integrated Water Resources Management (IWRM). It will address the presence of formal stakeholder structures established at sub-catchment level. Because gender equity and women's empowerment are key ideas of the Dublin-Rio Principles that formed the basis of IWRM, the survey for indicator 6.5.1 is supposed to incorporate gender parity questions.<sup>87</sup> As noted earlier, IWRM's focus on gender equity and local capacity building is in theory aligned with a human rights-based approach to development, but its effectiveness depends on how it is actually implemented.

The SDGs could also monitor the extent to which state actors engage with civil society actors and involve them in decision-making.

## **2. What critical aspects of the HRTWS are missing or open to misinterpretation in these targets?**

As discussed in the response to the prior question, the normative content of the human rights to water and sanitation are largely being interpreted out of Targets 6.1 and 6.2. However, the SDGs will only be consistent with a human rights approach if they result in policies that promote non-discrimination and equality and ensure that the needs of the marginalized and vulnerable are met. Disaggregation of monitoring data by sub-population will help to achieve this and also enhance transparency.

The SDGs are also silent with respect to the means of implementation and do not identify who is responsible for achieving the goals and targets. States are the primary duty-bearers under the human rights regime. This does not mean that states must directly provide services, but they must provide an enabling environment. They also do not address potential conflicts between actors over water usage, nor the responsibilities of corporate actors (such as set forth in the Guiding Principles for Business and Human Rights). While there the goals speak of the need for participation by local communities, the manner in which it will be measured is deficient, as discussed above.

While Targets 6.a and 6.b are meant to focus on the means by which Goal 6 is accomplished, the corresponding indicators alone do not adequately capture cross-cutting human rights concepts. For example, while the SDGs are meant to promote greater accountability and transparency through global monitoring, there is no mechanism for assessing local accountability. For example, does the local service provider have a mechanism for receiving and addressing complaints about water service quality? In addition, while national statistics offices play a role in gathering information that is subsumed into the SDG monitoring process, will it necessarily translate into greater access to information at the local level?

Although the potential for measurement provides a basis for accountability,<sup>88</sup> a danger exists in valuing only what can be measured. Not everything can be measured well through an indicator,

---

<sup>87</sup> IAEG-SDGs, *supra* note 6 at 30–31.

<sup>88</sup> Philip. Alston, *Ships Passing in the Night: The Current State of the Human Rights and Development Debate seen through the Lens of the Millennium Development Goals*, 27 HUM. RIGHTS Q. 755–829 (2005). (noting that the MDGs were “deliberately designed to be measured and thus to provide a basis for accountability”).

and it is important not to lose sight of this. As an article co-authored by the former Special Rapporteur on the human right to safe drinking water and sanitation observed:

Measuring development progress will never replace human rights monitoring, since human rights progress entails a wide variety of obligations and duties that are not captured by development goals and cannot be assessed solely using development indicators, no matter how rights-sensitive they are. Indeed, measurement can never replace the qualitative and judgment-laden processes of assessment required for human rights monitoring.<sup>89</sup>

### **3. What are the most critical elements of Goal 6 and its targets to enable a realization of the HRTWS?**

As discussed in the answer to Question 1, the HRTWS will only be realized if the indicators used to monitor the targets are sufficient. At the same time, not everything can be reduced to a quantifiable measurement. Qualitative and anecdotal evidence may be useful in identifying human rights violations that are not otherwise captured by the data.

The UNECE's interpretation of its Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lakes provides a useful comparative approach for thinking about how the SDGs could be interpreted to encompass the HRTWS. The UNECE Protocol does not explicitly use human rights language; rather, it states in Article 5 that "equitable access to water, adequate in terms both of quantity and of quality, should be provided for all members of the population, especially those who suffer a disadvantage or social exclusion." The UNECE has interpreted this language as a vehicle for realizing the human right to safe drinking water and sanitation. A 2013 report by UNECE states that "[t]he Protocol on Water and Health provides a sound framework for the translation of the human right to water and sanitation into practice, in particular through the setting of specific targets and target dates."<sup>90</sup> It further notes that "[e]ven if no explicit reference may be found in the Protocol to the human right to water and sanitation — or to relevant international human rights instruments — the Protocol reflects most, if not all, of the elements of this right and more broadly of a human rights-based approach (access to information, participation and access to remedies for local populations)."<sup>91</sup>

### **4. How can the reference to the HRTWS in the Vision of the Declaration (#7) and the general references to a human rights based realization of the SDGs ensure a rights-based interpretation and implementation of SDG 6?**

---

<sup>89</sup> Inga T. Winkler, Margaret L. Satterthwaite & Catarina de Albuquerque, *Treasuring What We Measure and Measuring What We Treasure: Post-2015 Monitoring for the Promotion of Equality in the Water, Sanitation, and Hygiene Sector*, 32 WIS INTL LJ 547 (2014).

<sup>90</sup> UNECE AND WHO, *supra* note 85 at 14.

<sup>91</sup> *Id.* at xiv. (The report focuses on three key aspects of equitable access to water and sanitation: "geographical differences in service provided; discrimination or exclusion in access to services by vulnerable and marginalized groups; and financial affordability for users.").

The Declaration of the UN General Assembly Resolution on Transforming our World: the 2030 Agenda for Sustainable Development proclaims that it is “grounded in the Universal Declaration of Human Rights” as well as “international human rights treaties.”<sup>92</sup> Moreover, Preamble states that the 17 SDGs and 169 targets “seek to realize the human rights of all.” The SDGs focus on universal access and the Preamble declares that “no one will be left behind,”<sup>93</sup> consistent with a human rights approach. In addition to other references to human rights throughout the Declaration, the Vision explicitly affirms the human right to safe drinking water and sanitation.

Although there may be no *legally binding* way to *ensure* that the Sustainable Development Goals will be implemented through a human rights-based approach, the explicit reference to the human right to safe drinking water and sanitation as well as the more general references to human rights in the Preamble and Declaration suggest international consensus regarding their importance to the implementation of Goal 6 and beyond. Moreover, as discussed below, recent resolutions by the UN General Assembly and Human Rights Council that welcome inclusion of the HRTWS in the post-2015 development agenda further underscore this point.

The SDGs are not binding international law, but instead are part of a voluntary agreement that sets forth a statement of aspirations.<sup>94</sup> In this sense, the SDGs are a form of “soft law,” i.e. declarations, statements, standards and guidelines that are not enforceable and binding in the same manner as formal international law, but that nevertheless exert influence over the behavior of countries and other key actors.<sup>95</sup> Soft law can offer several advantages as compared to “hard law” such as treaties. States may be more willing to adopt ambitious and detailed targets when they do not expect to be legally bound by them.<sup>96</sup> State compliance can sometimes be facilitated by avoiding a difficult domestic treaty ratification process;<sup>97</sup> however, doing so runs the risk that there may not be sufficient support and funding for actual implementation.<sup>98</sup> Soft law instruments can also be supplemented, amended or replaced more easily than treaties, which makes them more flexible and adaptable than treaties.<sup>99</sup> Soft law instruments can influence state practice, illustrate emerging consensus, and also provide evidence of a state’s sense of legal obligation (i.e. *opinio juris*) towards new or emerging rules.<sup>100</sup> In this sense, non-binding soft law is not so different than binding treaties in terms of their impact on customary international law.<sup>101</sup> Moreover, as the MDGs illustrated, soft law can also be very powerful in terms of

---

<sup>92</sup> U.N. General Assembly, TRANSFORMING OUR WORLD: THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT, A/RES/70/1 para 10 (2015).

<sup>93</sup> *Id.* at Preamble. See also CENTER FOR ECONOMIC AND SOCIAL RIGHTS, *supra* note 4 at 2.

<sup>94</sup> Thomas Pogge & Mitu Sengupta, *The Sustainable Development Goals (SDGs) as Drafted: Nice Idea, Poor Execution*, WASH. INTL LJ 571 (2015); CENTER FOR ECONOMIC AND SOCIAL RIGHTS, *supra* note 4 at 3.

<sup>95</sup> ALAN BOYLE & CHRISTINE CHINKIN, THE MAKING OF INTERNATIONAL LAW 212 (2007). (“From a law-making perspective the term [‘soft law’] is simply a convenient description for a variety of non-legally binding instruments used in contemporary international relations.”); Xuan Li, *Soft Law-making on Development: The Millennium Development Goals and Post-2015 Development Agenda*, 10 MANCH. J INTL ECONL 362 (2013).

<sup>96</sup> Pogge and Sengupta, *supra* note 94 at 572; BOYLE AND CHINKIN, *supra* note 95 at 214.

<sup>97</sup> The position of the United States leading up to the Paris talks is a case in point: the Obama administration sought a type of international agreement that would avoid the need for U.S. Senate ratification.

<sup>98</sup> BOYLE AND CHINKIN, *supra* note 95 at 214.

<sup>99</sup> *Id.* at 214.

<sup>100</sup> *Id.* at 215.

<sup>101</sup> *Id.* at 215. (noting that the treaties and non-binding soft law instruments can have similar impacts on customary international law because “[t]reaties do not generate or codify customary law because of their binding form but

directing resources and shaping the behavior of states, international organizations, private actors and others.

Because the 2030 Agenda had the freedom to be ambitious because it is not a treaty, it is perhaps puzzling why it did not incorporate more references to human rights. The SDG targets and goals were not framed in human rights terms, despite the fact that they are well-aligned with many economic and social rights, including the HRTWS. While treaty obligations under the International Covenant on Economic, Social and Cultural Rights (ICESCR) still exist, there was clearly a reluctance to incorporate this language into the SDGs goals and targets despite strong advocacy.<sup>102</sup>

At the same time, the references to human rights in the Preamble and Declaration carry weight because the text was extensively negotiated by the state parties. The inclusion of human rights language arguably reflects not only strong NGO advocacy around this issue, but also the consensus of the international community. This is especially true for the human right to safe drinking water and sanitation. Given that the HRTWS was recently interpreted out of the ICESCR, it perhaps makes sense why this right was mentioned, but others that are explicitly set forth in the ICESCR, such as the rights to food and housing, were not.

The UN General Assembly and Human Rights Council also adopted a series of resolutions highlighting the importance of including the human right(s) to safe drinking water and sanitation in the post-2015 development agenda. In December 2015, the UN General Assembly adopted a resolution on “The human rights to safe drinking water and sanitation” that specifically welcomed the reaffirmation of the human right to safe drinking water and sanitation as part of the 2030 Agenda for Sustainable Development.<sup>103</sup> (The title of this GA resolution is noteworthy because it reflects the evolving consensus that water and sanitation are related but distinct human rights; this is the first time that a General Assembly resolution or Human Rights Council resolution has used the plural form). This resolution followed one adopted in December 2013, where the General Assembly specifically called upon states “[t]o give due consideration to the human right to safe drinking water and sanitation and the principles of equality and non-discrimination in the elaboration of the post 2015 development agenda.”<sup>104</sup> Moreover, the Human Rights Council has also repeatedly underscored the need to consider the human right to safe drinking water and sanitation in the post-2015 development agenda.<sup>105</sup>

---

because they either influence state practice and provide evidence of *opinio juris* for new or emerging rules, or because they are good evidence of what the existing law is.”).

<sup>102</sup> See, e.g., HUMAN RIGHTS CAUCUS, HUMAN RIGHTS CAUCUS REACTION TO THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT (2015), Human Rights Caucus Reaction to the 2030 Agenda for Sustainable Development.

<sup>103</sup> G.A. Res. 70/169, *supra* note 2 at 1. (“Welcoming the adoption of the 2030 Agenda for Sustainable Development, including the reaffirmation of commitments regarding the human right to safe drinking water and sanitation therein.”).

<sup>104</sup> G.A. Res. 68/157, U.N. Doc. A/RES/68/157\* (Feb. 12, 2014), para 6(c).

<sup>105</sup> Human Rights Council Res. 27/7, U.N. Doc. A/HRC/RES/27/7 (Oct. 2, 2014), para 4. (“invites States to consider adequately the human right to safe drinking water and sanitation in the elaboration of the post-2015 development agenda”); Human Rights Council Res. 24/18, U.N. Doc. A/HRC/RES/24/18 (Oct. 8, 2013), para 10. (“Calls upon States to integrate the human right to safe drinking water and sanitation and the principles of equality and non-discrimination into the post-2015 development agenda”); Human Right Council Res. 21/2, U.N. Doc. A/HRC/21/2 (Aug. 26, 2013), p.10, para 14. (“calls upon States . . . to integrate the human right to safe drinking water and sanitation into the international development agenda beyond 2015”).

Although neither the General Assembly nor the Human Rights Council has the power to legally bind states,<sup>106</sup> these resolutions are a form of soft law that provide normative and political support for the relevance of the HRTWS to the SDGs and further underscore that the HRTWS derives from the ICESCR. As Boyle and Chinkin observe, “[w]hile none of [the human rights committees’] comments, reports or recommendations is formally binding, their consistent repetition creates a consensus that a lawyer would be foolish to ignore.”<sup>107</sup>

While the references to human rights in the 2030 Agenda are important, the key test will be how the SDGs and targets will be implemented and monitored. For example, Target 7.C of the Millennium Development Goals (MDGs) called for the provision of “safe” drinking water, but only a proxy—“improved”—was used. As a result, access to a broken faucet without flowing water or to one with contaminated water still have been counted as access to safe drinking water.<sup>108</sup>

**5. Although the implementation of SDGs is nationally focused and voluntary in nature, what HR mechanisms could be used to report on progress made or not on the realization of HRTWS in the SDGs over the next 15 years?**

Two volumes of the handbook by the former Special Rapporteur provide very helpful overviews of relevant mechanisms:

- See Chapter 4 of Catarina de Albuquerque, “Monitoring compliance with the human rights to water and sanitation,” *Realising the Human Rights to Water and Sanitation: A Handbook by the UN Special Rapporteur Catarina de Albuquerque* (2014), available at [http://www.ohchr.org/Documents/Issues/Water/Handbook/Book5\\_Monitoring.pdf](http://www.ohchr.org/Documents/Issues/Water/Handbook/Book5_Monitoring.pdf)
- See Chapter 2 of Catarina de Albuquerque, “Access to justice for violations of the human rights to water and sanitation,” *Realising the Human Rights to Water and Sanitation: A Handbook by the UN Special Rapporteur Catarina de Albuquerque* (2014), available at [http://www.ohchr.org/Documents/Issues/Water/Handbook/Book6\\_Justice.pdf](http://www.ohchr.org/Documents/Issues/Water/Handbook/Book6_Justice.pdf)

As discussed in the Special Rapporteur’s handbooks, one important vehicle is the Universal Periodic Review (UPR), which involves a review of the human rights records of all UN member states under the auspices of the UN Human Rights Council. Created in 2006 by a UN General Assembly resolution, the UPR is state-led peer-review process that also allows participation by civil society actors at different stages.<sup>109</sup> Several NGOs have called for the SDGs to incorporate a monitoring plan similar to the UPR.

---

<sup>106</sup> BOYLE AND CHINKIN, *supra* note 95 at 116.

<sup>107</sup> *Id.* at 156.

<sup>108</sup> WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, *supra* note 33 at 4. (noting that “it is likely that the number of people using safe water supplies has been over-estimated” because some of the improved sources “may not be adequately maintained and therefore may not actually provide ‘safe’ drinking water”); Ned Breslin, FEW CELEBRATING MDG SUCCESS IN WATER HUFFINGTON POST (2012), [http://www.huffingtonpost.com/ned-breslin/clean-water-millennium-development-goal\\_b\\_1343292.html](http://www.huffingtonpost.com/ned-breslin/clean-water-millennium-development-goal_b_1343292.html)

<sup>109</sup> <http://www.upr-info.org/en>

**6. Other SDGs: What elements of the HRTWS are represented in targets 3.2, 3.3 and 10.2, 10.3 and 11.5 and 11.6 and 12.4, 15.1 and 15.3 (and any other targets)?**

**Goal 3. Ensure healthy lives and promote well-being for all at all ages**

***3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births***

Indicator 3.2.1 is the “under-five mortality rate.”<sup>110</sup> The data is to be disaggregated by cause, including pneumonia, diarrhea and malaria. As diarrhea is often caused by the poor water quality and fecal contamination, the realization of the human rights to safe drinking water and sanitation would certainly impact child mortality.

Indicator 3.2.2 is the “neonatal mortality rate.”<sup>111</sup> While the HRTWS is of course intricately linked to the right to health, this indicator does not have an obvious link to the provision of WASH services.

***3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases***

None of the proposed indicators under Target 3.3 specifically address water-borne diseases.<sup>112</sup> Currently, there are five proposed indicators, covering AIDS, tuberculosis, malaria, hepatitis and neglected tropical diseases. While the realization of the HRTWS would no doubt have a positive impact on those suffering from these diseases, there is not otherwise a direct link. As of the writing of this memo, no indicator was included in Target 3.3 to measure “water-borne diseases.” Instead, it appears that this will be measured through Target 3.9.

***3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.***

Indicator 3.9.2 is “Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services).” No additional information on this indicator was available as of the writing of this report.<sup>113</sup>

---

<sup>110</sup> IAEG-SDGs, GOAL 3 ENSURE HEALTHY LIVES AND PROMOTE WELL-BEING FOR ALL AT ALL AGES (METADATA ON SUGGESTED INDICATORS FOR GLOBAL MONITORING OF THE SUSTAINABLE DEVELOPMENT GOALS) 5 (2016), <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-3.pdf>. (version dated March 7, 2016).

<sup>111</sup> *Id.* at 6.

<sup>112</sup> IAEG-SDGs, *supra* note 110. (The May 2016 version of this document also did not include an indicator for water-borne diseases under Target 3.)

<sup>113</sup> The latest version of the memo available on the IAEG-SDG website was dated May 11, 2016.

## **Goal 10. Reduce inequality within and among countries**

### ***10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status***

Goal 10 has been hailed as an important human rights milestone because it explicitly identifies the need to reduce inequality within and among countries. Notably, the MDGs were silent on this aspect.

Indicator 10.2.1 is the “Proportion of people living below 50 per cent of median income, by age, sex, and persons with disabilities.”<sup>114</sup> Although there is some disaggregation, the indicator reinforces the traditional income-based approach to measuring inequality rather than using a more multi-dimensional approach.<sup>115</sup>

As noted above, it is actually Goal 17 that the JMP looks to for disaggregation guidance.

### ***10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard***

Indicator 10.3.1 is proposed to be the “Percentage of the population reporting having personally felt discriminated against or harassed within the last 12 months on the basis of a ground of discrimination prohibited under international human rights law.”<sup>116</sup> This indicator relates to the HRTWS in that an individual who has been denied access to WASH services for discriminatory reasons could answer this question affirmatively. The data is to be disaggregated by the ground of discrimination, relationship with the person/entity felt to have discriminated and the place where the discrimination occurred. While it is not clear how specific the disaggregation will be, it may be a vehicle for assessing discrimination in accessing WASH services.

## **Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable**

### ***11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums. This is an important target from the perspective of the human rights to water and sanitation because people living in slums and urban settlements are often excluded or undercounted in census surveys.***

Although Target 11.1 was not included in the original list of questions, it is actually the most important target of Goal 11 from the perspective of the human rights to water and sanitation.

---

<sup>114</sup> IAEG-SDGs, GOAL 10 REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES 3 (2016), <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-10.pdf>. (version dated March 3, 2016).

<sup>115</sup> U.N. GENERAL ASSEMBLY, *supra* note 12 at para 48. (“The conventional discourse describes poverty as multidimensional, yet its quantification has remained largely one-dimensional, focused on income, making it incapable of reflecting reality.”).

<sup>116</sup> IAEG-SDGs, *supra* note 114 at 4.

According to the latest plans, this target will be measured by Indicator 11.1.1: “Proportion of urban population living in slums, informal settlements, or inadequate housing.”<sup>117</sup> The methodology defines this as the “Proportion of people living in households lacking at least one of the following five housing conditions: access to improved water; access to improved sanitation facilities; sufficient-living area (not overcrowded); durable housing; and security of tenure.”

Notably, the methodology states that it will measure “easy access to safe water,” but in fact, the criteria used reflects the older MDG definition of “improved” water supply: Piped connection to house or plot; Bore hole; Public stand pipe serving no more than 5 households; Protected dug well; Protected spring; Rain water collection; and Bottle water (new).

UN-Habitat, which is developing this indicator, is also a member of GEMI. It may be worth seeing why this methodology does not encompass the new definition of safe water being developed by the JMP and whether there are plans to do so.

***11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations***

Target 11.5, which relates to reducing the losses from disasters, including water-related disasters, only indirectly relates to the human rights to water and sanitation in its current form.

It will be measured in part by Indicator 11.5.1: “Number of deaths, missing persons and persons affected by disaster per 100,000 people.”<sup>118</sup> As part of the definition of “persons affected,” UNISDR will look at the number of people whose houses were damaged or destroyed and who received food aid. The definition does not specifically include the number of individuals whose access to water and sanitation has diminished as a result of the disaster, nor does it include the incidence of water-borne diseases that might result from such a disaster (like the cholera outbreak in Haiti after the earthquake).

Target 11.5 will also be measured in part by Indicator 11.5.2: Direct disaster economic loss in relation to global GDP, including disaster damage to critical infrastructure and disruption of basic services. This indicator indirectly includes a reference to water and sanitation services, which are part of the “critical infrastructure” that would cause a “disruption of basic services.”

Although UNISDR states that both 11.5.1 and 11.5.2 will be multi-purpose indicators that help to measure access does not list any targets from Goal 6.

Target 11.5 also states that it has a “focus on protecting the poor and people in vulnerable situations.” In its rationale and interpretation, it discusses people living in poverty. However,

---

<sup>117</sup> IAEG-SDGs, GOAL 11 MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE (METADATA ON SUGGESTED INDICATORS FOR GLOBAL MONITORING OF THE SUSTAINABLE DEVELOPMENT GOALS) 2 (2016), <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-11.pdf>. (version dated March 3, 2016).

<sup>118</sup> *Id.* at 7.

the Indicator 11.5.1 data disaggregation only includes these categories: “by country, by event, by hazard type (e.g. disaggregation by climatological, hydrological, meteorological, geophysical, biological and extra-terrestrial for natural hazards is possible following IRDR\* classification), by death/missing/injured or ill/evacuated/relocated/people whose houses were damaged/people whose houses were destroyed/people who received food relief aid.” Notably, it does not include by race, ethnicity, income level or other ways to assess whether certain sub-populations are over-impacted. Similarly, Indicator 11.5.2 only includes disaggregation “by country, by event, by hazard type (e.g. disaggregation by climatological, hydrological, meteorological, geophysical, biological and extra-terrestrial for natural hazards is possible following IRDR\* classification), by asset loss category.”

***11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management***

Target 11.6, which relates to reducing the environmental impact of cities, includes Indicator 11.6.1: “Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities.”<sup>119</sup> This indicator is specifically focused on solid waste management – not sewage and wastewater, which are covered by Goal 6.

**Goal 12. Ensure sustainable consumption and production patterns**

***12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment***

Target 12.4 only relates to the HRTWS in that improved water quality could enhance the availability of clean water needed to provide WASH services. The proposed indicators, however, do not directly measure water impacts. Indicator 12.4.1 is “Indicator 12.4.1: Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement” and Indicator 12.4.2 is “Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment.”<sup>120</sup>

**Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

---

<sup>119</sup> *Id.* at 15.

<sup>120</sup> IAEG-SDGs, GOAL 12 ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS (2016), <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-12.pdf>. (version dated March 31, 2016).

***15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements***

Freshwater ecosystems provide important services in terms of improving water quality and availability, which could enhance realization of the HRTWS. However, this is not being measured in the indicator. Rather, Indicator 15.1 is the “Forest area as a proportion of total land area” and Indicator 15.1.2 is the “Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type.”<sup>121</sup>

***15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world***

Target 15.3 relates to the HRTWS in that droughts and floods can negatively impact water quality and availability. Indicator 15.3.1 is the “Proportion of land that is degraded over total land area,” which is only tangentially related to the HRTWS.

**Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

Effective achievement of these four targets under Goal 16 would also indirectly enhance realization of the human rights to water and sanitation:

16.6 Develop effective, accountable and transparent institutions at all levels

16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels

16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements

16.b Promote and enforce non-discriminatory laws and policies for sustainable development

**Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development**

---

<sup>121</sup> IAEG-SDGs, GOAL 15 PROTECT, RESTORE AND PROMOTE SUSTAINABLE USE OF TERRESTRIAL ECOSYSTEMS, SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, AND HALT AND REVERSE LAND DEGRADATION AND HALT BIODIVERSITY LOSS (2016), <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-15.pdf>. (version dated March 3, 2016).

***Target 17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.***

As noted earlier, the JMP has interpreted Target 17.18 as a mandate to enhance its data disaggregation. Disaggregation by itself does not reduce inequalities, but it does provide the information needed to be acted upon. The list of potential bases for discrimination—age, sex, disability, race, ethnicity, origin, religion or economic or other status—should not be read as each in isolation. Rather, these identities can intersect; thus, the idea of “intersectionality.”<sup>122</sup> Notably, however, sexual orientation and gender identity are noticeably absent from this list, but it can be interpreted into “other status.”

Target 17.18 will be measured by Indicator 17.18.1, which is the “Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics.”<sup>123</sup>

### **III. Conclusion**

The 2030 Agenda has the potential to further the realization of the human rights to safe drinking water and sanitation. SDG Targets 6.1 and 6.2 relating to access to water, sanitation and hygiene largely incorporate the normative content of the HRTWS and address many of the shortcomings of the MDGs. However, the data must be appropriately disaggregated to ensure that the goals of equality and non-discrimination are met and to assess whether services are in fact affordable. This is an important area for advocacy. In addition, the participation indicators used to measure Targets 6.a and 6.b are narrow in scope and should be strengthened; doing so would help to realize the human rights to safe drinking water and sanitation and would also promote a human rights-based approach to development and water management.

---

<sup>122</sup> U.N. GENERAL ASSEMBLY, *supra* note 12 at para 35. (“Often, inequalities intersect and their effects accumulate over time. Without an explicit focus on multiple discrimination, these effects can continue unabated and stifle progress. Social, cultural, economic and political inequalities all have reinforcing effects that perpetuate social exclusion. Hence, a focus on intersectional inequalities is indispensable.”).

<sup>123</sup> IAEG-SDGs, GOAL 17 STRENGTHEN THE MEANS OF IMPLEMENTATION AND REVITALIZE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT (2016), <http://unstats.un.org/sdgs/files/metadata-compilation/Metadata-Goal-17.pdf>. (version dated March 29, 2016).