

Practical Paper

Rights-based indicators regarding non-discrimination and equity in access to water and sanitation

Urooj Quezon Amjad, Georgia Kayser and Benjamin Mason Meier

ABSTRACT

The declaration of the Human Right to Water and Sanitation by the UN General Assembly in 2010 is a significant achievement. Successfully implementing, enforcing and monitoring this right in various countries, contexts and scales will be an even greater achievement. Facilitating accountability for water and sanitation as a human right, The Water Institute at the University of North Carolina at Chapel Hill and the United Nations Office of the High Commissioner for Human Rights hosted a workshop to examine the translation of public health data into human rights indicators. Experts in water and sanitation policy and human rights law discussed and debated the challenges and ways forward in developing indicators for equity and non-discrimination that would assist with meaningful practice of the Human Right to Water and Sanitation. The discussion was framed by three main questions: what should be measured, where to find this information, and what additional information is needed. The workshop was convened at The Water Institute's annual conference, *Water and Health: Where Science Meets Policy* on October 4, 2011.

Key words | equity, human right to water and sanitation, indicators, public health, water quality

Urooj Quezon Amjad (corresponding author)
Post-doctoral Research Associate,
The Water Institute,
Gillings School of Global Public Health,
and Research Fellow,
Global Research Institute,
University of North Carolina, Chapel Hill,
Rosenau Hall, CB #7431,
135 Dauer Dr. Chapel Hill,
North Carolina 27599-7431,
USA
E-mail: amjad@unc.edu

Georgia Kayser
Post-doctoral Research Associate,
Department of Public Policy and The Water
Institute at UNC, CB#7431,
University of North Carolina, Chapel Hill
North Carolina
USA

Benjamin Mason Meier
Assistant Professor of Global Health Policy,
Department of Public Policy,
University of North Carolina, Chapel Hill,
218 Abernethy Hall, CB #3435, Chapel Hill,
North Carolina 27599-3435, USA

INTRODUCTION

With the human right to water and sanitation gaining rapid acceptance under international law and framing global governance efforts to improve water and sanitation, the implementation of this right will require corresponding accountability frameworks to assess national human rights realization. Facilitating this implementation, the United Nations has begun a process to identify specific indicators reflective of the progressive realization of human rights norms, distinguishing human rights indicators from development goals and laying the groundwork for global water governance through international treaty monitoring. By drawing on the process of developing indicators for other human rights, this indicator development project seeks to create a means of monitoring and evaluating rights-based

obligations, thereby holding governments accountable for realizing the right to water and sanitation. Central to legal obligations for the human right to water and sanitation, this indicator development has begun with a focus on equity and non-discrimination.

Attended by approximately 50 human rights, public policy, and water and sanitation professionals, this three-hour workshop on 'Human Rights-Based Indicators: Non-Discrimination and Equity in Access to Water and Sanitation' encouraged participants to examine and assess existing data and data collection methods, that would be amenable to application as rights-based indicators specific to equity and non-discrimination. To provide background on rights-based principles and prepare workshop

participants for interdisciplinary group discussions, the workshop began with an opening panel presentation to: (1) introduce the human right to water and sanitation; (2) define rights-based principles of equity, equality and non-discrimination; (3) outline human rights indicators and the indicator development process; and (4) review indicator development efforts for water and sanitation. Thereafter working in independent groups – with representation in each group from service operators, policy makers, civil society, and water professionals – five groups examined the data reflective of the implementation of the right to water and sanitation before presenting their individual group conclusions for comment by the full workshop.

THE INDICATOR DEVELOPMENT PROJECT FOR WATER AND SANITATION

The human right to water and sanitation is derived under international law from a 2003 General Comment on the International Covenant on Economic, Social and Cultural Rights and the 2010 UN General Assembly Resolution on the Human Right to Water and Sanitation. Incorporating human rights in the development agenda reaffirmed that a debate on appropriate goals, targets and indicators is under way in preparing for the 2015 assessment of the Millennium Development Goals, and that there will be opportunities to integrate the human right to water and sanitation in the Post-2015 Agenda. From an initial May 2011 Consultation on Post-2015 Monitoring of Drinking-Water and Sanitation in Berlin, the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) provided a framework for future efforts to implement the human right to water and sanitation. In carrying out these next steps, the consultation stakeholders concluded that: (1) global goals, targets and indicators are necessary for human rights implementation; (2) more attention should be directed to ensuring that water and sanitation systems respond to information needs of decision-makers at national, regional and international levels; and (3) global and national monitoring systems should feed into national decisions on overall resource allocations, targeting of services and selection of interventions. Providing an imperative to bring together the water and sanitation community around human rights norms, the next steps

identified in Berlin included exploring water supply and sanitation indicators, proposing indicators for equity, exploring standards for rural and urban areas, and refining and improving the current system of monitoring (WHO and UNICEF 2011).

EQUITY, NON-DISCRIMINATION AND EQUALITY

As a basis to propose indicators for equity, the principles of ‘non-discrimination and equality are linked: under human rights law, states must ensure that individuals do not suffer discrimination, and that they can enjoy equality’. Where human equality is the bedrock principle of human rights law,

‘the principle of equality before the law does not mean ... absolute equality, namely the equal treatment of men without regard to individual, concrete circumstances, but it means ... relative equality, namely the principle to treat equally what are equal and unequally what are unequal ... To treat unequal matters differently according to their inequality is not only permitted but required (Satterthwaite 2011)’.

Useful to developing indicators for the implementation of the human right to water and sanitation is the concept of ‘substantive equality’, which moves beyond formal equality to require affirmative action to rectify inequity under human rights law. In contrast to equality, the definition of equity usually refers to economic barriers, in which monitoring helps us to understand who is left behind, focusing on the most disadvantaged members of society. Viewed through a human rights lens, equity can be fruitfully paired with equality, creating a legally binding obligation to ensure that everyone – regardless of status, race, sex, class, caste or any other factor – has access to safe water and sanitation (WHO and UNICEF 2012).

MEASURES VS. INDICATORS

Clarifying issues of equity through indicators, indicators for non-discrimination and equality could be linked specifically to affordability, as it is one of the key barriers to achieving

equality and equity. With the water sector examining and categorizing indicators based on a framework of structure, process and outcome, advocates have focused on separate qualitative and quantitative indicators to assess state commitments, efforts and results (Roaf *et al.* 2005). In examining these indicators under the human right to water and sanitation, the preferences and needs of vulnerable groups must be directly linked to specific indicators for the human right to water and sanitation. However, the needs of vulnerable groups are not adequately highlighted and disaggregated data are not consistently collected. For example, regulators need to understand the role of affordability, but they tend to gather information only for those customers who have a connection. Indicators used in monitoring will need to be tailored to local circumstances and feasible in national level monitoring efforts, with non-governmental organizations bearing a key role in rights-based monitoring.

SMALL GROUP DISCUSSIONS ON THE DEVELOPMENT OF RIGHTS-BASED INDICATORS

As a participatory workshop incorporating the water sector in indicator development efforts, five groups of participants discussed and shared their perspectives on key questions in the implementation of the human right to sanitation and water. The members of each group sought to develop answers to three key questions: (1) What should be measured for non-discrimination and equity? (2) What measurements are available to monitor equity and discrimination? and (3) What additional information is necessary for rights-based indicators? Working groups reported their results to all participants (summarized in Boxes 1, 2 and 3, respectively), with the synthesis of these ideas facilitating the development and implementation of indicators for measuring, monitoring and enforcing the human right to water and sanitation.

WHAT SHOULD BE MEASURED FOR NON-DISCRIMINATION AND EQUITY?

The following themes were suggested by workshop participants as concrete indicators for assessing non-discrimination and equity in the context of the human

right to water and sanitation: access, quality, quantity, availability, priority of use and user friendliness. The question of what should be measured in developing appropriate and practical indicators for implementing the Human Right to Water and Sanitation is important because these characteristics will drive policy and practice efforts. Suggested areas to measure regarding water and sanitation were discussed as well as areas for further consideration (see Box 1). Many of the indicators for water and sanitation – water quality, water quantity, water availability and sanitation safety and waste treatment – impact health and could be compared across groups of varying class, race, ethnicity, gender, disability, sexual orientation, social, economic and political opportunity, reflecting different levels of wealth, acceptance and/or prestige. Some of the indicators recommended are direct measures of discrimination. This demonstrates how health determinants can be translated into human rights indicators. Not all possible indicators were mentioned, but many factors that affect the development of a list of indicators for measuring equity and non-discrimination were discussed. These factors included: data disaggregated by geographic area, gender, vulnerable group, caste or racial group and health status, among others.

WHAT MEASUREMENTS ARE AVAILABLE TO MONITOR EQUITY AND DISCRIMINATION?

Existing datasets could be harnessed to develop indicators and sources for monitoring instead of ‘re-creating the wheel’ of newer datasets. Identifying where and what is readily available for the complicated task of developing practical indicators would be more efficient and strategic. The water and sanitation datasets shown in Box 2, suggested by workshop participants, could be matched to human rights indicators for achieving non-discrimination and equity in the context of the human right to water and sanitation.

WHAT ADDITIONAL INFORMATION IS NECESSARY FOR RIGHTS-BASED INDICATORS?

Identifying what should be measured and where to find such existing information is not sufficient in an effective indicator

BOX 1 | What should be measured for non-discrimination and equity?

Water

- Access – population ratio of access to use
 - Time to source.
 - Distance to source.
 - Access by socioeconomic group.
- Quantity (liters/person/per day).
- Quality – Microbiological and chemical components of water quality: at the source, after filtration, at consumption.
- Availability (h/day/week).
- Priority of use (discrimination at point of source and use).
- User friendliness (disabilities, children, pregnant women).
- Participation in decision making.

Sanitation

- Distance from home.
- Privacy.
- Safety.
- Community sanitation facilities.
- Disposal/treatment.
- User friendliness.

For consideration

- Definitions: Before indicators may be defined, definitions are needed for non-discrimination – process-oriented, and equality vs. equity and they need to be outcome-oriented.
- Target audience: Need to differentiate between country and regional-level and global-level monitoring. Imposing a strict global template for country and regional-level surveys prohibits useful outside-the-box data from being utilized.
- Geography: Urban/rural and disaggregate peri-urban.
- Affordability: Percentage of income spent on water by wealth quintiles; existence of social tariff; breakdown of cut off rates.
- Rules of law: Are fair laws on the books? Are the rules respected and enforced?
- Unit of measurement: per capita might be better than by household.
- Single indicator: e.g. maternal education, age
- Vulnerable groups: How vulnerable households are defined when considering members who are chronically ill, disabled, or non-biological children via adoption or foster care.
- Access to water outside and inside the home: Difficulty of getting to water source; access to water within the household between women and men.
- Burden of access: Access to safe water in relation to other responsibilities.
- Socioeconomic status: Identifying who will get a filter and who will use it according to socioeconomics.
- Epidemiological data stratified by caste: not only quantity but quality.
- Health status: Data for access by health status (e.g. individuals with HIV/AIDS have different water needs).
- Accuracy of measurements and testing: Where water quality testing takes place affects accuracy of test results.

Disease outbreaks: number of diarrheal disease outbreaks in a year, and similar water and sanitation related diseases.*

* *Note:* This comment did not directly emerge from the workshop, although relevant, and was suggested by one of the reviewers of the manuscript.

Box 2 | What measurements are available to monitor equity and discrimination?

- Demographic and health surveys: Urban/rural; wealth quintiles; religion; gender of household head; age.
- Multiplied indicator and cluster survey.
- Living standards measurement study: World Bank data on household income, expenses, and facilities can be found.
- Core welfare indicator questionnaire.
- Access to improved and unimproved water sources & JMP
- National water quality data.
- Water safety plans.
- National water and sanitation policies and legislation.
- Children's rights – UNICEF and project level.
- Human rights to education and health.
- Laws and policies (instruments on legislations, strategies, regulations).
- Tariff structures and levels.
- National water and sanitation plans.
- World Bank asset index measured by socioeconomic quintile.

development process. New sources of data and themes are also needed. In facilitating rights-based accountability, it is necessary to develop data sources that reflect human rights realization, with targeted exploration of water and sanitation to understand what cannot be assessed through current measures. [Box 3](#) lists questions suggested by workshop participants that will be necessary to identify new sources of data for assessing non-discrimination and equity in the context of the human right to water and sanitation.

NEXT STEPS IN IDENTIFYING INDICATORS TO FULFILL HUMAN RIGHTS OBLIGATIONS

The future development of indicators and implications of the new UN General Assembly Resolution on the human right to water and sanitation 'require that these [rights] are accessible, available, affordable, acceptable and safe. Indicators in accordance with this understanding will bring us towards a more holistic understanding [of water and sanitation policy]' ([de Albuquerque 2011](#)). The difficult issues that need to be addressed in indicator development include: identifying indicators that can be aggregated to

the national level and compared globally, isolating water quality measures that can be collected in a range of settings, locating measures for affordability that incorporate the complexities of household income and unpaid work, identifying how to measure reliability and sustainability at scale, and finding ways to measure the progress of the most discriminated in each society, specifically, illegal inhabitants. Looking toward the future of global water and sanitation policy and how the UN General Assembly's official recognition of the right to water and sanitation will influence the discussions surrounding the Post-2015 Agenda, one of the remaining questions is 'What should the post 2015 development agenda take account of – what should be our new goal with regard to water and sanitation?' Furthermore, practical goals matched with practical indicators that assist with effective implementation of the Human Right to Water and Sanitation would be key. In assisting policy makers to understand the data that is reflective of human rights norms, the thinking developed in Chapel Hill will be instrumental to developing indicators for the human right to water and sanitation, facilitating accountability for the realization of human rights through the water and sanitation sectors.

BOX 3 | What additional information is necessary for rights-based indicators?

- Who are the duty bearers?
- Whether rights-based considerations are included in the national legislations regarding water and sanitation plans.
- Percentage of budget and of GDP currently devoted to water and sanitation infrastructure.
- More extensive information about community stand-pump use (size of community; social and cultural context to access).
- Regions prone to natural disasters; regional seasonality fluctuation information (create proactive solutions).
- Most disadvantaged communities and how they were disproportionately affected and take measures to protect those communities in the future. Develop definitions of who is most at risk and disaggregate data accordingly.
- In relation to three types of indicators in mind (structural, process and output), the JMP could be used for output indicators.
- Gendered roles and ability to participate in policy change. Disaggregated data by sex, and process indicators.
- Much of the data is tied to households, so alternatives need to be developed for those who do not have secure tenure, such as slum dwellers. Clarifying how access to water can be achieved by slum dwellers is important.
- How to coordinate local and global indicators to make sure they are compatible.
- Context is hard to measure. Currently we are not able to develop context-based indicators, and no meta-data are currently available.
- Global datasets have become so expensive to build, maintain and use.
- The availability of opportunities for participation is difficult to measure.
- Ability of marginalized groups to impact decision making is even more difficult to measure.

ACKNOWLEDGMENTS

Organized by the UK office of the High Commissioner for Human Rights and the Water Institute at the University of North Carolina at Chapel Hill.

REFERENCES

de Albuquerque, C. 2011 Special UN Rapporteur on Human Right to Water and Sanitation, Public Presentation.

Roaf, V., Khalfan, A. & Langford, M. 2005 Monitoring Implementation of the Right to Water: A Framework for Developing Indicators.

Satterthwaite, M. 2011 Public presentation referencing Judge Tanaka (dissenting), South West Africa case, International Court of Justice.

WHO and UNICEF 2011 *First Consultation on Post-2015 Monitoring of Drinking-Water and Sanitation*. 3–5 May, WHO and UNICEF Joint Monitoring Programme, Berlin.

WHO and UNICEF 2012 JMP Working Group on Equity and Non-Discrimination. Final Report, August 2, available at: http://www.wssinfo.org/fileadmin/user_upload/resources/JMP-END-WG-Final-Report-20120821.pdf.