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## *Monitoring Implementation of the Right to Water: A Framework for Developing Indicators*

By Virginia Roaf, Ashfaq Khalfan and Malcolm Langford, Centre on Housing Rights and Evictions, based on the proceedings of a workshop held in October 2004 organised by the Heinrich Böll Foundation, Brot für die Welt (Bread for the World) and the Centre on Housing Rights and Evictions (COHRE).

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## Executive Summary

National and international efforts to implement the right to water for all require the use of indicators to monitor the actions of States and other actors, to identify gaps in implementation and to help prioritise the use of scarce resources. This issue paper describes the start of an international process to develop right to water indicators that can be used by a variety of actors to make their monitoring processes more consistent, rigorous and transparent. Such actors include: States, who wish to assess and improve the effectiveness and design of their own policies; national human rights institutions, international human rights treaty bodies, which monitor State implementation of their human rights obligations; other UN agencies with responsibility for water and sanitation and civil society organisations.

This paper, based on a two-day expert workshop that included representatives of the main UN agencies monitoring access to water, governments, the UN Committee on Economic, Social and Cultural Rights, NGOs and other experts on the right to water, sets out a framework and methodology for designing indicators for the right to water. It demonstrates the value-added of human rights indicators to current human development indicators for access to water, such as their focus on measuring efforts by States and other actors to realise rights, rather than only on outcomes, and on assessing levels of access to rights on the basis of gender, ethnic and other differences. The paper considers the technical and resource-related challenges to using indicators in developing countries, and considers a number of responses, including greater use of qualitative indicators that assess laws, policies and institutions, rather than relying only on quantitative survey-based indicators. The paper assesses current indicators for access to water used by UN agencies and notes that they can be used to measure certain components of the right to water, in particular those related to physical accessibility. It considers components of the right to water for which such indicators need to be further developed, such as in relation to affordability of water and sanitation services. The paper draws on lessons from efforts already underway to develop indicators for housing rights and the right to health.

The issue paper sets out a matrix of potential indicators covering each aspect of the right to water set out in General Comment No. 15 on the Right to Water, and commentary on potential choices. These are not, however, indicators for immediate implementation. They represent a menu of choices which will be revised and narrowed down at a further stage to a smaller group of indicators that are most important and which are feasible to implement in the short-term and medium-term using easily available data. An initial indication as to which indicators may qualify is given. The analysis may also assist those currently developing national and international indicators for access to water in taking the rights-based approach into account.

The paper concludes with a series of proposed steps that should be carried out to develop right to water indicators, involving a wide range of stakeholders. Indicators can be developed in the short-term that would rely on existing quantitative data sources as well on qualitative structural indicators which would assess whether necessary laws, policies and institutions are in place. Over the medium and longer term, new forms of data collection will be required to measure the right to water in a more comprehensive manner. International assistance to developing countries, an obligation under the International Covenant on Economic, Social and Cultural Rights, is needed to develop the necessary capacity. The more effective and widespread use of indicators would lead to greater clarity in implementing the right to water and stimulate greater efforts to ensure the right to water for all.

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## **Background and Acknowledgements**

This paper synthesizes and develops upon presentations and discussions at a workshop in October 2004 organised by the Heinrich Böll Foundation, Centre on Housing Rights and Evictions and Bread for the World. The full list of the participants is contained in Appendix 2.

The workshop was designed and organised by Ingrid Spiller, Heinrich Boell Foundation, Malcolm Langford and Ashfaq Khalfan, Centre on Housing Rights and Evictions and Danuta Sacher, Bread for the World. The participants benefitted from documentation submitted prior to the workshop by Paul Hunt, the UN Special Rapporteur on the Right to Health and Audrey Chapman, AAAS.

The current issue paper provides a framework for development of indicators for the right to water. As indicated in Section 7 of this paper, further work to develop the indicators is intended. Comments on the proposed framework, proposals on the formulation of the indicators and information on sources of data are warmly welcomed. These can be sent to Ashfaq Khalfan at [water@cohre.org](mailto:water@cohre.org).

The following is the list of presentations made at the two day workshop, which provided the base for this issue paper:

### **1. Opening Statements**

Right to Water and the Committee's Use of Indicators

*Eibe Riedel, Vice-Chair, UN Committee on Economic, Social and Cultural Rights*

Use of Indicators in Government Policy-Making

*Barbara Schreiner, Senior Executive Manager, Policy and Regulation, Department of Water Affairs & Forestry, South Africa*

### **2. Comparative Review of Development of Indicators for other Rights and Lessons Learnt**

Right to Health

*Audrey Chapman, Director, Science and Human Rights Program, American Association for the Advancement of Science (AAAS)*

Right to Housing

*Malcolm Langford, Senior Legal Officer, Centre on Housing Rights and Evictions (COHRE)*

Right to Food

*Eibe Riedel, Vice-Chair, UN Committee on Economic, Social and Cultural Rights*

### **3. Existing Indicators in the Water and Sanitation Sector**

Indicators for Quantity and Quality

*Jose Hueb, Water, Sanitation and Health, World Health Organization (WHO)*

Indicators for Accessibility, Affordability and Non-Discrimination

*Gora Mboup, Senior Demographic and Health Expert, Global Urban Observatory, United Nations Human Settlements Programme (UN-Habitat)*

Human Rights Perspective on Current Indicators

*Ashfaq Khalfan, Coordinator, Right to Water Programme, Centre on Housing Rights and Evictions (COHRE).*

#### **4. Methodology for Choosing Right to Water Indicators**

Human Rights and Other Criteria for Choice of Indicators

*Ashfaq Khalfan, Coordinator, Right to Water Programme, COHRE*

The Role of Communities in the Development and Use of indicators for Access to Water

*Puroshottam Paranjape, Society for Promotion of Participative Ecosystem Management (SOPPECOM)*

#### **5. Towards Development of Indicators: General Indicators, Availability and Physical Accessibility**

Human Rights Perspective

*Malcolm Langford, Senior Legal Officer, COHRE*

Statistics and Policy Perspective

*Gora Mboup, Senior Demographic and Health Expert, Global Urban Observatory, UN-Habitat*

User Perspective

*Dominic Ayine, Centre for Public Interest Law (CEPIL), Ghana*

#### **6. Towards Development of Indicators: Quality**

Human Rights Perspective

*Audrey Chapman, Director, Science and Human Rights Program, AAAS*

Statistics and Policy Perspective

*Jose Hueb, Water, Sanitation and Health, WHO*

#### **7. Towards Development of Indicators: Affordability and Non-Discrimination**

Human Rights Perspective

*Henri Smets, Conseil européen du droit de l'environnement (CEDE)*

Statistics and Policy Perspective

*Rolf Luyendijk, UNICEF, JMP*

User Perspective

*Barbara Schreiner, Senior Executive Manager, Policy and Regulation, Department of Water Affairs & Forestry, South Africa*

The organising partners are grateful to the participants for their presentations and comments at the workshop. They also would like to thank those who provided comments and supplementary information on the draft concept paper coming out of the workshop, including Barbara Schreiner, Rolf Luyendijk, Audrey Chapman, Andreas Kuck (GTZ), Mayra Gomez (COHRE), Jose Hueb, Gora Mboup, and Simone Klawitter. This information is reflected in the current issue paper.

## I. Introduction

The rights-based approach to development has gained significant attention amongst governments, development practitioners and civil society, particularly as the approach has the potential to significantly enhance the quality of programmes in the water and sanitation sector. The recognition of the right to water, and related human rights, provides an ethical and legal framework for mobilising support for prioritising water and sanitation as well as an expanded set of tools for policy-makers. It focuses attention on the most vulnerable and marginalised communities and their participation in decision-making. It provides a framework for governance and accountability, with its emphasis on legal and administrative structures and the need for monitoring of governments and other actors.

The adoption of the General Comment No. 15 on Right to Water<sup>1</sup> in November 2002 by the UN Committee on Economic, Social and Cultural Rights provided a seminal overarching methodology for determining people's rights and obligations of various actors, particularly the government. The General Comment is an authoritative interpretation of the *International Covenant on Economic, Social and Cultural Rights*, an international treaty ratified by 151 States. The General Comment called for States to use indicators to monitor the right to water.

### **UN Committee on Economic, Social and Cultural Rights and Indicators for the Right to Water**

To assist the monitoring process, right to water indicators should be identified in the national water strategies or plans of action. The indicators should be designed to monitor, at the national and international levels, the State party's obligations under articles 11, paragraph 1 [right to adequate standard of living, including water], and 12 [right to health]. Indicators should address the different components of adequate water (such as sufficiency, safety and acceptability, affordability and physical accessibility), be disaggregated by the prohibited grounds of discrimination, and cover all persons residing in the State party's territorial jurisdiction or under their control. ...

*General Comment No. 15 on Right to Water (para. 53).*

This Right to Water and Indicators workshop aimed to initiate the process of identifying the most appropriate indicators to monitor the extent to which States are implementing the right to water.

This paper brings together and develops upon the discussions held at a workshop on 25-26 October 2004 in Berlin. Participants included experts and practitioners in human rights, statistics, and water and sanitation policy, coming from a range of organizations, including the UN Committee on Economic, Social and Cultural Rights, UN agencies (World Health Organization – WHO, United Nations Children's Fund - UNICEF and the United Nations Human Settlements Programme - UN-HABITAT), national governments (South Africa and Germany) and international and national NGOs involved in advocacy and service delivery.<sup>2</sup>

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<sup>1</sup> Committee on Economic, Social and Cultural Rights, *General Comment 15 (The Right to Water)*, UN Doc. E/C.12/2002/11, available at: [www.ohchr.org/english/bodies/cescr/comments.htm](http://www.ohchr.org/english/bodies/cescr/comments.htm). The General Comment also specifically includes access to adequate sanitation (para 29). While sanitation is not mentioned in its title, it is an important part of the general comment, both because adequate sanitation requires an improved water supply for hygiene purposes (hand-washing) and also because poor sanitation has a negative impact on quality of water. In this document, sanitation has been given an equal weight within the monitoring process as water.

<sup>2</sup> List of participants included in Appendix 2.

The focus of the workshop was to consider the particular requirements of indicators for human rights monitoring of the right to water. This involved assessing existing *water* and sanitation indicators for their utility for human rights monitoring, and identifying *new* indicators to monitor crucial areas of human rights obligations that are not presently covered by current indicators.

The first day of discussions outlined the conceptual differences between human rights indicators and indicators which lead to statistical analysis of the delivery of water and sanitation (human development indicators). These discussions were initiated through a review of the development of indicators for other related rights, such as the rights to health, housing and food, and a discussion of the methodology of developing right to water indicators. The second day was spent discussing the creation of a 'toolkit' of indicators which fulfil the requirements of a human rights approach: examining existing indicators for suitability and developing an initial list of new indicators where no indicators were appropriate or relevant.

## II Explaining indicators

### 1. Indicators

Indicators can play an important role in the process of monitoring the success or failure of meeting a target or goal, or the means by which a target or goal may be realised. An indicator acts as a question or series of questions, which assist in determining the extent to which the target has been met. In the case of human rights monitoring, indicators are a way of measuring the State's implementation of its obligations required by the right to water, using data from questionnaires, surveys or censuses. Such indicators can be managed directly by the State or by regional or local governments, or by an external body, e.g. international or local NGOs or UN organisations. A State has the responsibility to individuals and groups within its jurisdiction to ensure that it is monitoring the realisation of their rights. At the international level, the UN Committee on Economic, Social and Cultural Rights carries out international monitoring of economic, social and cultural rights, including the right to water.

There was significant discussion on the methodology for developing human rights indicators, and it centred on two different approaches. As discussed below, these two approaches each provide advantages and it should be possible to merge them.

#### ***1.1 Analytical Categories Approach: Structural, Process and Outcome Indicators***

The first approach is that proposed by Paul Hunt, appointed by the United Nations Commission on Human Rights as the Special Rapporteur for the Right to Health.<sup>3</sup> In his Reports to the General Assembly in 2003 and 2004, the Special Rapporteur defined three different types of indicators: structural, process and outcome.

In brief, structural indicators ask questions about the policy environment for delivery of the human right, with reference to law, constitutions and policy institutions. For example, is there a development plan for expanding access to water services to all, with specific mention of the need to focus on vulnerable and marginalised groups? Is the right to water already a legal obligation within national legislation? These are usually qualitative indicators, which monitor to what extent

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<sup>3</sup> Report of Paul Hunt, Special Rapporteur of the Commission on Human Rights on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health to the 59<sup>th</sup> Session of the UN General Assembly, available at: <http://www.ohchr.org/english/issues/health/right/annual.htm>. The Special Rapporteur's Interim Report to the 58<sup>th</sup> session of the General Assembly, in which he commenced his consideration of right to health indicators is available at the same web-page.

the State has put in place necessary laws, policies and institutions in order to deliver upon a human rights obligation. Structural indicators are ordinarily binary in character, demanding either a ‘yes’ or ‘no’ response, but which will also frequently require additional clarifying questions. In the example above of a plan of action to expand access, it is insufficient to only determine whether there is a plan. Supplementary questions should refer to important characteristics of such a plan, for example, whether there is a time-frame specified in the plan,

Process indicators also ask questions about the policy environment, but in this case, they tend to demand a quantifiable response. These will ask specific questions, such as what proportion of the budget is being spent on delivering services to those who have nothing at all, compared with the proportion of budget spent on upgrading those who already have some form of access.

The final type of indicator in this framework is the outcome indicator. The majority of human development indicators are outcome indicators that monitor the extent to which individuals and groups do in fact have access to basic needs. Outcome indicators are normally quantifiable indicators. Outcome indicators can be used for human development and human rights purposes alike. One primary difference for a human rights indicator is that the data would be expected to be disaggregated across gender, age, ethnicity etc. This issue is further explored in Sections 4.1. and 4.4 of this paper .

### ***1.2 ‘Human rights Obligations’ approach***

A second approach, based on the experience of developing housing rights indicators, was presented at the workshop. Instead of beginning with analytical categories of indicators, this method commenced with the relevant human rights obligations themselves. In the case of housing, experts had first identified the key elements of the right to adequate housing - for example, secure tenure, affordability, physical accessibility and habitability – and then examined the various indicators that could be best used to measure the applicable aspect of the right to housing. For example, habitability of housing was defined as ‘number of persons per room’.

Potential indicators were therefore assessed on their potential to capture the human rights standard or target and it was of secondary importance as to whether the indicator could be classified as ‘structural’, ‘process’ or ‘outcome’. Indeed, it would therefore be possible to use a ‘cocktail’ of indicators to measure a State’s realisation of human rights, which is important since indicators are, by definition, an approximation of reality. Perhaps conversely, one of the practical advantages of this approach is that the large catalogue of potential indicators for human rights can be more easily reduced – or ranked in terms of importance - since there is a clear end-goal, the measurement of the States performance with respect to a particular element of a human right.

### ***1.3 Merged approach***

In practice, the nature of economic, social and cultural rights<sup>4</sup> will most likely entail the merger of both approaches for two reasons. First, since States are obliged under international instruments to adopt a number of non-quantifiable over-arching measures – for example legal and monitoring frameworks - structural indicators will play an important role in this regard. It is also more realistic to propose new structural indicators, rather than process or outcome indicators, as they do not rely on extensive quantitative data. Second, a State’s obligation with respect to a human right is not always evenly matched with the content of the right. While realisation of some aspects of a right is immediate – for example, the minimum essential level or non-discriminatory

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<sup>4</sup> Note that the following analysis would apply to some aspects of positive obligations associated with civil and political rights.

access - States are often given some leeway through the requirement that they only ‘take steps’ towards ‘achieving progressively the full realization’ of economic, social and cultural rights. This means that process indicators are important in capturing whether a government is complying with its obligation of conduct, its duty to ‘take steps.’

The methodology adopted by the workshop – as is evident in the attached matrix – represents a fusion of the two approaches. The indicators are organised according the latter approach, with the indicators categorised according to the human rights obligations approach, therefore making it conceptually clear how the various indicators fit together. The categories used in this matrix are: General Indicators, Availability, Physical Accessibility, Quality, Affordability, Sanitation and Vulnerable and Marginalised Groups. They are also coded according to whether they are structural, process or outcome indicators, which has the primary benefit of showing the form of data that would need to be utilised. The matrix of indicators represents the most significant issues to be addressed, rather than ensuring a balance of structural, process or outcome indicators. The matrix relies heavily on structural indicators, as these are far less costly and easier to collect than process and outcome indicators.

## **2. Benchmarking**

In the literature on the Committee on Economic, Social and Cultural Rights (the Committee), benchmarks are targets to progressively realise economic, social and cultural rights, measured through indicators. Benchmarks should be designed to ensure these rights in a deliberate, concrete and targeted manner.<sup>5</sup> They should be designed taking into account the resources and institutional capacities that are available to the State.

The benefit of benchmarking can be to assist States move towards progressive realisation of the right to water, and to measure their progress against these goals. In the process of State reporting under to the International Covenant on Economic, Social and Cultural Rights which is designed to occur every five years, the Committee encourages the State to propose certain benchmarks in dialogue with the Committee. However, this process of selecting benchmarks should not be confined to the reporting cycle. It can be replicated in other forums at the national level, for example, between civil society or human rights commissions and government.

If these benchmarks are used well, and the appropriate data collected and made available, the information can help to refine or reform policy. Benchmarks are normally used only with process and outcome indicators – they are usually not appropriate for structural indicators, as these refer to aspects of the State’s obligation that should be realised immediately, such as to establish a concrete plan of action or to ensure anti-discrimination laws and institutions are put in place. Benchmarks, can however, be set for process indicators related to the institutions, such as the amount of funding granted to a human rights commission.

It should be noted that the use of the word ‘benchmark’ in this section is based on its narrow definition in the literature on economic, social and cultural rights. The word is otherwise commonly employed to denote non-quantifiable targets or standards.

## **3. Millennium Development Goals**

The Millennium Development Goals (MDGs) were set at the Millennium Summit of 2000. The goal is to halve by 2015 the proportion of people who are unable to reach or to afford safe

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<sup>5</sup> Committee on Economic, Social and Cultural Rights ‘General Comment 3 (The Nature of States Parties Obligations)’ UN Doc. E/1991/23. paras. 1-2.

drinking water.<sup>6</sup> The goal to halve by 2015 the proportion of people who do not have access to basic sanitation was added to the MDGs at the World Summit on Sustainable Development in Johannesburg in 2002. The WHO-UNICEF Joint Monitoring Programme (JMP) estimates that 1.1 billion people currently do not have access to drinking water sources that are likely to be safe (i.e. 'improved water sources') and which allow for sufficient water to be collected. The JMP estimates that 2.6 billion people do not have access to sanitation facilities that are likely to meet basic standards of safety and hygiene (i.e. 'improved sanitation').<sup>7</sup> The attainment (or lack thereof) of the MDGs is measured primarily by outcome human development indicators. These indicators, particularly if they are disaggregated according to gender, ethnic group, geographical area etc., can be effective human rights indicators.

While the MDGs represent a realistic attempt to improve living conditions, they do not necessarily require a change in policy to focus on the most vulnerable or marginalised populations. Even if the goals are met, this will not necessarily represent an improvement in the living standards of the poorest people in the world. In delivering services to halve the proportion of people without access to safe water and sanitation, it would often be expedient to deliver services to those who are easiest to reach, to improve the access of those who currently receive an inadequate service, rather than of those living in the conditions which are hardest or most costly to ameliorate, such as those living in remote areas, or those living without legal land tenure on unsuitable land.

The rights-based perspective provides guidance on the manner in which the achievement of the MDGs must be implemented by requiring a particular focus on the most vulnerable and marginalised people, who are least able to gain access to essential services without State assistance.

#### **4. Current quantitative indicators for access to water**

Before embarking on a discussion on what forms of indicators will best capture the realization of the right to water, it is important to review the existing quantitative indicators for water and sanitation that are currently being used internationally, and what data are already collected. It is important to be aware of current quantitative indicators given that establishing new indicators is often costly and time consuming. As far as possible, existing indicators for which data are being collected should be used to measure the various components of the right to water. Only where existing indicators are insufficient should there be an attempt to propose new supplementary indicators. The benefit of this approach is to avoid imposing burdensome monitoring and reporting obligations on States and other actors, as well as to ensure the practical realisation of an indicators approach to the right to water.

There are numerous surveys which collect data on the delivery of water and sanitation. States collect information on these issues from their national censuses. Water ministries collect data in order to assess how successful their policies are, and, in an increasing number of cases, to report to national and international human rights institutions. International organisations, such as UNICEF and the World Health Organization (WHO) and others support nationally representative household surveys to assess the health status of a population. This is carried out through government survey processes, such as national censuses, or the internationally supported surveys which include:

- Demographic and Health Surveys (DHS) from the US Agency for International Development (USAID), which commenced in 1998,

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<sup>6</sup> Millennium Declaration, G.A. Res. 55/2, (2000) para. 19.

<sup>7</sup> See Section 5 below for further discussion of this point.

- UNICEF's Multiple Cluster Indicator Surveys (MICS), introduced in 1995,
- WHO's World Health Survey (WHS), which are usually carried out by national statistics offices, introduced in 2002,
- Living Standards Measurement Study (LSMS), developed by the World Bank,
- Urban Inequities Survey (UIS) currently being tested by UN-Habitat.

International and local development NGOs carry out surveys in order to assess where they should focus their efforts. Local communities also carry out surveys for mobilisation or lobbying purposes, in order to represent their needs to the appropriate authorities, or simply to gather information for themselves, in order to carry out development projects.

Currently, only the nationally representative household surveys like the DHS, MICS and WHS have achieved a high level of comparability with each other due to ongoing efforts to harmonize survey questions and response categories since 1995. Very few other surveys are compatible with, or comparable to each other, even where they have similar aims and data needs. This is because such surveys ask different questions at different times, and sometimes to different classes of people. This makes comparison between surveys, geographical areas and over time difficult even within the same State or locality.

The reason for the extensive number of surveys is organisational and political. Surveys are constantly being designed and refined for the particular task that they have to fulfil. There is little cross-referencing between surveys within a region, let alone within a State. Different organisations have a different need or focus for the information that they gather. There is contradictory understanding of the appropriate indicators, and the questions are framed in slightly different ways that will change the data response. States will be looking for information in a very different way from international organisations, or indeed community groups themselves.

Any organisation carrying out a survey will assume that the responses that they receive will be accurate, but with such a multitude of surveys, there is the potential that respondents become cynical or attempt to use the survey for their own gains, responding in a way that they hope will influence the outcome. There is also a problem of people simply not answering the question correctly, or having different reference points from the people who wrote the survey. Extractive surveys, which are for the use of governments or NGOs alone, where the results are not brought back to the respondents may engender suspicion from individuals or groups, which can be counter-productive in the long-term.

The WHO-UNICEF Joint Monitoring Programme is perhaps the most authoritative source of information on access to water. It relies primarily on population-based data obtained through nationally representative household surveys.<sup>8</sup> The Programme no longer uses reported data from national government sources. The Programme provides information on access to improved water supply and sanitation. Improved water sources are those that are likely to protect the water source from external contamination, by nature of its design features. In essence, the form of technology is used as a proxy for the safety of the water. 'Improved water sources' include household connections, public stand-pipes, boreholes, protected dug wells, protected springs and rainwater collection. 'Unimproved water sources', which are assumed to not provide safe or sufficient quantities of water include unprotected wells, unprotected springs, rivers or ponds, tanker truck water, bottled water (due to insufficient quantities) and vendor-provided water.

A household is only considered as having access to an improved water source if the time taken to collect water is short enough (i.e. 30 minutes or less) to allow collection of the essential amount

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<sup>8</sup> These include the Demographic and Health Survey (DHS) and the Multiple Indicators Clusters (MICS) Survey.

of water (at least 20 litres) (see also Section 5.3 below).<sup>9</sup> However, a number of participants raised the concern at the workshop that the approach can exclude from measurement a range of other groups who also lack access to water and sanitation. While some individuals and communities may have ‘physical access’ to an improved water supply or sanitation facility, it may be unaffordable or not regularly continuously available in accordance with General Comment No. 15 on Right to Water. See the further discussion below at Section IV.1. UN-Habitat has developed indicators specifically for the urban environment. These have recently been pared down to a bare minimum, as it was proving difficult to collect the wide range of indicators that were previously specified.<sup>10</sup>

Current international indicators for water and sanitation, including those listed in this section generally focus on quality, quantity and availability of water and sanitation supplies. Household surveys commonly monitor where people fetch their drinking water and what kind of toilet facility they use. These surveys also consider other issues of sanitation, such as the disposal of children’s faeces. There may also be consideration of hygiene issues, such as whether there is a hand-washing facility near the sanitation facility, and how water is stored in the home. These are primarily outcome indicators and are generally monitored through household surveys. There are also existing indicators regarding access to water and sanitation in schools and clinics, and from UNICEF and WHO surveys, questions around hygiene education and the extent to which it is taught in schools (e.g. whether hygiene education is in the national curriculum).

In general, there is less measurement of affordability, access by marginalised and vulnerable groups and the quality or existence of broader legal and institutional frameworks or adequate budgetary support. This deficit makes it difficult to track progress in the realisation of the right to water. It also undermines efforts to track progress in the MDGs, in particular the MDG on water which refers, in part to the proportion of people unable to **afford** safe drinking water.

Efforts to monitor the right to water should not rely on international indicators alone. National level indicators, collected by the State or an independent national organisation are necessary in order to address a wider range of issues. Sample surveys, which many of the existing international monitoring processes rely on, can have the drawback that they do not provide sufficient information on disaggregation, since the sample size of a particular group (such as an ethnic minority) within the sample is normally too small to make proper generalisations. Country data, for example from a census, can give a more accurate picture of this issue. States also need to formulate more detailed indicators, beyond the small number of indicators used at the international level, in order to guide policy development and implementation.

National level sources will not always be reliable. This is particularly the case where official figures are based on information reported to government officials only, rather than a scientific survey. The workshop was given the example of rural functionaries in parts of India who are normally over-worked and are responsible for reporting on the situation in very large areas. The information collected by such functionaries is reported upwards and becomes the basis of national statistics, but may not be accurate. There is a need for greater investment and international support towards better national statistics collection.

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<sup>9</sup> Presentations by Jose Hueb, WHO and Rolf Luyendijk, UNICEF, from the Joint Monitoring Programme. See also: *Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress*, WHO and UNICEF, 2004, available at [http://www.who.int/water\\_sanitation\\_health/monitoring/en/jmp04.pdf](http://www.who.int/water_sanitation_health/monitoring/en/jmp04.pdf).

<sup>10</sup> Presentation by Gora Mboup, UN-Habitat, Existing Indicators in the Water and Sanitation Sector: Indicators for Accessibility, Affordability and Non-Discrimination.

## 5. Harmonising indicators

The WHO/UNICEF Joint Monitoring Programme (JMP) for water supply and sanitation has recently made efforts to harmonise the most essential indicators amongst the major international household survey instruments. The aim of this exercise is to enable different agencies to use the same survey data and to know that the indicator questions have been well researched. A significant advantage of the harmonisation programme has also been to reduce the number of questions that are asked to a bare minimum making collection of the data easier. The process also allows surveys to be flexible in developing questions beyond these harmonised indicators to address needs in particular countries.

A further advantage of a harmonisation programme is clearly the opportunity to save money and effort that is currently spent on carrying out surveys by a number of organisations. A standardised survey, accepted by all users of surveys is of immeasurable assistance.

In order to carry out this harmonisation exercise, it has been important for the JMP to build consensus between different organisations as what are the most important indicators, how the questions should be asked, and how the data should be processed. The harmonised questions are limited to seven, four for water supply, two for sanitation and one for hygiene, and are seen as the core questions rather than a full survey.<sup>11</sup> The seven indicators that are currently addressed in the survey focus on access to improved water supply, which also includes a question on who in the household usually collects water and a question about what, if any, home-treatment methods are applied to make the water safer to drink; access to improved sanitation including the number of households using the facility and a question on safe disposal of children's faeces.

The harmonised water indicators are designed to locate data on whether a water supply is improved or unimproved (with a definition supplied, which outlines the probability of the water supply being improved or unimproved), and how long it takes to go to the source, get water and come back. The latter is the 'water collection time', which is a proxy measure for the ability of people to collect their daily requirement of water. The sanitation questions also aim to monitor whether latrines/toilets are 'improved' or not, and further include a question as to whether the sanitary facility is shared or not shared. Frequently, an 'improved' latrine is no longer hygienic if it is shared. The hygiene question relates to the safe disposal of children's faeces.

Though the JMP's task force on harmonisation discussed the possibility of new questions and indicators to monitor reliability and affordability of water supply services as well as aspects of privacy and cleanliness of sanitation facilities. However, no definite questions and indicators on these issues have been formulated yet and research into this is still ongoing. For example, the JMP may use these survey questions for collecting data on health as it relates to water and sanitation, but another organisation may be more interested in the privacy or security aspects of water and sanitation services and will consequently add appropriate questions to cover these issues.

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<sup>11</sup> See the *Guide for Water Supply, Sanitation and Hygiene Related Survey Questions (draft)* October 2004, WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP).

### III Human rights obligations

#### 1. Key features of human rights obligations with respect to water and sanitation<sup>12</sup>

The right to water puts the onus onto States who have ratified the *International Covenant on Economic, Social and Cultural Rights* (which has been ratified by 151 States) or, to a slightly lesser extent, other relevant international human rights instruments,<sup>13</sup> to demonstrate the intention, and political and financial commitment, to deliver universal access to improved water supply and sanitation for all residents. The most important aspects are:

1. Development and implementation of a national plan of action, which includes delivery of services to the most vulnerable, without any form of discrimination;
2. Participation of individuals and groups in the development of policies and programmes;
3. Accountability and monitoring mechanisms, which allow for the participation of individuals and groups.
4. Development of law and policy measures to entrench protection and facilitate realisation of the right to water.

There is also a specific requirement for other States to provide necessary international assistance and cooperation.<sup>14</sup>

In the General Comment on the Right to Water, the Committee on Economic, Social and Cultural Rights has articulated the key elements of the right to water, stating “The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses.”<sup>15</sup> It defined the various elements as follows:

*Sufficient*: An adequate quantity must be available in the geographic and social circumstance and in accordance with international guidelines. (According to the WHO, a norm for basic access is 20 litres per person per day).

*Safe*: Water must meet safety requirements for each use and States are directed to the WHO’s Guidelines on Drinking Water Quality.

*Physically accessible*: Water must be within safe physical reach, in or near the house.

*Affordable*: Water should be affordable, not reducing a persons’ capacity to buy other essential goods. This means that water must sometimes be provided free.

*Non-discrimination*: Water and water facilities and services must be accessible to all, including the most vulnerable or marginalised sections of the population.

The Committee also notes the importance of the right of accessibility to information water issues.

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<sup>12</sup> For further details, see M. Langford, A. Khalfan, C. Fairstein and H. Jones, *Legal Resources for the Right to Water: International and National Standards* (Geneva: COHRE, 2004), available at: [www.cohre.org/water](http://www.cohre.org/water).

<sup>13</sup> These include in particular with respect to children, the *Convention on the Rights of the Child*, to women, the *Convention on the Elimination of Discrimination Against Women*, and to racial and ethnic groups, the *Convention on the Elimination of All Forms of Racial Discrimination*.

<sup>14</sup> General Comment No. 15, para. 38.

<sup>15</sup> General Comment No. 15, para. 2.

## 2. Human Rights Obligations: Respect, Protect, Fulfil

As stated in the General Comment,<sup>16</sup> in order to comply with the right to water, States must respect, protect and fulfil the various aspects of the right to water set out in the preceding section.

*Respect:* The obligation to respect means that States must refrain from interfering directly or indirectly with the enjoyment of the right to water.

*Protect:* The obligation to protect means that the States must prevent third parties from interfering in any way with the enjoyment of the right to water.

*Fulfil:* The obligation to fulfil means that States must facilitate, promote and provide water and sanitation services for those who do not currently enjoy the right to water.

Indicators should capture each of these three categories of obligations. Most current indicators, however, only measure obligations similar to the obligations to fulfil. Clearly many States are a long way from complying with their obligations to a right to water, and in order to be able to assess that progress is being made towards universal access to water and sanitation, States are measured by their progressive realisation of the right to water. According to the Committee on Economic, Social and Cultural Rights, targets or benchmarks are to be set by States for a five year period, and agreed upon with the Committee, as a statement of what a State can realistically achieve. There should be no regression from already achieved standards regarding the right to water, which could indicate failure to comply with the obligation to respect, protect or progressively realise the right to water. According to the Committee on Economic, Social and Cultural Rights, there is a strong presumption that retrogressive measures taken in relation to the right to water are prohibited under the Covenant. The State then bears the burden of proving that all alternatives were considered, that the action is justified and that the State has drawn upon its maximum available resources to meet economic, social and cultural rights. Even in times of severe resource constraints, at least the vulnerable members of society must be protected by the adoption of relatively low-cost targeted programmes, which still ensure a basic level of access..<sup>17</sup>

## IV Human rights methodologies for indicators

Indicators for human rights measure the extent to which a human right is being fulfilled or enjoyed in a given situation. They may be based on quantitative or qualitative information. They measure inputs to realizing specific human rights as well as outcomes or the degree to which the human rights are being enjoyed.<sup>18</sup> The primary addition of a human rights perspective to human development indicators is to address the State's effort to realise human rights. The conduct of the government is as important as the outcome from a human rights perspective. Consequently there is a range of new indicators which are needed to monitor the extent to which States are implementing the right to water. There are three sub-questions which will assist in clarifying how the rights-based indicators should be developed:

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<sup>16</sup> General Comment No. 15 paras. 21-36

<sup>17</sup> General Comment No. 15, paras 13, 19.

<sup>18</sup> A. Chapman, "The Status of the Development of Indicators for Economic, Social and Cultural Rights with Particular Reference to the Rights to Education, Participation in Cultural Life, and Access to the Benefits of Science" (forthcoming from UNESCO, 2005), p. 6.

- a. How precisely do we measure the State action? What are the policy implications of the indicator?
- b. Who is going to use the indicators?
- c. Is it feasible to collect the data and how?

## **1. How is State action measured, what are the policy implications of human rights indicators?**

Within a human rights approach, indicators will not focus just on outcomes, for example, how many latrines have been built, or how many people have access to an improved water source, but more particularly on inputs, on policies that target the most vulnerable populations, and which examine how budgets target those lacking in basic services. These will be measured by structural and process indicators, measuring States' intentions, their policies and their financial inputs.

Indicators must examine all major aspects of the right to water. While current indicators measure distance to a source of water or time taken to collect water, they often do not take into account affordability of water and the continuity of supply. There are significant limits to indicators which do not capture all these elements, as the information which is created is so general as to be potentially misleading. Gora Mboup of UN-Habitat provided the example of the coverage of water services in Addis Ababa, which was 80 per cent if one looked only at physical accessibility, but when affordability and continuity were taken into account, the percentage of residents in reality accessing improved water supplies was reduced to 50 per cent.<sup>19</sup> The generally good coverage of urban areas belies the terrible conditions that exist in slums. Without a more comprehensive analysis of the obstacles to real access to water, the information resulting from indicators can be misleading or even hide pernicious discrimination.

If human rights indicators are well designed, they should be able to assist in the development of effective policies that will deliver human rights. Currently, human development indicators tend to demonstrate the extent of the problem but they do not provide disaggregated information nor assess governance related obstacles to the provision of adequate water supply and sanitation. It is therefore sometimes almost impossible to be able to identify how or where to focus efforts to improve the delivery of water and sanitation services, on the basis of the indicators. Human rights monitoring therefore adds questions relating to the legal and policy institutions established by the State, many of which will be evaluated using structural indicators.

One of the most important implications of reviewing indicators from a human rights perspective is whether the indicator is disaggregated, that is, does it break up the relevant data according to significant variables, such as gender, ethnicity, race, religion, nationality, and social origin. Because a human right is a universal entitlement, its implementation is measured particularly by the degree to which it benefits and empowers those who hitherto have been among the human rights "have-nots."<sup>20</sup> It is not sufficient to only disaggregate national statistics into rural and urban populations, a categorisation that even in itself raises questions of relevance and accurate definition. In order to fully understand which sections of the population are not able to access their right to water and sanitation, it is necessary to examine levels of access according to gender, disability, racial or ethnic groups, geographic location (urban and rural, informal and formal settlements) and others. This is important for informing policy design and implementation, so that delivery of services can be focused on the most in need, as well as identify discriminatory

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<sup>19</sup> Presentation by Gora Mboup, UN-Habitat, Existing Indicators in the Water and Sanitation Sector: Indicators for Accessibility, Affordability and Non-Discrimination.

<sup>20</sup> See Audrey R. Chapman, "A Human Rights Approach to Health Care Reform," in Audrey R. Chapman, ed., *Health Care Reform: A Human Rights Approach* (Washington, D.C.: Georgetown University Press, 1994), p.153.

practices, and put the necessary processes in place, whether legal, technical or social, to ensure that all residents are able to access their rights.

The obstacles to disaggregation are not just technical, they are also political in nature. Some States have legislation forbidding the collection of information along religious or ethnic lines. Other States are unwilling to collect such data, or even if they collect such data, may be reluctant to make it publicly available. It can be argued that disaggregating information in this way or making it public can lead to conflict. A counter-argument is that keeping such information secret is inconsistent with human rights principles of transparency and public participation. In addition, it could be argued that where there is no authoritative information, perceived inequalities between ethnic or other groupings may be exaggerated. From a human rights perspective, showing solid evidence that inequality exists is sometimes required in order to build a social consensus for social reforms. The practise of the UN Committee on Economic, Social and Cultural Rights is to always request disaggregated data. However, as the collection of disaggregated data requires a considerable amount of resources, both human and financial, it is important to prioritise which issues are to be disaggregated within a particular State. It may not, for example, be relevant to ask questions on religion or language in countries where there is little likelihood that these are differences in access to water along these lines. Any determination in this regard should be carried out in consultation with the relevant groups. Some minorities may not wish to be categorised separately.

It should be noted that one does not need indicators for all situations. Contextual non-indicator information may be needed in the place of indicators, or in accompaniment to it. An example of this might be on tariffs and subsidies, where a thorough study would have to be carried out to ensure that the subsidy or tariff structure is accurately targeted in theory as well as in practice. From a human rights perspective, there should not be a 'one size fits all' tariff or subsidy structure, but rather a variety of options that provide affordable services for the poorest.

## **2. Who will use human rights indicators?**

Ideally, human rights indicators will be used by a wide range of institutions, each of whom will focus on different aspects of the right. Not all users will be interested in monitoring all indicators. Each user can select the most pertinent indicators for their mandate.

The following is a list of types of institutions which would be expected to find human rights indicators useful:

1. Human rights treaty bodies, such as the UN Committee on Economic, Social and Cultural rights, who are responsible for monitoring States' compliance with human rights treaties. Such bodies exist at the global and the regional level (these include human rights institutions that cover Europe, Africa and the Americas). National level bodies, such as human rights commissions and courts, will be interested in using human rights indicators for monitoring purposes.<sup>21</sup> All types of indicators (structural, process and outcome) will inform reports on States compliance with the right to water.
2. International organisations, such as UN organisations (WHO, UNICEF) and NGOs will use human rights indicators to inform policy and focus their work, either globally or locally within a State. Disaggregated human rights indicators will assist in identifying the most vulnerable groups. Again, all types of indicators will be pertinent.

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<sup>21</sup> Dominic Ayine, of the Centre for Public Interest Law (Ghana), indicated situations in which such statistics were essential to the success of litigation on the right to housing in Ghana.

3. National ministries are required to collect data for their own purposes for assessing, informing and improving policy, to measure local government progress, and also to fulfil requirements from national as well as international human rights bodies. One example is South Africa, where the South African Human Rights Commission, which has a mandate to monitor the right to water, recognised in the South African Constitution, is requesting the Water Ministry to report on various components of the right to water for which data are not currently collected.<sup>22</sup>
4. Local authorities and local NGOs and community organisations will probably focus on the outcome indicators, which, if they are sufficiently disaggregated will have an impact on the design of policy and projects, and may also be used for lobbying or as a tool for litigation.

### 3. Comparison between States and over time

There is consensus that it is generally useful for there to be some consistency of indicators, in order to avoid duplicating surveys unnecessarily. The work to develop human rights indicators can follow in the footsteps of the JMP's harmonisation programme, and will lead to an ability to compare data between regions, States and over time.

Comparison over time is important in order to be able to measure progressive realisation, the principle by which each State is obligated to improve its own economic, social and cultural rights record, without it necessarily being compared to another State. Comparison between States is often more controversial as for a variety of social, cultural, technical, economic and political reasons, one State is further behind in the realisation of human rights than another for reasons that have little to do with the commitment of a State to economic, social and cultural rights. Comparison between States is possible with regard to common goals established under the ICESCR, and clarified by the UN Committee on Social, Economic and Cultural Rights. These include the minimum core obligations of economic, social and cultural rights, the obligation to refrain from discrimination and the obligation of conduct to take deliberate, concrete and targeted steps towards full realisation of the right.<sup>23</sup>

Bench-marking can be seen as a way of encouraging states to take responsibility for their own obligations (See Section II.2). However, it is important to note that many of the non-progressive indicators can be measured across States. For example, this would include the existence of legal and policy measures, non-discrimination, ensuring respect for the rights – for example, not unfairly disconnecting water supplies - and ensuring the minimum essential level of the rights. An interesting approach has also been provided by the European Committee on Social Rights, a regional human rights treaty body monitoring the performance of States under the European Social Charter. The Committee has stated that the minimum wage in each State must always be at least two-thirds of the average national wage, setting a common bench-mark for all States under the European Social Charter.<sup>24</sup>

Flexibility is also demanded of indicators, to allow for culturally or technically specific questions to be asked. For example, in the housing rights field, overcrowding is normally determined as

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<sup>22</sup> Presentation by Barbara Schreiner, Senior Executive Manager: Policy and Regulation, Department of Water Affairs and Forestry “Use of Indicators in Government Policy-making.”

<sup>23</sup> Committee on Economic, Social and Cultural Rights ‘General Comment 3 (The Nature of States Parties Obligations)’ UN Doc. E/1991/23, paras. 1-2, 9-10.

<sup>24</sup> Scott Leckie, “Another Step Towards Indivisibility: Identifying the Key Features of Violations of Economic, Social and Cultural Rights” (1998) 20 Human Rights Quarterly, p. 100.

occurring when there are two persons to a room. In the African context, this was changed to three persons by UN-Habitat as surveys showed that such a number was seen to be culturally acceptable. This type of flexibility makes the possibility of comparing between States more complex.

For international development assistance, comparison between States is more useful, where the comparison assists agencies to decide on which States, or which geographic areas and communities within a State they need to focus their efforts. However, indicators should be used for this purpose only with caution, particularly where one is relying on nationally determined indicators which may not be comparable with those in other countries.

#### **4. Feasibility and costs of collecting information**

Many 'structural indicators' can be collected with little cost, as they are normally yes/no questions on the overall policy framework in the State. However, in order to be useful, such questions generally need to be quite comprehensive and anticipate the range of possible responses. Structural indicators require the filling in of a questionnaire by a government official or by an independent researcher (with the State given the opportunity to review the information). This information should then be verified by an independent body. One source of information that will assist in the collection of data on structural indicators is the Water Law and Standards Database of the World Health Organisation (WHO) and the United Nations Food and Agricultural Organization (FAO). This database, which is in development, collects information that is relevant for many of the issues related to the right to water.

Human rights treaty bodies already request information from States as part of their periodic review of each State's implementation of the respective human rights treaty. Information is therefore contained in the State's report to the treaty body. The treaty bodies also have access to information from civil society organisations, which can produce parallel reports, as well as information from other United Nations bodies. One of the primary ways in which the indicators proposed here can be implemented is through their integration, as appropriate, by treaty bodies into their Reporting Guidelines. The UN Committee on Economic, Social and Cultural Rights, for example, uses indicators in order to ask more pointed questions, with the result that the dialogue is more effective. Quantitative data are not essential for such purposes.

For quantitative indicators (many, or most, process and outcome indicators), one of the major drawbacks of the collection of indicators is the time and the cost of gathering such detailed information, particularly disaggregated information. Very few governments of developing countries have the financial or technical capacity to collect the amount of disaggregated data that are required by the human rights approach. In South Africa, for example, government agencies want to obtain disaggregated data, but are still battling to find out how many people actually do not have access to services. This has severe implications for the efficacy of any set of indicators. It is important that in the development of indicators this fact is kept at the forefront of the debate. It is more valuable to collect reliably and regularly a few well-targeted indicators, than to have a wide range of specific and rigorous questions which will never be answered.

There is a serious issue of a lack of capacity within organisations, local municipalities and national governments in developing countries to collect information for indicators, and this is compounded when there are simply too many indicators. An important role in the development of right to water indicators is to find a way to limit the number of indicators, and to identify those that are most pertinent for monitoring the right to water. The cost of monitoring can be considerable, and the cost of getting accurate information in place of 'almost accurate' information may not be worth the expense. However, where the indicators chosen are correct

and useful for policy purposes and are actually taken into account by policy makers, the cost of the survey will normally pay for itself through the gains from better designed services that are more likely to reach those who need them the most.

In its first General Comment, the UN Committee on Economic, Social and Cultural Rights noted that the process of monitoring and gathering information regarding social, economic and cultural rights is potentially time-consuming and costly. It therefore noted that international assistance and cooperation, as provided for in the Covenant, may well be required. It invited States that felt that they did not have the capacity to undertake the monitoring process to indicate to the Committee the nature and extent of any international assistance that they may need.<sup>25</sup>

The difficulty of data collection in many instances will require greater reliance on structural indicators, or the use of proxy indicators where direct indicators are not feasible. It may be possible to ‘cut corners’ by asking questions of households rather than individuals. Collecting data per (‘average’) household will clearly be a simpler task than collecting the same information per person, and the difference in the level of accuracy may not be significant. However, it is important to ensure that issues relating to gender and the particular needs of children are not left out by relying on this approach. It should also be noted that the effort being committed at the international level to indicator development and data collection is expanding considerably, therefore creating new opportunities for addressing human rights issues. To conclude, it will be necessary to adopt the principle of ‘progressive realisation’ used in economic, social and cultural rights to the development of indicators. It will be necessary to start with a realistic scope for the indicators, but to aim towards improving data collection capabilities with a view to eventually measuring all key aspects of the right to water.

## **5. Human rights indicators for housing, health and food**

Indicators for the rights to housing, health and food are at an early stage of development by a range of institutions including international organisations such as the Office of the UN High Commissioner for Human Rights, UN Human Settlements Programme (UN-Habitat) and the World Health Organization, with the support of research bodies and NGOs such as the American Association for the Advancement of Science and the Centre on Housing Rights and Evictions.

There are some common issues that those involved in developing human rights indicators have identified. First, some aspects of human rights obligations will not have a simple and matching indicator. Circumstantial information will be needed in order to complement the indicator in order to effectively measure the realisation of the right. This occurs, for example, where a component of the right is inherently non-tangible. In the case of the right to housing, one example is forced evictions, which are only permissible where a number of procedural and substantive requirements are met. A similar example relates to disconnections of water, which are only consistent with the right to water if a number of procedural and substantive requirements are met. Second, there has to be a limit to the number of indicators or they become impossible to monitor effectively, let alone collect data on. Third, given that a range of different users will utilise indicators, and have different priorities, it is necessary to develop a ‘toolbox’ of indicators to address the needs of all groups. That is to say, while there may be a small number of indicators to be used by all groups (normally those that are required for international monitoring by the international human rights treaty bodies), it is necessary to recognise that each user, such as a national government, will wish to maintain and collect data on supplementary indicators.

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<sup>25</sup> Committee on Economic, Social and Cultural Rights ‘General Comment 1 (Reporting by States parties), UN Doc. E/1989/22, para. 3.

In order to streamline the process, the development of the indicators for the right to water will be compatible with the typology of other, related rights, so that all those involved are able to follow a common framework, and able to use the same data. It is necessary to be aware of the challenges facing governments, who are faced with many reporting obligations (to Parliaments, international treaty bodies, and others). There are also common indicators relating to various economic, social and cultural rights, for example accountability mechanisms. In addition, water is a cross-cutting issue, which forms a part of human rights to housing, health, food, work, education, and culture. Access to water and sanitation are in themselves key indicators for the rights to health, adequate housing and food. As a result, human rights indicators should be broadly compatible with each other, and correspond as far as possible to existing indicators used internationally. The approach of the workshop followed a methodology close to that developed for the right to housing, but also was structured so as to be compatible with the typology currently being proposed for the right to health. See the discussion above in section II.1 on the various types of indicators that may be used for human rights monitoring.

### ***5.1 Development of Indicators for the Right to Housing<sup>26</sup>***

UN-Habitat, in collaboration with COHRE, has carried out a significant amount of research on housing rights indicators and prepared a draft set of indicators. In November 2003, an Experts Group Meeting (EGM) was convened by UN-Habitat and the United Nations High Commissioner for Human Rights to discuss the development of indicators on Housing Rights.

The indicators drawn up at this EGM followed the normative content of the General Comments No. 4 (Right to Adequate Housing) and No. 7 (Forced Evictions), which included security of tenure, availability of services/materials, affordability, habitability, accessibility, location, cultural appropriateness, non-discrimination and participation, forced evictions, the legal and institutional policy frameworks. Fifteen indicators were developed to address these issues and a questionnaire based on these indicators will be developed and disseminated to States.

### ***5.2 Development of Indicators for the Right to Health<sup>27</sup>***

There has been a significant amount of work done on the development of indicators for the right to health by the United Nations Special Rapporteur on the Right to Health, Paul Hunt, the World Health Organization and the American Association for the Advancement of Science (AAAS). The Special Rapporteur has proposed the categorisation of right to health indicators into structural, process and outcome indicators, as discussed in Section II. 1 above. To a large extent, existing indicators are process and outcome indicators. The demands of the human rights approach are usually emphasised in the structural indicators, for which the process and outcome indicators provide supporting data. The World Health Organization has organised a number of international meetings to discuss options for developing right to health indicators.

A project has been proposed by AAAS, working with the UN Special Rapporteur for the Right to Health, and the Health and Human Rights Advisor of the World Health Organization, which would aim to develop a manageable set of indicators to measure population health status from a human rights perspective. The objective is to establish a tool-box of a relatively small number of indicators that can be used both for human rights evaluations and for health status assessments.

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<sup>26</sup> Presentation by Malcolm Langford at the Indicators Workshop, "Comparative Review of Development of Indicators for other Rights and lessons learnt: Right to Housing." See, for detailed information, *Report of the Expert Group Meeting on Housing Rights Monitoring*, Geneva, November 2003, organised by UN-Habitat and the Office of the High Commissioner for Human Rights. This document and a number of relevant background papers are available at: [http://www.unhcr.org/programmes/housingrights/expert\\_group\\_meeting.asp](http://www.unhcr.org/programmes/housingrights/expert_group_meeting.asp).

<sup>27</sup> Presentation made by Audrey Chapman at the Indicators Workshop, "Comparative Review of Development of Indicators for other Rights and Lessons Learnt: Right to Health."

Existing health indicators will be screened in three ways: to consider their significance for specific health outcomes; to utilise a series of human rights principles and criteria drawn from the right to health and to consider whether developing countries are likely to collect the data necessary for the use of the indicator.

To date, 38 structural and process indicators have been developed for the first of seven sets of indicators, namely children's rights. The other sets of indicators will cover reproductive and sexual health, essential medicines, HIV/AIDS, other infectious diseases, the environmental dimensions of health, and finally, a set of indicators to assess the overall health system infrastructure. It is recognised that this is a large-scale undertaking, not just to develop the indicators, but particularly then to have the data collected from the States. There is a sense that while it is valuable to define all the possible indicators (the tool-box), to ensure that useful data is actually collected, States will have to prioritise the issues which are to be addressed.

Lessons learnt from the above two processes include:

- Some aspects of the rights obligations do not require an indicator
- There is a danger of over-inclusion, leading to immeasurability, and under-inclusion, which would mean a true picture of a State's implementation of a right cannot be drawn.

## **6. Local level indicators and benchmarks**

The human rights indicators proposed in this paper would be used primarily at the international and level. It should be kept in mind that there is an important role for indicators and benchmarks that are developed at the local level with the participation of communities, in particular those whose rights to water is not realised, or whose right is threatened. This would allow individuals and groups to develop or modify the indicators and monitoring processes that they themselves see to be the most important issues for their access to water and sanitation services.

The use of international and national indicators should not preclude the development of local level indicators. Central to a human rights based approach is the participation of individuals and groups from the communities themselves in development policies and projects. One of the key areas for this is the participation in the collection of information about themselves. It is important for communities to understand the information that is generated about them, and an important mobilisation and educational tool that can be used by communities to lobby government for access to their rights. Efforts should be made to involve local communities in the data collection process, for example by carrying out their own enumerations to verify official figures.

Conversely, the need to set indicators at the local level should not be used to replace uniform national and international indicators, which serve as the basis for international and national action. International, national and local level indicators each have different roles to fulfil.

Benchmarking can also operate at the local level, with targets set per locality. In some localities in India, local targets are painted on a central wall, so that all residents are informed of the local planning agenda. This approach can give local residents the opportunity to be involved in the monitoring of human rights, fulfilling within the development of human rights indicators the essential aspects of local participation in decision-making processes.

## V Potential indicators for the right to water

The right to water workshop devoted the second of its two days to discussing potential indicators for the right to water and prepared a draft matrix of potential indicators. These are arranged and designed in accordance with the framework of the General Comment on the Right to Water.

**The following is not a list of indicators for immediate implementation. It represents a extensive menu of choices which would be refined and narrowed down at a further stage to a smaller group of indicators that are critical and which can be implemented in the short-term, using easily available data, as well as in the medium term.** It will be necessary to reduce the number of indicators to ensure they are manageable. This should be done on the basis of importance and feasibility. It is assumed that each user group will further narrow the choice of indicators by selecting those that are closest to their mandate. Most of the potential indicators rely on qualitative, rather than quantitative, information as these are likely to be more feasible to implement.

Further work needs to be carried out to carefully assess the feasibility and importance of each indicator. A clearly articulated rationale should be provided for selecting priority indicators and excluding others. In the interim, a rough rating system is used to provide an indication as to which indicators will be the focus of short-term efforts.

The following list also considers future indicators for the medium and longer term to be progressively developed and implemented as data collection possibilities expand in focus and reliability. Some States with better data collection capabilities will be able to commence use of these indicators earlier than others. This would be an important development, since the primary use of the indicators is to track a State's own progress rather than to compare States. It is also assumed that due to growing commitment on the part of States and international organisations to economic, social and cultural rights such as the right to water, they will be willing to devote more resources to indicators measuring human rights.

The section below focuses on indicators for which there was considerable discussion at the workshop. It attempts to outline the nature of those discussions, and to draw some conclusions. Otherwise, the indicator is stated with no further comment.

The matrix attached to the present document is designed to facilitate a comparison of the indicators in order to select those that are most feasible to implement. The matrix includes the following information:

- the obligation that the indicator refers to (paragraph within the General Comment),
- the type of indicator (structural, process or outcome),
- whether the information in response to the question should be disaggregated,
- whether there is an existing indicator measuring this obligation and whether data are being collected that could be used for the proposed indicator and
- an initial indication on the priority of the indicator for the right to water and the feasibility of actually collecting data on this indicator.

Where water and sanitation is regulated by provincial or regional governments, responses should be provided for all provincial and regional governments in every place where there is a reference to 'national government' policies.

### 1. General Issues

### **1.1 Right to water expressly contained in law as a justiciable right**

Indicator: Is the right to water expressly contained in the constitution or other law? Is the right justiciable in courts or other bodies?

### **1.2 National strategy and plan of action**

Indicator: 1. Is there a national strategy and plan of action for universal delivery of water and sanitation? Is a time-frame specified?  
2. Does the plan of action specify attention to marginalised and vulnerable groups?

The purpose of this indicator is to track equity in government programmes and to determine whether the State is taking at least the step of planning to progressively ensure universal access to water and sanitation.

### **1.3 Facilitate participation of communities in water supply decision making**

Indicator: 1. Does the national plan of action specify that there should be community participation in decision making and delivery of water and sanitation services and monitoring?  
2. Is there a national advisory body or local advisory bodies for water and sanitation services? Does it/they include representatives of marginalised and vulnerable groups?

It will be necessary to clearly define community participation in this indicators and a minimum threshold for representation of marginalised and vulnerable groups. A crucial feature of the rights based approach to development is the full involvement of individuals and groups (communities) in decision-making for policies and programmes.<sup>28</sup> It is also essential for the long-term financial, technical and social sustainability of a water and sanitation project that communities are involved in the development of their own water and sanitation projects, from preliminary design to execution, to ensure the suitability and viability of the projects. As a part of reaching this goal, it is important that the government widely disseminates key aspects of the water and sanitation delivery policies, so that communities can know their rights and how to access their rights as outlined in the national plan of action.

### **1.4 Equity in budget allocations**

Indicator: 1. Are specific national and local budgetary strategies in place to address marginalised and vulnerable groups?  
2. What percentage of the national water and sanitation budget and of local authority water and sanitation budgets is allocated to address the needs of marginalised and vulnerable groups?  
3. (There is a need to also define an 'Equity of distribution indicator'.)

The first of these indicators is a yes/no question that provides only the first step in analyzing a State's actions. The answer is not conclusive, but needs further review and further investigation. For example, a treaty body that receives a positive answer to this question will have to ask which particular marginalised and vulnerable groups are addressed and what the strategies mentioned entail. In addition, the review of a country's budgetary strategy will have to be contextual, as a

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<sup>28</sup> General Comment No. 15, para. 37.f.

policy that in fact addresses the needs of marginalised and vulnerable groups may not be presented as such.

The second indicator takes account of the fact that the barriers for the poorest and most vulnerable people to access essential services, such as water and sanitation, are not just legal or political, but are also financial, technical and social. Developing a national plan for water and sanitation delivery will not assist the poorest unless there is budgetary allocation dedicated to delivering essential services to the most marginalised and vulnerable populations, with a focus in the national plan which specifically addresses issues of equity and redistribution.

There is ever increasing pressure on national governments to ensure that essential services are financially viable, and that people pay the real cost of receiving water and sanitation services. However, it is also clear that the delivery of services to the most vulnerable population, whether urban or rural, can be the most technically complex and financially demanding – long distances and limited space being two of the most important constraints.

It is critical that the national plan of action identifies how this issue will be addressed. Possible options could be cross-subsidies or lowering standards of delivery to allow for short-term solutions, to be followed by more permanent delivery solutions within a particular time-frame.<sup>29</sup> The indicator only addresses the amount devoted to the marginalised and vulnerable groups. It does not address a subsidiary question – which is how effectively the resources are spent. Therefore, this indicator provides only the first step in reviewing a government's budgetary policy.

The indicator requests information on budgets at both the national and local authority level. It may only be practical, at the international level to receive information about the national and provincial level. For example, to ask about South African local authority budgets would require information about 184 local government budgets. There may be situations where one would not necessarily need to scrutinise local budgets, such as where there is a nationally mandated and implemented subsidy for low-income groups.

The indicators need not consider the proportion of the overall national budget, or of national GNP, that is devoted to water and sanitation services, as the responses may not often shed light on the extent of the State's efforts to fulfil the right. High spending on water and sanitation often does not translate into investment into the affordable services that benefit the poor. In addition, a State may raise a large water and sanitation budget by charging high tariffs that exclude the poor. Finally, States where management of water services is privatised might have a relatively small water and sanitation budget only because since tariff receipts are not reflected in government accounts.

A further issue is the equity of distribution, ensuring that there is an even distribution of budgetary allocations, and that all areas are receiving the services that they need, without corruption or arbitrary political intervention. For example, WaterAid's Malawi programme identified cases where one village had as many as eight pumps, while others had none whatsoever. Further work needs to be done to propose a potential indicator for this obligation. Water Aid is developing an indicator to monitor the equity of distribution of water-points in rural areas of Malawi, which may provide a model for an internationally applicable indicator.<sup>30</sup> One possibility might be to consider the percentage of the national water and sanitation budget that is directed towards poorer areas.

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<sup>29</sup> General Comment No. 15, para. 27.

<sup>30</sup> S. Sugden, *Indicators for the Water Sector: Examples from Malawi* (London: Water Aid, 2003), online at: [http://www.wateraid.org.uk/in\\_depth/country\\_programmes/malawi/1388.asp](http://www.wateraid.org.uk/in_depth/country_programmes/malawi/1388.asp).

## 1.5 International financial assistance provided by developed States

- Indicator:
1. What proportion of developed States' GNP is spent on water and sanitation through international financial assistance?
  2. What proportion of financial aid on water and sanitation is directed towards marginalised and vulnerable groups?

Included within the General Comment No. 15 is the requirement for other actors to assist States with 'international assistance and cooperation, especially economic and technical...' (para 38).

There is a United Nations target for developed states to provide 0.7% of their Gross National Product (GNP) towards official development assistance. The question was raised as to whether this indicator should include private (including NGO) initiatives as well as government financing. However, this information is difficult to track as there are no official sources of data on private transfers. In addition, the obligation is legally binding on States, rather than on individuals. It was suggested that this indicator should not include both loans, but only grants since loan financing is a very limited form of development assistance. However, the difficulty with this suggestion is that official statistics on development assistance normally combine grants and loan financing. It should also be noted that official figures on aid directed towards water and sanitation do not normally capture amounts of aid provided for housing programmes, which can be expected to benefit water and sanitation provision.

The indicators should measure the proportion of a developed State's Gross National Product devoted to dedicated to water and sanitation programmes, on the basis of which a universal benchmark could be set. It is better to measure proportion of GNP rather than proportion of aid, in order to avoid providing a distorted analysis for developed States whose overall assistance is below average. It might also be possible to measure the proportion of GNP directed towards water and sanitation in the category of States known as the Least Developed States. Data on this information are widely available, such as from the OECD. It would be useful to assess the proportion of such financing actually targetted towards the most marginalised and vulnerable. However, further analysis is needed on whether there are figures collected on the proportion of aid targeted to the poorest (or assistance to the type of projects that benefit the poor), and indeed how this should be defined.

## 1.6 Non-financial international assistance.

- Indicator:
1. Are there laws or policies preventing a neighbouring State from accessing essential water supplies from shared water resources in order to meet the right to water?
  2. Are there plans in place for emergency sharing of water to neighbouring States which regularly/seasonally suffer a lack of safe water supplies for essential needs?

This category contains some of the more ambitious indicators that may not be of as great importance as the other indicators. Water for essential personal and domestic uses constitutes such a small percentage of overall water use in a State that it is normally difficult to draw a link between international water sharing issues and the right to water. There may, however, be implications for the greater amounts of water required for agriculture, essential to the rights to food and the right to work in areas where farmers have to rely on irrigation.

The first indicator addresses the 'obligation to respect' that is to refrain from actions that would deny access to water in other States through restrictions on essential amounts of water from a

shared resource.<sup>31</sup> This obligation is well established in international customary law as well as under the right to water. The difficulty lies in determining and quantifying an acceptable definition of ‘essential’ use. It would suffice if there were willingness on the part of a State to negotiate the use of common water courses in a manner that takes into account essential needs of the population of each State, or the establishment of a common institution that is mandated to respect the essential needs of the population of each State. A further issue here might relate to preventing pollution of shared water resources.

The second indicator would capture the ‘obligation to fulfil’ aspect of the right, where a State would provide water from its own water sources or out of its agreed share of common resources. This non-financial assistance may be particularly pertinent for those States bordering other States with known seasonal water shortages and which have particularly vulnerable populations. More research needs to be carried out on concrete situations to examine whether this consideration is more theoretical than real.

### **1.7 Accountability mechanisms**

Indicator:      1. Is there a monitoring body/bodies to assess and report on implementation of all aspects of right to water? Is civil society formally included in the monitoring process?  
                         2. Are there complaints mechanisms for those denied access to water?

Accountability mechanisms do not have to be specialized on water and sanitation. It may suffice if an Ombudsman or human rights commission has the mandate to address the right to water. The reference in the question to ‘all aspects of the right to water’ is to address situations in which a State mandates different bodies to address different aspects of water issues, e.g. a separate institution for water quality.

The existence of a monitoring body and complaints mechanism demonstrates that a first step in ensuing accountability has been taken. However, it is necessary to consider follow-up potential questions that would assess whether such mechanisms are accessible, accountable and responsive. It is possible that this supplementary question cannot be feasibly resolved through indicators, and those monitoring the right to water will have to look in a more contextual fashion at the workings of the accountability mechanisms.

### **1.8 International economic agreements and regulation of the private sector**

Indicator:      1. Is there a national law that subjects the implementation of international trade and financial agreements signed by the State to the right to water?  
                         2. Does the State’s impact assessments of economic agreements explicitly consider the human right to water?  
                         3. Where the private sector manages water services, are private sector providers required to ensure that all the persons in their service area have access to safe and affordable water?

There is the possibility that the implementation of international economic agreements could infringe the right to water in a State. Such agreements might include loan conditionalities from international financial institutions or through bilateral agreements, some of which may require reduction to subsidies or require the State to abdicate its responsibility for the delivery of essential services. International economic agreements may include international, regional or bilateral trade agreements where some requirements of liberalisation might require private sector

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<sup>31</sup> General Comment No. 15, para 44 (c) (vii).

participation in situations where a State does not have the capacity to adequately regulate the private sector. In many cases, the agreements may on their face be consistent with the right to water, but may be implemented in an inconsistent manner. The question refers to agreements ‘signed’ by the State rather than ‘ratified.’ This is because international agreements might be implemented by the State even prior to ratification by the legislature.

General Comment No. 15 states that ‘the international financial institutions, notably the International Monetary Fund and the World Bank, should take into account the right to water in their lending policies, credit agreements, structural adjustment programmes and other development projects, so that the enjoyment of the right to water is *promoted*.’<sup>32</sup> This indicator, which is applying at the State level, measures precisely whether the State is subjecting the implementation of these agreements to the right to water.

The primary concern with the first and second indicator is that most States would simply respond in the negative to this question because their laws do not explicitly contain the right to water as yet. However, such a response might be partially misleading if the State uses alternative terms, such as ‘equity’ in its policy making. In addition, some States may not carry out any impact analysis on economic agreements.

The third indicator addresses private sector participation, which is often induced or required by international financial agreements (and potentially by trade and investment agreements). Where the State engages the private sector, whether local or international, in the delivery of water and sanitation, the onus remains with the state to ensure that the contracts that are drawn up require efforts to expand and maintain delivery to all residents, including the most vulnerable and the hardest to reach. Care needs to be taken in the drawing up of the contract to ensure that all residents will receive services in a timely manner.

However, just as it is either politically or financially difficult for the State to deliver services to certain sectors of the population (e.g. those living on river banks, remote villages, nomadic populations), the private sector will also try to avoid costly service delivery. The point is not simply to ensure that the private sector understands the obligations of the right to water, but that the government, national or local, which has contracted the private sector, has the capacity and commitment to monitor and regulate the work of the private sector, as it would with a public service.

Some of the crucial issues that will need to be monitored and regulated will be the same as those for public sector delivery agencies, such as: Is the contract subject to price controls? What is the obligation to provide services to informal settlements or otherwise hard to reach areas? What are the time-frame and the responsibilities within the contract? Further issues will include: Does the government have the capacity to monitor or regulate the above issues.

The indicator for this obligation cannot capture all these aspects. Some of them will be indirectly addressed by the more specific indicators below on accessibility, affordability, etc. which apply to both the private and public sector. A specific question is asked here on the private sector due to the possibility that after privatisation, a State may feel less responsible for ensuring accessible and affordable water services. The question here therefore asks whether private sector providers are held to the same standards relating to the right to water as public sector providers.

## 2. Availability

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<sup>32</sup> General Comment No. 15, para. 60.

## **2.1 Priority of essential levels of drinking water over other uses.**

Indicator: Is provision of essential amounts of water for personal and domestic uses prioritised within the national plan of action?

In gathering data for this indicator, ‘essential amounts of water for personal and domestic uses’ could be taken as at least 20 litres per person per day for drinking, cooking and personal hygiene. While important uses of water for food production and industry must be acknowledged, the relatively small amounts of water used by humans for essential personal and domestic uses and its central importance to human survival justify prioritizing this use over others. However, this priority only applies to essential amounts of water, rather than to all domestic uses.

It is important for the monitoring body to assess how water is prioritised within the national plan of action for water and sanitation, and between competing interests, such as the ministries of agriculture or industry. Many States do not have a single ministry for water and sanitation, but have these services under many different ministries, such as agriculture, education, industry, health etc. This can make it difficult to set firm priorities or to design policies and programmes effectively.

The prioritisation of water usage will also be an issue for local discussion, both for conflicting needs and interests within a locality, or within a wider water catchment area. Decisions cannot be made at a national level for the specific local conditions, although national policies to guide decision-making should be set, which would include assurances that vulnerable and marginalised groups are able to effectively participate in decision-making.

## **2.2 Continuous supply of water**

Indicator: What is the average number of days per year of disruption to supply?

Interruptions to water supply, whether to piped water systems or the breakdown of water pumps effectively restricts supply. At a certain level, such disruptions force users to rely on unsafe or unaffordable sources of water, or to restrict consumption to a level that creates a health risk. The indicator does not attempt to measure the level of interruptions that would be considered significant. However, an inference as to the extent of the disruption can be provided by the number of days of disruption per year.

The information above can be best determined through user surveys. A maximum period of 4 days is advised for such questions as users cannot reliably provide information on disruptions over the past year. Therefore, the survey would ask: “Has the water supply been disrupted in the last two weeks?” The alternative to user surveys in areas served by piped water is to rely on supplier data. Such data may be available from piped water service utilities, however, such reported data are often unreliable. Data are not normally available from those managing small drinking water supplies, such as vendor kiosks or community managed boreholes.

This indicator may also need to ascertain the reason why there have been disruptions, whether due to intermittent sources or engineering inefficiencies, which would be crucial information in designing policies to avoid further disruptions to the supply. Such data would need to be broken down according to the type of water service.

In some cases, the users may have reasonable coping mechanisms, such as storage facilities or alternative sources. It would be useful to know the extent of the impact of disruption in order to prioritise efforts and resources. However, such a nuanced indicator might not be practical. It is

may be difficult to assess coping mechanisms and whether they mitigate the concerns caused by interruptions of water. According to the World Health Organization, “..[D]iscontinuity results in low supply pressure and a consequent risk of in-pipe recontamination. Other consequences include reduced availability and lower volume use, which adversely affect hygiene. Household water storage may be necessary, and this may lead to an increase in the risk of contamination during such storage and associated handling. Seasonal discontinuity often forces users to obtain water from inferior and distant sources. As a consequence, in addition to the obvious reduction in quality and quantity, time is lost in making regular collections.”<sup>33</sup> The Joint Monitoring Programme has attempted to include continuity in its work, so far without success. UN-Habitat’s pilot project to assess regularity of water supply in urban areas may provide guidance for the future on this indicator.

### 2.3 Quantity of water

Indicator:      1. Is a basic minimum amount of water for personal and domestic uses per person stipulated in the State’s standards and regulations?  
                     2. What is this amount per person per day?

While General Comment No. 15 does not specify a minimum quantity, the Joint Monitoring Programme follows a standard of 20 litres per person per day to meet the most essential uses of water. This may be unfeasible in highly water stressed areas whereas in other circumstances, States are able to ensure access to higher quantities of water. Generally, about 50-100 litres is required before health risks are low (subject to other factors such as hygiene).<sup>34</sup> States, and even regions within States, will need to set their own standards, dependent on conditions.

Access to sufficient quantities of water is normally a function of amount of time required for collection. In the Joint Monitoring Programme, quantity is not measured as such, but rather time of collection. Where collection of water takes between 3 and 30 minutes, people generally meet their basic requirements of water for personal and domestic uses irrespective of how much water is collected per trip or the number of trips to do so - explained under indicator 3.1. This is particularly relevant where water is not available in the household or in a standpipe in a yard.

In spite of the greater importance of time of collection, quantity standards set by a State are relevant in designing subsidy policies and in specifying essential amounts of water from which no person can be disconnected. In South Africa, the minimum (free) quantity is 6000 litres per household per month, as the work involved in calculating the exact amount per person would be prohibitively expensive and would not necessarily lead to an improved service. The South African amount assumes a household of at least eight people, and the monthly amount therefore works out to 25 litres per person per day.

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<sup>33</sup> World Health Organization, *Guidelines for Drinking Water Quality*, 3<sup>rd</sup> ed. (Geneva, WHO, 2004), p. 93, available at [http://www.who.int/water\\_sanitation\\_health/dwq/gdwq3/en/](http://www.who.int/water_sanitation_health/dwq/gdwq3/en/).

<sup>34</sup> G. Howard & J. Bartram, *Domestic Water Quantity, Service Level and Health* (Geneva, WHO, 2003) at 22-26.

### 3. Physical Accessibility

#### 3.1 Ensure physical accessibility to water for personal and domestic uses.

- Indicator:
1. What is the proportion of the population with access to an improved drinking water supply?
  2. What is the proportion of the population with access to a household connection? (piped water in dwelling, plot or yard)

Indicators for this obligation often focus on access to improved water supply. Access to improved water supply is the focus of the WHO/UNICEF Joint Monitoring Programme and other monitoring efforts. See Section 2.4. of the issue paper above for an explanation of the term ‘improved water source’ and information on how the JMP applies this indicator.

The previous indicator has been that water supplies should be within a certain distance of the household. However, the Joint Monitoring Programme has developed a proxy indicator for this indicator. This is the time that is taken to collect water. It has been shown that the amount of time it takes to collect water is the deciding factor on how much water is collected. As a general rule, if the water is piped into the house, then as much water as is needed is used. Where up to half an hour is spent collecting water, including walking and standing in a queue, a steady basic amount per person per day (suggested as 20 litres per person per day, but with regional variation from 16-25 litres ppd) will be collected. If it takes longer than half an hour, less than the basic amount is collected. This applies to urban and to rural areas, and is generally recognised to be more accurate at measuring ease of access to a water source than distance alone. The indicator measures time spent going to the source and coming back and time spent actually collecting the water (relevant when there is a low flow) or waiting in queues. In urban areas, while there may be a water-point within 10 metres of the household, the high demand at the water-point may mean that the accessibility of that water is very poor. The link between collection time, quantity of water collected and health consequences is illustrated in the chart below produced by the WHO:

<b>Service Level Descriptors of Water in Relation to Hygiene<sup>35</sup></b>			
<b>Service Level description</b>	<b>Distance/ time measure</b>	<b>Likely Quantities Collected</b>	<b>Level of Health Concern</b>
No Access	More than 1000 metres or 30 minutes collection time	Very low (often less than 5 litres daily)	Very high as hygiene not assured and consumption need may be at risk. Quality difficult to assure, emphasis on effective use and water handling hygiene.
Basic Access	Between 100 metres and 1000 metres (5 to 30 minutes total collection time)	Low, Average is unlikely to exceed 20 litres daily; laundry and/or bathing may occur at water source with additional volumes of water	Medium. Not all requirements may be met. Quality difficulty to assure.
Intermediate Access	On-plot (e.g. single tap in house or yard)	Medium, likely to be around 50 litres daily, higher volumes	Low. Most basic hygiene and consumption needs met. Bathing and laundry possible on-site,

<sup>35</sup> Reproduced from G. Howard & J. Bartram, *Domestic Water Quantity, Service Level and Health* (Geneva, WHO, 2003), p. 22.

		unlikely as energy/time requirements still significant	which may increase frequency of laundering. Issues of effective use still important. Quality more readily assured.
Optimal Access	Water is piped into the home through multiple taps	Varies significantly, but above 100 litres daily and may be up to 300 litres daily	Very low. All uses can be met, quality readily assured.

### 3.2 Provide emergency supply for people without access to water

Indicator: What is the proportion of people without access to long-term improved drinking water who are receiving emergency assistance to improved water?

This indicator inspired considerable discussion, particularly around what level of emergency supply would be acceptable. If the emergency supply is not ‘improved’, then clearly this would not be consistent with the right to water. However, some levels of emergency provision are important – such as supply of water by tanker truck to communities facing shortages of water or provision of basic water purification systems. Tanker truck water is generally not considered an improved water supply due to concern of quality and sometimes cost. However, in arid areas and more affluent desert states, trucking of water is institutionalized as often the only means of supplying drinking water at all. Further work needs to be done to clarify the difference between improved supply and forms of emergency supply that are acceptable as an interim measure. In addition to the type of supply, the indicator may also capture the cost of the supply, or the person that pays for the supply (whether the individual, the state, or an NGO, such as a disaster relief organisation).

An alternative or supplementary means of measuring this obligation would be ask what educational work the government is facilitating in order for communities to be able to test and improve the quality of water they obtain. This is addressed in Indicator 4.7 below.

### 3.3 Ensure security at water points

Indicator: What proportion of women or girl children collects water outside the immediate vicinity of the home?

Almost invariably it is women and girls who have the responsibility of collecting water, which frequently has serious implications for their physical security. Due to the difficulty of defining and measuring security at water-points, this indicator can be applied by two survey questions, in particular: Do you have water on premises? Who collects water? If the water-point is some distance from the home, it can be assumed that it leads to increased security risk. The ideal situation from a security point of view is to have the water-point in or very near to the home. The harmonized household survey question set of the DHS and MICS includes a question on who usually goes to the source to collect water. It is necessary to determine a uniform criteria to determine what constitutes ‘immediate vicinity of home.’

### 3.4 Expanding access to water services

Indicator: 1. Is there a national policy with explicit timeline to extend water services, particularly to deprived urban areas and rural areas?

2. What percentage of the national water and sanitation budget and of local authority water and sanitation budgets directed towards expanding access to water services to the unserved population?
3. What is the decrease of the proportion of the population without access to improved water in the last five years?

The term ‘expansion of access to the unserved population’ could include all extension of networks as well as drilling of boreholes and digging of wells (either by the State directly or through financial and technical assistance to communities). A possible refinement would be to focus on the persons who are most in need. The indicator would then discount expansion of access to persons who already have access to improved drinking water sources within thirty minutes collection time, e.g. a household who has safe water through a borehole in its yard, but who benefit from a government programme to pipe water directly into their house. While this refinement would be beneficial, it might be extremely hard to put into practise. Also the household which has a collection time of less than three minutes uses dramatically more water, with a corresponding impact on health and well-being, than the household which has a collection time of, say, ten minutes, which is a benefit which should not be ignored.

The State’s focus should be on the persons with the least amount of access rather than more privileged groups. It would be unrealistic and undesirable to require that a State’s entire water investment be devoted to the persons without improved water access – many connections to households pay for themselves in the medium run through cost recovery. However, at least a significant amount should be devoted to persons without improved access. It may be necessary to review existing standards in order to ensure that all residents can enjoy the right to water. Unattainable standards and a lack of acceptable low-tech solutions may be preventing delivery to certain sectors of the population. This point is quite relevant. Policy makers who are not taking human rights into account may argue that it is more financially feasible to deliver a higher standard in steps than slowly improve standard of delivery in stages.

The proposed question for this indicator address budgetary issues in a manner that is closely tied to Indicator 1.4. It might be argued that the proportion of water and sanitation budgets is a good proxy indicator for assessing the amount of the budget devoted to marginalised and vulnerable groups. However, this will depend on how ‘unserved population’ is defined, as discussed at the top of this section. This question deals with both water and sanitation budgets since many States do not maintain separate budgets for water and sanitation.

The second question asks whether there has been a decrease in the proportion of the unserved population in the last five years. This is relevant for the purpose of assessing the progressive realisation of the right to water within a State.

It will be necessary to consider security of tenure issues that are a major barrier to expansion of access, particularly in urban areas. It is necessary to verify whether the housing rights indicators developed by UN-Habitat adequately capture this issue from an access to water perspective.

### **3.5 Maintaining access**

- Indicator:
1. What proportion of the population is served by sustainable water supplies?
  2. What proportion of the water and sanitation budget is invested in operation and maintenance?

This is an extremely difficult indicator to operationalise. It could be done with the following survey questions: For networks, is there a plan for long-term (10-15 years) replacement of pumps

and other infrastructure? For small-scale supplies, is there a technical/financial assistance for small-scale water quality programs (comprising funds, technical skills and spare parts where this cannot be secured by a community's own efforts)?

It is not adequate to finance the delivery of water and sanitation projects without ensuring that the supply will be sustainable. All too often projects are designed simply to deliver the services, without examining whether the pumps can be maintained, or whether the latrines will be adequately and hygienically kept. This is a crucial issue for which WaterAid has developed a 'sustainability snapshot', a series of three indicator questions, which assess the extent to which an installation will be financially and technically maintained, and whether spare parts are available. This 'snapshot' is carried out at the time of the installation of the service, if the responses suggest that the installation will not be sustained, it will be necessary to carry out further mobilisation and sensitisation, or set up better systems for supporting community management processes, or other supply or maintenance mechanisms. This needs to be taken account of with a national policy of technical/financial assistance for small-scale water quality programmes. There also needs to be a national/regional record of all water-points, to assist in planning replacement (and which can also be used for a variety of other uses, including equity of distribution indicators).<sup>36</sup>

### **3.6 Education/Health facilities**

Indicator:      1. What is the percentage of schools and clinics with access to improved water and sanitation facilities?  
                     2. What is the percentage of schools/clinics with hand-washing facilities?  
                     3. What is the percentage of schools and clinics that have separate sanitation facilities for males and females?  
                     4. Is there a national action plan for providing water supply and sanitation facilities to schools and clinics?

The reference to clinics includes hospitals. Information on this indicator is available from educational and health ministries, but there are issues of reliability and consistency of data.

In many developing countries, a large proportion of schools and hospitals do not provide water and sanitation facilities – in many cases this figure is lower than the proportion of number of households with such facilities. Such institutions should be priority targets for government efforts on water and sanitation due to the danger of spread of disease in such institutions and the fact that they are used by vulnerable groups. This is particularly a gender and education issue, as the lack of appropriate, secure and private sanitation facilities for girls in school reduces their levels of enrolment and attendance.

### **3.7 Access to land with drinking water sources**

Indicator:      Do national policies provide for secure access to common water sources?

This indicator refers to instances where a water-point, whether a publicly owned borehole or protected spring, or to unimproved sources of water, such as rivers or springs, are accessed by crossing private land or is situated on private land. Access to the land, and hence the waterpoint, must be secure in order for people to enjoy their right to water. This indicator would assess whether such access is provided for in the applicable laws and policy documents. Further work is needed to operationalise this indicator.

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<sup>36</sup> S. Sugden, *Indicators for the Water Sector: Examples from Malawi* (London: Water Aid, 2003), online at: [http://www.wateraid.org.uk/in\\_depth/country\\_programmes/malawi/1388.asp](http://www.wateraid.org.uk/in_depth/country_programmes/malawi/1388.asp).

## **4. Quality**

### **4.1 Water quality standards**

- Indicator:      1. Does the State have national standards on drinking water?  
                    2. Were the WHO Guidelines used to provide the technical information for the standards? Do these apply to all accepted sources of water provision?

An earlier proposed indicator was to assess whether the national standards are more or less strict than WHO Guidelines. However, the Guidelines are not standards – they provide information to States that should be applied taking into account national capacities, actual conditions and the cost. Indeed, the Guidelines warn that setting national standards that are unattainable for a State is counter-productive. It is necessary for actual drinking water quality conditions, national capacities and the cost to be taken into account in developing national standards.

### **4.2 Regulation and Surveillance**

- Indicator:      1. Is there a national and agency overseeing water quality? Is it empowered to review performance of suppliers? Is it empowered to review/inspect documents and facilities?  
                    2. Are water suppliers obliged to establish water safety management plans and is there a body empowered to review and approve these?  
                    3. Are water suppliers obliged to inform the public, and public health authorities, at times of significant risk to supplies?

### **4.3 Pollution**

- Indicator:      1. Are there regulations and policies to control pollution of water sources?  
                    2. Does the state impose disincentives and penalties for pollution?  
                    3. What is the percentage of population living in localities with water pollution control mechanisms in place and which are enforced?

### **4.4 Waste water treatment**

- Indicator:      What percentage of waste- water receives primary or secondary treatment?

### **4.5 Microbial and chemical contaminants**

- Indicator:      What percentage of the population have their water monitored for priority microbial contaminants/chemical contaminants/sensory aesthetic factors?

Each State will have to make a decision about the contaminants that are most important to test for in light of its available resources. Testing for all contaminants may be costly and unnecessary, in particular for most chemical contaminants. However, it will always be necessary to protect against microbial contaminants and a few chemical contaminants that are always of serious concern (e.g. arsenic). The State will have to take steps to ensure that all people are protected from the most serious contaminants.

### **4.6 Disinfection**

- Indicator:      What percentage of persons relying on water supply through distribution network are supplied with water that is effectively disinfected?

This indicator requires research on whether there are accepted common standards of ‘effective disinfection.’ This indicator can be read together with Indicator 3.1.2 (percentage of people relying on household connection or standpipe), to yield the percentage of people in a State relying on safe supply through a distribution network. However, it might be difficult or impossible to secure data on the number of persons or households relying on a specific pipeline, particularly where they rely on a public standpipe (where public records would not normally list the total number of users).

#### **4.7 Household level water treatment**

The following questions apply to households relying on non-improved water supply.

- Indicator:
1. What is the percentage of households treating their water effectively?
  2. What is the percentage of households educated in household level treatment?
  3. What percentage of households have access to products for treatment?

In areas where the water supply is not safe from contaminants, households must be educated in the use of household level water treatment methods. Often these can be expensive and time consuming, and should not be seen as a long-term solution. The effectiveness of household level water treatment is extremely hard to measure, and as the responsibility for water collection and management often rests with children, it cannot be assumed to be fail-safe. If this indicator is to be operationalised, it is necessary to consider only measuring whether a household actually treats its water using a method likely to be safe, using a similar approach used by the JMP to distinguish improved and non-improved water sources.

#### **4.8 Child health**

- Indicator: What percentage of children suffer from serious levels of diarrhoea per year?

This question will need to be re-phrased to be consistent with most public health surveys questions on diarrhoea. The information for this indicator can be extrapolated from responses to the survey question: “What is the number of diarrhoea episodes had by any children in the household in the last two weeks before the survey?” Child health often indicates whether a household has effective access to water and sanitation and is following appropriate standards of hygiene.

#### **4.9 Hygiene awareness**

- Indicator:
1. Is there a national programme for hygiene awareness? What is the percentage of the population covered?
  2. Is hygiene awareness contained in the national health strategy?
  3. Is hygiene awareness contained in the national educational curriculum?
  4. What is the percentage of primary schools that teach hygiene awareness?

### **5. Affordability**

#### **5.1 Affordability of water and sanitation**

- Indicator: What is the percentage of household expenditure spent on drinking water by persons living below the State’s poverty line?

The above indicator is only one of several options that should be kept on the table. Further work is needed on defining low-income groups. In cases where a State does not have an official poverty line, UN figures might be used (\$1 a day). This measure will not allow comparability across States, but will be useful to track progress by a State.

This is a complex indicator, both in the need for a poverty line, but also in terms of measuring percentages of household expenditure. Also if the household has no access to infrastructure, and is collecting their water from a river or spring, they may be paying nothing for their water, but are not accessing safe water.

The above potential indicator suggests that there is a maximum percentage of household expenditure that should be spent on water and sanitation on a daily/weekly/monthly basis. This is in preference to the percentage of household income spent on water and sanitation, since income is notoriously hard to measure. Another complicating factor is that many people may have widely varying expenditures on water and sanitation from year to year. For example, a household may invest in one year in a latrine, and not have to replace it for 2-5 years. However, it is easier to track costs for those who pay for water and sanitation services provided through networks or through community or vendor managed services on a pay per use basis.

Each State, or region within a State, has to decide what is the most appropriate level to designate as the limit of affordability, but it was suggested that the poorest should not pay more than three times that which the average user pays.<sup>37</sup>

In spite of the complexity of this indicator, it is important that this information be monitored. In addition to the need to monitor the affordability dimension of the right to water, it is needed to monitor progress towards the MDGs. The MDG for water explicitly commits States to reduce by half the proportion of people without access to safe or **affordable** water.

## 5.2 Assistance to low-income groups

Indicator:

1. Is there a process to ensure that the needs of the poor are taken into account in pricing policies and in the design of new water and sanitation infrastructure?
2. Are one-time capital subsidies provided to low-income households?
3. Are recurrent subsidies provided to low-income households?
4. What percentage of the lowest-income 20% of the population receive capital or recurrent subsidies?

The indicators proposed above are examples of indicators that can only provide a preliminary view of State policies. Those using this indicator would need to make provision for asking supplementary questions, such as: What methods of subsidies are used? The fourth indicator is very useful. It is also useful to collect data for the upper quintiles of the population – as this might often indicate cases where subsidies benefit the middle class while leaving out sections of the poor. Data for this will not often be available.

The pricing policies that a State adopts will impact on the affordability of water for all users, and there must be particular consideration for the impact that policies and subsidies have on the marginalised and vulnerable groups. There is a range of options for developing pricing policies, and these need to be tailored for a particular situation. There is no single preferred system which will ensure affordable water for the marginalised and vulnerable population. As a result, this indicator will be complex to monitor.

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<sup>37</sup> Presentation at the indicators workshop by Henri Smets, Towards Development of Indicators: Affordability and Non-discrimination, Human Rights Perspective.

An essential level of water supply is a human right. This does not mean that it should necessarily be supplied for free, but it should be affordable. All too often, the costs of delivering water to the most vulnerable or the most in need will be higher than delivering to the general population. In order to make this delivery both affordable to the recipients and financially viable for the service provider, there will need to be some form of well targeted subsidy system, whether capital or recurring subsidy, or an effective pricing policy which does not result in the poorest people paying more for their water per litre than the better off. There is not one system which will be applicable, but each State, each city or region will have to decide upon the most equitable system.

The point was made in the discussions at the Indicators Workshop that the most important form of assistance, particularly in urban areas is to extend distribution networks to low-income persons since the recurrent costs (once capital costs are paid) are far cheaper than water vendor costs, and often it is the connection charge which is the barrier to gaining access to a piped supply system. This point is addressed in the second question above on one-time capital subsidies. Indicators 3.4 and 3.5 above also address whether the State and local authorities are making sufficient funds available for expansion of networks.

### **5.3 Exclusions from a water source (e.g. disconnections)**

- Indicator:
1. Is there legal prohibition on complete exclusion from a safe water source?
  2. Do national provisions specify the following procedural protections:
    - i) genuine consultation with those affected
    - ii) timely and full disclosure of information on the proposed measures
    - iii) reasonable notice of proposed actions
    - iv) legal recourse and remedies for those affected
    - v) legal assistance for obtaining legal remedies
    - vi) capacity to pay to be taken into account to be taken into account, when exclusion is based on failure to pay for water.
  3. What is the proportion of households that been disconnected from water supply at least once per year?

The second indicator above has a check-list of protections based directly on the General Comment on the Right to Water. The key principle set out in the General Comment on this issue is that under no circumstances shall an individual be deprived of the minimum essential level of water. Disconnections need not be made illegal per se, in particular where there are people who can afford to pay but who choose not to do so. Thus, a water service provider could impose quantity restrictions that supply only the minimum amount, or disconnect a household connection if a yard connection is available, thus ensuring that there is access to the minimum essential amount of water. It may be difficult to get a set indicator for this issue that is reliable given the amount of variables for determining which disconnections are compatible with the right to water. The actual collection of data is feasible as water suppliers and local authorities normally keep records of disconnections carried out. However, this data may not be reliable.

This indicator will be applied only to deliberate disconnections. The Indicator 2.2 on continuity addresses cut-offs (discontinuity) of water supply that occur for technical reasons.

## 6. Sanitation

These indicators have largely been extracted from the UN-Habitat surveys that are currently being tested. They therefore address urban issues to a greater extent.

### 6.1 General living conditions in urban areas

Indicator: What percentage of people live in areas where there are open drains used as sewers or where there is solid waste disposed of in public spaces?

### 6.2 Use of sanitation facilities

Indicator: 

1. What proportion of the population has improved sanitation facilities in the home, plot or yard?
2. What proportion of the population uses public sanitation facilities only
3. What proportion of the population has a sewer connection?
4. What percentage of sanitation facilities are emptied and cleaned appropriately?

The following questions apply to the percentage of households that use public facilities only:

5. What percentage of households uses facilities that are open at night?
6. . What percentage of facilities has separate facilities for males and females?
7. What percentage of facilities has hand washing facilities?

As with water-points, the accessibility of toilets and latrines is a particular issue for women and girls, for whom shared latrines can be a particular security risk, particularly at night. Using the toilet is a particular privacy issue for women in many States - it is not acceptable to be seen to be using the toilet during the day, and at night it is unsafe. There is therefore often a trade-off between privacy and security in toilets that are not in or near the home, as well as the detrimental health impacts of not having safe and secure access to a sanitation facility whenever needed. Consequently, having toilets anywhere but in the yard or house is inadequate provision from the point of view of security and privacy, and therefore health. This indicator needs to be disaggregated according to age and gender, which may make the data difficult to collect.

The definition of 'improved sanitation' does not include a public or shared latrine - with good reason given the security and privacy issues for women and children. However, some toilets, even unhygienic toilets, are better than no toilets and some toilet shared blocks can be well managed. It may be unfeasible for each household to have its own toilet in the short to medium term, both financially and technically. The harmonization task force of the JMP is still considering how best to assess the level of hygiene of a shared toilet facility.

### 6.3 Extension of sanitation services

Indicator: 

1. Is there a national policy with explicit timeline to extend sanitation services, particularly to deprived urban areas and rural areas?
2. What percentage of the national water and sanitation budget and of local authority water and sanitation budgets is directed towards expanding access to sanitation to the unserved population?
3. What is the decrease in the proportion of people without access in the last five years?

(See comments to Indicator 3.4. which addresses extension of water services).

## **7. Marginalised and Vulnerable Groups**

This section refers to marginalised groups as those who are not involved in decision-making processes and whose interests are not given sufficient weight due to their status in society. Such groups may include women, refugees and nomadic groups. Vulnerable groups are those who, due to their age (children and older persons), disability or poverty, are not able physically or financially to access services.

### **7.1 General**

Indicator: Are specific national strategies in place to address marginalised and vulnerable groups?

(See also Indicator 1.4 on resources).

### **7.2 Appropriate water supply technology for all users, including women, children, elderly persons and people with disabilities**

Indicator: Is there a policy for supplying appropriate technology for marginalised and vulnerable groups?

This indicator may not be feasible given that low-tech solutions are most needed in order to ensure financial sustainability. However it is often the low-tech solutions that can be most easily modified to be operated by a range of users. It is necessary to consider whether there are possible social solutions through community management that could be promoted.

### **7.3 Nomadic/Travellers/Indigenous people**

Indicator: 

1. Does the State recognize the right of nomads/travellers to traditional water sources?
2. Does the State take active steps to protect these sources?

The second question is particularly applicable where nomads and travellers face the danger of losing access to their water sources because they are not there all year to protect them.

### **7.4 Disaster prone areas**

Indicator: Is there a disaster response strategy addressing water and sanitation needs?

### **7.5 Gender**

An indicator is necessary to assess improvement of the role of women in water and sanitation. Women and girls are normally responsible for the collection of water and in the upkeep of sanitation facilities. It is necessary to therefore consider whether women have control over decision-making on water and sanitation issues, and whether efforts are being made to redress women's burdensome responsibilities in this area.

### **7.6 Informal settlements/Rural areas**

(Addressed indirectly in Indicators 3.4 and 6.3).

## 7.7 Prisoners/Detainees

Indicator: Is the right of prisoners and detainees to water guaranteed?

## 7.8 Refugees/IDPs

Indicator: Does the State allow refugees and internally displaced persons to enjoy their rights to water and sanitation? Is there a justiciable right?

Because refugees are not citizens of the State they are living in, they are frequently discriminated against, either intentionally, or through omission. Internally displaced persons often face discrimination on the basis of race, ethnicity or religion. In developing this indicator, reference may also be made to the SPHERE standards for water, sanitation and hygiene in emergency situations.<sup>38</sup>

All the above indicators require disaggregation, and an understanding of other relevant rights, such as women's rights or the rights of prisoners.

## VI Further steps to develop right to water indicators

The workshop and the present paper represent only the initial stage of the process for developing right to water indicators. At the conclusion of the workshop, the participants set out a roadmap for future work.

1. Produce a paper to reflect the discussions of the workshop in a synthesised and further developed form, outlining the range of possible indicators for further investigation. This document was to be disseminated for workshop attendees and refined on the basis of comments. The present document aims to fulfil this task.
2. Carry out further research on each of the potential indicators. This research should consider the relevance of the listed indicators and whether they should be revised or reformulated. The research should also examine their feasibility, and in particular, identify all sources of data that are available for each proposed indicator. It should examine current indicators for access to water and data sources that are used internationally, as well as what relevant data are collected at the national level in a small sample of developing countries, including both middle-income and least developed countries.
3. Bring together a small group of experts, including statisticians and data collectors, water experts, legal experts from governments, international organisations and NGOs, including both delivery and human rights NGOs. Based on the menu of choices in the present document and the further research on priority and feasibility of potential indicators, the small group will refine and narrow down the indicators to those that are critical and which can be implemented in the short term, using available data, as well as in the medium term. A larger policy paper shall be disseminated to explain these choices. If possible, a few questions may be considered for inclusion in a current survey – this could only comprise questions that do not raise difficult issues of data collection or conceptualisation.

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<sup>38</sup> [http://www.sphereproject.org/handbook/hdbkpdf/hdbk\\_c2.pdf](http://www.sphereproject.org/handbook/hdbkpdf/hdbk_c2.pdf).

4. Test the developed indicators in a small number of States to produce country level reports.
5. Hold a multi-stakeholder workshop to select harmonised international indicators for the right to water from the options presented by the small reference group. These would be broken down into a core set of indicators, and a list of supplementary indicators to be used by States that have the capacity to monitor them.
6. Integrate the indicators into Reporting Guidelines of the UN human rights treaty bodies, in particular the UN Committee on Economic, Social and Cultural Rights.
7. Promote the use of indicators to States and potentially measure some of the indicators through UN efforts to monitor the MDGs.

## ***Appendix 1: Matrix of Potential Indicators for the Right to Water***

The following is not a list of indicators for immediate implementation. It represents an extensive menu of choices which would be refined and narrowed down at a further stage to a smaller group of indicators that are critical and which can be implemented in the short-term, using easily available data, as well as in the medium term. It will be necessary to reduce the number of indicators to ensure they are manageable. This should be done on the basis of importance and feasibility. It is assumed that each user group will further narrow the choice of indicators by selecting those that are closest to their mandate. Most of the potential indicators rely on qualitative, rather than quantitative information as these are likely to be more feasible to implement.

Further work needs to be carried out to carefully assess the feasibility and importance of each indicator. A clearly articulated rationale should be provided for selecting priority indicators and excluding others. In the interim, a rough rating system is used to provide an indication as to which indicators will be the focus of short-term efforts.

The following list also considers future indicators for the medium and longer term to be progressively developed and implemented as data collection possibilities expand in focus and reliability. Some States with better data collection capabilities will be able to commence use of these indicators earlier than others. This would be an important development, since the primary use of the indicators is to track a State's own progress rather than to compare States. It is also assumed that due to growing commitment on the part of States and international organisations to economic, social and cultural rights such as the right to water, they will be willing to devote more resources to indicators measuring human rights.

The discussions on this matrix are reflected in the main document.

### **Explanation of Column Terms:**

**1. Obligations:** This lists the specific human rights obligation being measured and whether it is categorized as obligation of the State to respect, protect or fulfill the right. Each of these three types of obligations should be addressed wherever they are relevant (See Section 3 of the main paper). A reference is provided to the paragraph in General Comment No. 15 on the Right to Water where this obligation is outlined.

**Disaggregated Data:** Does the indicator need to capture data disaggregated on gender, ethnic, or similar grounds, in order to address human rights concerns? This is a Yes or No answer.

**S/P/O: Structural, Process or Outcome indicator?** This classifies the proposed indicators according to the typology defined by the Report of the UN Special Rapporteur for the right to health (See Section 2.1 of the Concept Paper).

**Based on a current indicator:** Is there currently an indicator for access to water measuring this issue that is used internationally or consistently at the national level? Yes/No, where this information is known. What data source is used or could be used for this indicator? (See Section 2.4 of the main paper).

**Priority and Feasibility:** This represents an initial indication of priority and feasibility – the focus of further work on this topic.

Three Stars: These represent the indicators that can be utilised based on currently available data and which are of key importance.

Two Stars: These represent indicators that are not of primary importance or for which data collection is feasible in the near future rather than the present.

One star: The indicators that would require new data, and are aspirations for the future.

### **Note on Terminology**

**Marginalised Vulnerable Groups:** For the purpose of this paper, ‘marginalised and vulnerable groups’ includes all the groups mentioned in Paragraph 16 of the General Comment on the Right to Water and listed in Section 7 of this matrix. These two terms are used to denote those who are not able to fend for themselves, such as children, the ‘vulnerable’, and those whose needs are often excluded from decision-making processes, such as women or refugees, referred to here as ‘marginalised’.

**National Government:** Where water and sanitation is regulated by provincial or regional governments, responses should be provided for all provincial and regional governments in every place where there is a reference to ‘national government’ policies.

	<b>Obligation R/P/F</b>	<b>Potential Indicator</b>	<b>To be Dis- aggregated ?</b>	<b>S/P/O</b>	<b>Current Indicator? Y/N. Data Source</b>	<b>Priority &amp; Feasibility (***)</b>
	<b>1. General Indicators</b>					
1.1	<b>Right to water expressly contained in law as justiciable right (R, P, F)</b> General Comment No. 15, paras. 17, 26.	Is the right to water expressly contained in the constitution or other law? Is the right justiciable in courts or other bodies?	No	S	No. Treaty body report. Review of legislation. Legal cases.	***
1.2	<b>National strategy and plan of action (F)</b> General Comment No. 15, paras 17, 26, 37 (f).	1. Is there a national strategy and plan of action for universal delivery of water and sanitation? Is a time-frame specified? 2. Does the plan of action specify attention to marginalised and vulnerable groups?	Yes	S	No. Questionnaire.	***
1.3	<b>Facilitate participation of individuals and communities in water supply decision- making (F)</b> General Comment No. 15, para. 37(f)	1. Does the national plan of action specify that there should be community participation in decision making, delivery of water and sanitation services and monitoring? 2. Is there a national advisory body or local advisory bodies for water and sanitation services? Does it/they include representatives of marginalised and vulnerable groups?	Yes	S	No. Examination of national policies and national plan of action.	**
1.4	<b>Equity in budget allocations</b>	1.Are specific national and local budgetary	Yes	1.S	No.	1.***

	<b>(F)</b> General Comment No. 15, paras 12 (c) (iii), 13, 14, 15, 16, 27	strategies in place to address marginalized and vulnerable groups? 2. What percentage of the national water and sanitation budget and of local authority water and sanitation budgets are allocated to address the needs of marginalised and vulnerable groups? 3. (Equity of distribution indicator)		2.P  3.O	Examination of national and local budgets. Reports to treaty bodies. It may only be possible to examine the national budget.	2. **  3. *
1.5	<b>International financial assistance provided by developed States (F)</b> General Comment No. 15, para 38	1. What proportion of developed States' GNP is spent on water and sanitation through international financial assistance? 2. What proportion of financial aid on water and sanitation is directed towards marginalised and vulnerable groups?	No	P	No. Donor country reports to OECD. Examination of of budgets.	1.***  2. *
1.6	<b>International non-financial assistance (R, P, F, depending on the circumstance)</b> General Comment No. 15, para 38	1. Are there laws or policies preventing a neighbouring State from accessing essential water supplies from shared water resources in order to meet the right to water? 2. Are there plans in place for emergency sharing of water to neighbouring States which regularly/seasonally suffer a lack of safe water supplies for essential needs?	No	S	No.	*
1.7	<b>Accountability mechanisms (P/F)</b> General Comment No. 15, paras 47, 55-59	1. Is there a monitoring body/bodies to assess and report on implementation of all aspects of the right to water? Is civil society formally included in the monitoring process? 2. Are there complaints mechanism for those denied access to water?	No	S	No. Report to treaty bodies.	1. ***
1.8	<b>International economic agreements and private sector</b>	1. Is there a national law that subjects the implementation of international trade and	No	S	No. Review of national laws	1. *

	<b>participation (R,P,F)</b> General Comment No. 15, paras 23, 24, 33, 34, 35 36, 44 (c) (vii), 49, 50, 60	financial agreements in the country to the right to water? 2. Does the State's impact assessments of economic agreements explicitly consider the human right to water? 3. Where the private sector manages water services, are private sector providers required to ensure that all the persons in their service area have access to safe and affordable water?			and procedures.	2. *  3. ***
	<b>2. Availability</b>					
2.1	<b>Priority of essential levels of drinking water over other uses (F)</b> General Comment No. 15, paras 6, 34	Is provision of essential amounts of water for personal and domestic uses prioritized within the national plan of action?	Yes	SP	No	**
2.2	<b>Ensure continuous supply of water (P,F)</b> General Comment No. 15, para 12 (a)	What is the average number of days per year of disruption to supply?	Yes	P	No. Surveys needed JMP not using.	*
2.3	<b>Quantity of water (F)</b> General Comment No. 15, para 12 (a)	1. Is a basic minimum amount of water for personal and domestic uses per person stipulated in the country's standards and regulations? 2. What is this amount per person per day?	No	S	No.	***
	<b>3. Physical Accessibility</b>					

3.1	<b>Ensure physical accessibility to water for personal and domestic uses (F)</b> General Comment No. 15, para 12 (c) (i)	1. What is the proportion of the population with access to improved drinking water supply? 2. What is the proportion of the population with access to a household connection? (piped water in dwelling, plot or yard)	Yes	O	Yes. JMP – based on MICS and DHS	***
3.2	<b>Provide emergency supply for people without access to water (F)</b> General Comment No. 15, paras 22, 28 (h)	What is the proportion of people without access to long-term improved drinking water who are receiving emergency assistance to improved water?	Yes	P	No	*
3.3	<b>Ensure security at water points (F)</b> General Comment No. 15, paras 12 (c) (ii), 37 (d)	What proportion of women and girl children collect water outside the immediate vicinity of the home?	Yes, gender and age	O	Yes – recently included in DHS and MICS surveys.	***
3.4	<b>Expanding access to water services (F)</b> General Comment No. 15, paras 25-29, 34, 37 (f), 38, 44 (c)	1. Is there a national policy with explicit timeline to extend water services, particularly to deprived urban areas and rural areas? 2. What percentage of the national water and sanitation budget and of local authority water and sanitation budgets directed towards expanding access to water services to the unserved population? 3. What is the decrease of the number of people without access in the last five years?	Yes	P O	1. No.  2. No  3. Yes – JMP.	1. ***  2. *  3. **
3.5	<b>Maintaining access (P)</b>	1. What proportion of the population is	Yes	P		1. *

	General Comment No. 15, paras 23-24, 44 (b)	served by sustainable water supplies? 2. What percentage of the water and sanitation budget is invested in operation and maintenance?				2. **
3.6	<b>Education/health facilities (F)</b> General Comment No. 15, paras 12 (c) (i), 16 (b). Provision of water in health facilities is implicit in para. 12 (c) (i).	1. What is the percentage of schools and clinics with water and sanitation facilities? 2. What is the percentage of schools and clinics with hand-washing facilities? 3. What is the percentage of schools and clinics that have separate sanitation facilities for males and females? 4. Is there a (national) action plan for providing water supply and sanitation facilities to schools and clinics.	No.	P	1-3. Yes, but not widely or with regular reporting. UNICEF collects some data on this. National sources.	***
3.7	<b>Access to land with drinking water sources (R, P)</b> General Comment No. 15, paras 16, (d) (e) (f), 21, 23, 24	Do national policies provide for secure access to common water sources?	No	S O	Yes. National law, policy documents.	*
	<b>4. Quality</b>					
4.1	<b>Water quality standards (P, F)</b> General Comment No. 15, paras 12 (b), 12 (c) (i)	1. Does the State have national standards on drinking water? Were the WHO Guidelines used to provide the technical information for the standards? Do these apply to all accepted sources of water provision?	No	S	Yes. National standards.	***
4.2	<b>Regulation and surveillance (F)</b> General Comment No. 15, paras 8, 24, 50 (e), 52, 53	1. Is there a national agency overseeing water quality? Is it empowered to review performance of suppliers? Is it empowered to review/inspect documents and facilities?	No	S	National policies.	***

		2. Are water suppliers obliged to establish water safety management plans and is there a body empowered to review and approve these? 3. Are water suppliers obliged to inform the public, and public health authorities, at times of significant risk to supplies?				
4.3	<b>Pollution (P,F)</b> General Comment No. 15, paras 8, 16 (c) (d), 44 (a) (iii)	1. Are there regulations and policies to control pollution of water sources? 2. Does the state impose disincentives and penalties for pollution? 3. What is the percentage of population in localities with water pollution control mechanisms in place and which are enforced?	Yes	S  P	1-2. National laws and policies.  3. No.	**  *
4.4	<b>Waste water treatment (P,F)</b> General Comment No. 15, para. 28	What percentage of waste- water receives primary or secondary treatment?	Yes	P	Some information collected by UNEP-GWP.	*
4.5	<b>Microbial and chemical contaminants (P,F)</b> General Comment No. 15, paras 12 (b), 28 (b)	What percentage of the population have their water monitored for microbial contaminants/chemical contaminants of priority concern/sensory aesthetic factors?	Yes	P	No.	*
4.6	<b>Disinfection (P,F)</b> General Comment No. 15, para 12 (b)	What percentage of persons relying on water supply through distribution network are supplied with water that is effectively disinfected?	Yes	P	No.	*
4.7	<b>Household level water treatment (P,F)</b> General Comment No. 15, para 12 (b)	The following questions apply to households relying on non-improved water supply 1. What is the percentage of households who rely on a non-improved water source who treat their water effectively?	Yes	O	1 and 2. Asked in the new DHS and MICS surveys.	**

		2. What is the percentage of households educated in household level treatment? 3. What percentage of households have access to products for treatment?				
4.8	<b>Child health (F)</b> General Comment No. 15, para 12 (b)	What percentage of children suffer from serious levels of diarrhoea per year?	Yes	O	Yes. DHS and MICS ask about incidences of diarrhoeal diseases among children in two weeks before survey	**
4.9	<b>Hygiene awareness (F)</b> General Comment No. 15, para 29 (see footnote 24)	1. Is there a national programme for hygiene awareness? What is the percentage of the population covered? 2. Is hygiene awareness contained in the national health strategy? 3. Is hygiene awareness contained in the national educational curriculum? 4. What is the percentage of primary schools that teach hygiene awareness?	Yes	S  S S P	1. Unlikely  2. Yes. 3. Yes.	1. ** 2. *** 3. *** 4. *
	<b>5. Affordability</b>					
5.1	<b>Affordability of water and sanitation (F)</b> General Comment No. 15, paras 11, 12 (c)(ii), 32	What is the percentage of household expenditure spent on drinking water and sanitation by persons living below the country's poverty line?	Yes	P	No.	**
5.2	<b>Assistance to low-income groups (P,F)</b> General Comment No. 15, paras 27, 34, 44 (a) (ii)	1. Is there a process to ensure that the needs of the poor are taken into account in pricing policies and in the design of new water and sanitation infrastructure? 2. Are one-time capital subsidies provided	Yes	SP	1-3. No. Review of national laws and policies.	1-3. ***



	<b>6. Sanitation-specific questions</b>					
6.1	<b>General living conditions in urban areas (P,F)</b> General Comment No. 15, paras 12 (a), 29	What percentage of people live in areas where there are open drains used as sewers or where there is solid waste disposed of in public spaces?	Yes	O	Yes in some urban areas – UN-Habitat surveys.	**
6.2	<b>Use of sanitation facility (F)</b> General Comment No. 15, paras 29, 37 (i)	What percentage of people have sanitation facilities in the home or yard? What percentage have private facilities? What percentage of sanitation facilities are emptied and cleaned appropriately? The following questions apply to the percentage of households that use public facilities only: What percentage use facilities that are open at night? What percentage have separate facilities for males and females? What percentage have hand washing facilities?	Yes	O	Yes in some urban areas – UN-Habitat surveys. Similar questions within JMP for rural supplies.	***
6.3	<b>Extension of sanitation services (F)</b> General Comment No. 15, paras 25-29, 38, 44 (c)	1. Is there a national policy with explicit timeline to extend sanitation services, particularly to deprived urban areas and rural areas? 2. What percentage of the national water and sanitation budget and of local authority water and sanitation budgets directed towards expanding access to sanitation services to the unserved population? 3. What is the decrease of the proportion of people without access in the last five years?	Yes	S	1-2. No. Review of national policies and budgets.  3. Yes. JMP.	1. ***  2. *  3.***

	<b>7. Vulnerable and Marginalised Groups</b>					
7.1	<b>General (R,P,F)</b> General Comment No. 15, paras 12 (c) (iii), 13, 14, 15, 16, 37 (b) (h)	Are specific national strategies in place to address marginalised and vulnerable groups? (See also Indicator 1.4 on resources).	No	S	Yes. Review of national policies.	***
7.2	<b>Appropriate water supply technology for all users, including women, children, elderly persons and people with disabilities (R,P,F)</b> General Comment No. 15, paras 12 (c) (i), 15, 27, 37 (f) (h)	Is there a policy for supplying appropriate technology for marginalised and vulnerable groups?	Yes	S	Review of national policies.	*
7.3	<b>Nomadic/Travellers/ Indigenous people (R,P,F)</b> General Comment No. 15, paras, 16 (d) (e)	1. Does the State recognize the right of nomads/travellers to traditional water sources? 2. Does the State take active steps to protect these sources?	Yes	S  P	1. No. Review of national policies.  2. No.	**
7.4	<b>Disaster prone areas (R,P,F)</b> Para 16 (h)	Is there a disaster response strategy addressing water and sanitation needs?	No	S	Review of national policies.	**
7.5	<b>Gender (R,P,F)</b> General Comment No. 15, para 16 (a)	[Indicator for improvement of the role of women in water and sanitation]	No	S	No	*
7.6	<b>Informal settlements /Rural areas(R,P,F)</b> General Comment No. 15, para 16 (c)	(Addressed in Section 3.6)				
7.7	<b>Prisoners/Detainees(R,P,F)</b> General Comment No. 15, para	Is the right of prisoners and detainees to water guaranteed?	No	S		**

	16 (g)					
7.8	<b>Refugees/IDPs (R,P,F)</b> General Comment No. 15, para 16 (f)	Does the State allow refugees and internally displaced persons to enjoy their rights to water and sanitation? Is there a justiciable right?	Yes	S		***

## ***Appendix 2: List of Participants at the Indicators Workshop***

1. Dominic Ayine, Centre for Public Interest Law, Ghana.
2. Audrey Chapman, Director, Science and Human Rights Program, American Association for the Advancement of Science (AAAS).
3. Maike Gorsboth, Food First Information and Action Network (FIAN).
4. Jose Hueb, Water, Sanitation and Health, World Health Organization (WHO).
5. Jennie Jonsén, Food First Information and Action Network (FIAN).
6. Ashfaq Khalfan, Coordinator, Right to Water Programme, Centre on Housing Rights and Evictions (COHRE).
7. Malcolm Langford, Senior Legal Officer, Centre on Housing Rights and Evictions (COHRE).
8. Phutiane Letsoalo, Department of Water Affairs & Forestry, South Africa.
9. Rolf Luyendijk, United Nations Children's Fund (UNICEF), Morocco.
10. Simone Klawitter, Consultant.
11. Andreas Kuck, Senior Manager, Priority Area 'Water', German Agency for Technical Cooperation (GTZ).
12. Gora Mboup, Senior Demographic and Health Expert, Global Urban Observatory, United Nations Human Settlements Programme (UN-Habitat).
13. Puroshottam Paranjape, Society for Promotion of Participative Ecosystem Management (SOPPECOM).
14. Eibe Riedel, Vice-Chair, United Nations Committee on Economic, Social and Cultural Rights.
15. Barbara Schreiner, Senior Executive Manager, Policy and Regulation, Department of Water Affairs & Forestry, South Africa.
16. Annette von Schönfeld, Bread for the World.
17. Danuta Sacher, Bread for the World.
18. Henri Smets, Conseil européen du droit de l'environnement (CEDE).
19. Ingrid Spiller, Head, International Politics Desk, Heinrich Böll Foundation.
20. Bernhard Weismeier, Bread for the World.
21. Virginia Roaf, Consultant, Centre on Housing Rights and Evictions (COHRE).

### **Appendix 3: List of Documents Presented at the Workshop**

These documents will be made available on-line at [www.cohre.org/water](http://www.cohre.org/water). In some cases, links to publications by the presenters or their institutions will be provided instead, as these have more detailed information on the specific topic.

1. *Statement on Use of Indicators in Government Policy-making*, Barbara Schreiner, Senior Executive Manager: Policy and Regulation, Department of Water Affairs and Forestry, South Africa
2. *Indicators for the Right to Housing*, Malcolm Langford, COHRE
3. *Development of Indicators for the Right to Health*, Audrey R. Chapman, Director, Science and Human Rights, American Association for the Advancement of Science (AAAS)
4. *Indicators for Quantity and Quality*, José Augusto Hueb, WHO
5. *Indicators for Accessibility, Affordability and Non-Discrimination*, Gora Mboup, Sr.Demographic and Health Expert, Global Urban Observatory, UN-Habitat
6. *Human Rights Perspective on Current Indicators and Human Rights criteria for choice of Indicators*, Ashfaq Khalfan, COHRE
7. *Reflections on the Role of Communities in the Development and Use of Indicators for Access to Water*, P. V. (Sahas) Paranjape, Society for Promoting Participative Ecosystem Management (SOPPECOM)
8. *Availability and Physical Accessibility: Statistics and Policy Perspective*, Gora Mboup, Sr. Demographic and Health Expert, Global Urban Observatory, UN-Habitat.
9. *Towards Development of Indicators: Quality, Statistics and Policy Perspective* José Augusto Hueb, WHO
10. *Indicators for Affordability*, Henri Smets, Conseil européen du droit de l'environnement (CEDE)
11. *Ideas for Right to Water Indicators: An Overview of Existing indicators and Ideas for Additional indicators for Availability and Non-discrimination*, Rolf Luyendijk, UNICEF-JMP

## **Appendix 4: Key Sources on the Right to Water and on Indicators for Water and other Economic, Social and Cultural Rights**

### **1. Right to Water**

K. Assaf, B. Attia, A. Darwish, B. Wardam & S. Klawitter, *Water as a Human Right: The Understanding of Water in Arab Countries of the Middle East – A Four Country Analysis* (Berlin: Heinrich Böll Foundation, 2004),

available at: [http://www.boell.de/de/04\\_thema/2757.html](http://www.boell.de/de/04_thema/2757.html).

B. Calaguas, *The Right to Water, Sanitation and Hygiene and the Human Rights Based Approach to Development* (London: Water Aid, 1999).

M. Langford, A. Khalfan, C. Fairstein and H. Jones, *Legal Resources for the Right to Water: International and National Standards* (Geneva: COHRE, 2004),

available at: [www.cohre.org/water](http://www.cohre.org/water).

S. Salman and S. McInerney-Lankford, *The Human Right to Water: Legal and Policy Dimensions* (Washington D.C.: World Bank, 2004)

H. Smets, *Le Droit de chacun a l'eau*, 2002 (2) *Revue europeene de droit de l'environnement* 123-70.

World Health Organisation, Office of the High Commissioner on Human Rights, Centre on Housing Rights and Evictions, Water Aid and Centre on Economic, Social and Cultural Rights, *The Right to Water* (Geneva, World Health Organization, 2003),

available at [www.cohre.org/water](http://www.cohre.org/water).

United Nations Committee on Economic, Social and Cultural Rights, *General Comment 15 (The Right to Water)*, UN Doc. E/C.12/2002/11,

available at: [www.ohchr.org/english/bodies/cescr/comments.htm](http://www.ohchr.org/english/bodies/cescr/comments.htm).

### **2. Indicators for Water and other Economic, Social and Cultural Rights**

K. Beeckman, "Measuring the Implementation of the Right to Education: Educational versus Human Rights Indicators" (2004) 12 *International Journal of Children's Rights*.

A. Chapman, "The Status of the Development of Indicators for Economic, Social and Cultural Rights with Particular Reference to the Rights to Education, Participation in Cultural Life, and Access to the Benefits of Science" (forthcoming from UNESCO, 2005).

Report of Paul Hunt, Special Rapporteur of the Commission on Human Rights on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health to the 59<sup>th</sup> Session of the UN General Assembly, available at: <http://www.ohchr.org/english/issues/health/right/annual.htm>. The Special Rapporteur's

Interim Report to the 58<sup>th</sup> session of the General Assembly, in which he commenced his consideration of right to health indicators, is available at the same web-page.

S. Sugden, *Indicators for the Water Sector: Examples from Malawi* (London: Water Aid, 2003), available at:

[http://www.wateraid.org.uk/in\\_depth/country\\_programmes/malawi/1388.asp](http://www.wateraid.org.uk/in_depth/country_programmes/malawi/1388.asp).

United Nations Human Settlements Programme (UN-Habitat), *Urban Inequities Surveys: Household Questionnaire, DRAFT, October 2004*.

UN-Habitat and the Office of the High Commissioner for Human Rights, *Report of the Expert Group Meeting on Housing Rights Monitoring*, Geneva, November 2003. This document and a number of relevant background papers are available at: [http://www.unchs.org/programmes/housingrights/expert\\_group\\_meeting.asp](http://www.unchs.org/programmes/housingrights/expert_group_meeting.asp).

WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), *Guide for Water Supply, Sanitation and Hygiene Related Survey Questions*, DRAFT October 2004.

WHO and UNICEF, *Meeting the MDG Drinking Water and Sanitation Target: A Mid-Term Assessment of Progress* (Geneva, New York: WHO/UNICEF, 2004), available at [http://www.who.int/water\\_sanitation\\_health/monitoring/en/jmp04.pdf](http://www.who.int/water_sanitation_health/monitoring/en/jmp04.pdf).

## ***Appendix 5: Description of Authors and the Partner Organisations***

### **About the authors**

**Virginia Roaf** is a development specialist in water and sanitation services, with a particular focus on community led activities. She previously was Regional Manager for Water Aid's Programme for Southern Africa and Coordinator for its Urban Initiatives. She was part of the team working on the initial development on the right to water at WaterAid. She also was Regional Co-ordinator (Western Cape) for Peoples Dialogue in South Africa. She has published on the right to water, community mapping processes and water management processes.

**Ashfaq Khalfan** is Coordinator of the Centre on Housing Rights and Eviction's Right to Water Programme. He has published on the right to water, sustainable development law, minority rights and international debt. He is co-author of *Sustainable Development Law: Principles, Practices and Prospects* (Oxford University Press, 2004). He has previously carried out advocacy and legal analysis at the Law and Society Trust (Sri Lanka), Kituo Cha Sheria (Legal Advice Centre, Kenya), the Canadian Department of Justice and the Canadian Human Rights Commission. He also is a founder and director of the Centre for International Sustainable Development Law.

**Malcolm Langford** is a Senior Legal Officer at the Centre on Housing Rights & Evictions (COHRE) and a researcher at the University of Mannheim. He was the inaugural coordinator of COHRE's Right to Water Programme and was publicly thanked by the UN Committee on Economic, Social and Cultural Rights for expert legal advice he provided during the Committee's deliberations over the General Comment No.15 on Right to Water. He has written and spoken widely in the field of economic, social and cultural rights and is currently engaged in a number of human rights advocacy projects in Africa and Europe.

## ***Heinrich Böll Foundation***

The Heinrich Böll Foundation, affiliated with the Green Party and headquartered in the Hackesche Höfe in the heart of Berlin, is a legally independent political foundation working in the spirit of intellectual openness.

The Foundation's primary objective is to support political education both within Germany and abroad, thus promoting democratic involvement, sociopolitical activism, and cross-cultural understanding.

The Foundation also provides support for art and culture, science and research, and developmental cooperation. Its activities are guided by the fundamental political values of ecology, democracy, solidarity, and non-violence.

By way of its international collaboration with a large number of project partners - currently numbering about 150 projects in almost 60 countries - the Foundation aims to strengthen ecological and civil activism on a global level, to intensify the exchange of ideas and experiences, and to keep our sensibilities alert for change. The Heinrich Böll Foundation's collaboration on sociopolitical education programs with its project partners abroad is on a long-term basis. Additional important instruments of international cooperation include visitor programs, which enhance the exchange of experiences and of political networking, as well as basic and advanced training programs for committed activists.

The Heinrich Böll Foundation has about 180 full-time employees as well as approximately 300 supporting members who provide both financial and non-material assistance.

Ralf Fücks and Barbara Unmüßig comprise the current Executive Board. Dr. Birgit Laubach is the CEO of the Foundation.

Two additional bodies of the Foundation's educational work are: the "Green Academy" and the "Feminist Institute".

The Foundation currently maintains foreign and project offices in the USA and the Arab Middle East, in Afghanistan, Bosnia-Herzegovina, Brazil, Cambodia, Croatia, the Czech Republic, El Salvador, Georgia, India, Israel, Kenya, Mexico, Nigeria, Pakistan, Poland, Russia, South Africa, Serbia, Thailand, Turkey, and an EU office in Brussels.

For 2003, the Foundation had almost 38 million Euro. public funds at its disposal.

## ***Centre on Housing Rights and Evictions***

Established in 1992, COHRE is an international, non-governmental human rights organization committed to ensuring the full enjoyment of economic, social and cultural rights for everyone, everywhere, with a particular focus on the human right to adequate housing. COHRE is registered as a not-for-profit foundation in the Netherlands. COHRE has an international secretariat based in Geneva, and regional offices for Africa, North America, South America and Asia/Pacific.

The chief objective of COHRE is to promote practical legal and other solutions to endemic problems of homelessness, inadequate housing and living conditions, forced evictions and other violations of economic, social and cultural rights. The COHRE Right to Water Programme mandate includes:

- Promoting and providing legal and policy advice for the implementation of the right to water at the international and national level
- Developing the capacity of communities living in poverty to lobby for the right to water

- Working with national and local groups to monitor and oppose violations of the right to water

The COHRE Right to Water Programme has actively promoted the right to water at the UN Commission on Human Rights and other UN bodies. COHRE provided expert legal advice to the UN Committee on Economic, Social and Cultural Rights which adopted a General Comment on the Right to Water in November 2002. The Programme has conducted training workshops for civil society organisations and made presentations on the right to water at several international meetings. It has provided legal advice to development NGOs to support their advocacy. The Programme is working in partnership with the Centre for Legal and Social Studies to assist two communities in informal settlements on the outskirts of Buenos Aires to help them lobby and use institutional means to secure access to safe water and to mainstream the right to water into the policies adopted by the Province of Buenos Aires and the concession contract agreed with the private water supplier. The Programme is monitoring the right to water in Kenya, Bangladesh and Ghana and is planning fact-finding missions and training workshops in these countries.

The Programme's advocacy and training is extended to a wider audience by its publications. These include *Legal Resources for the Right to Water*, currently the most detailed publication of international and national standards and jurisprudence on the right to water, and a user-friendly booklet entitled, *Right to Water* with the World Health Organization and others. It is currently preparing an ambitious Manual on the integration of the right to water into water and sanitation policies. Publications are available at on the COHRE website at: [www.cohre.org/water](http://www.cohre.org/water).

### ***Bread for the World***

Bread for the World, a campaign of the Protestant Churches and Free Churches in Germany, was founded in Berlin in 1959. The executive office lies within the responsibility of the EKD Social Service Agency in Stuttgart. The Director of Bread for the World is Pastor Cornelia Füllkrug-Weitzel.

The aim of the campaign is to struggle for justice to the poor. As an aid agency, Bread for the World contributes to overcoming hunger, poverty and social need in almost all the developing countries by financing development projects of local partner organisations. People are supported in their capacity towards self-help. Many years of experience have brought about the realisation that there is a causal correlation between the wealth of the industrial countries and the poverty of people in the South. One of the characterizing feature of Bread for the World are its close relationships to the church congregation. During its 42nd campaign with the motto "On their own two feet" a sum of 61. 2 million Euro was donated (May 2000 to April 2001). Alongside the contributions received, Bread for the World and other institutions of the ecumenical church service also have recourse to funds from the Churches' Development Service.

Bread for the World is increasingly transferring decision making competence to its partners and the guarantee is being given that help arrives where help is needed. In Germany, Bread for the World draws the public's attention to the needs of people in the South.

Bread for the World runs a campaign for the human right of water since March 2003. Supported by many groups and individuals in Germany "Bread for the World" asks to take water out off the WTO agenda. An important objective of the campaign is to contribute to the strengthening to the international network for defence of the human right of water. For more information: [www.brot-fuer-die-welt.de](http://www.brot-fuer-die-welt.de) or [www.menschen-recht-wasser.de](http://www.menschen-recht-wasser.de)