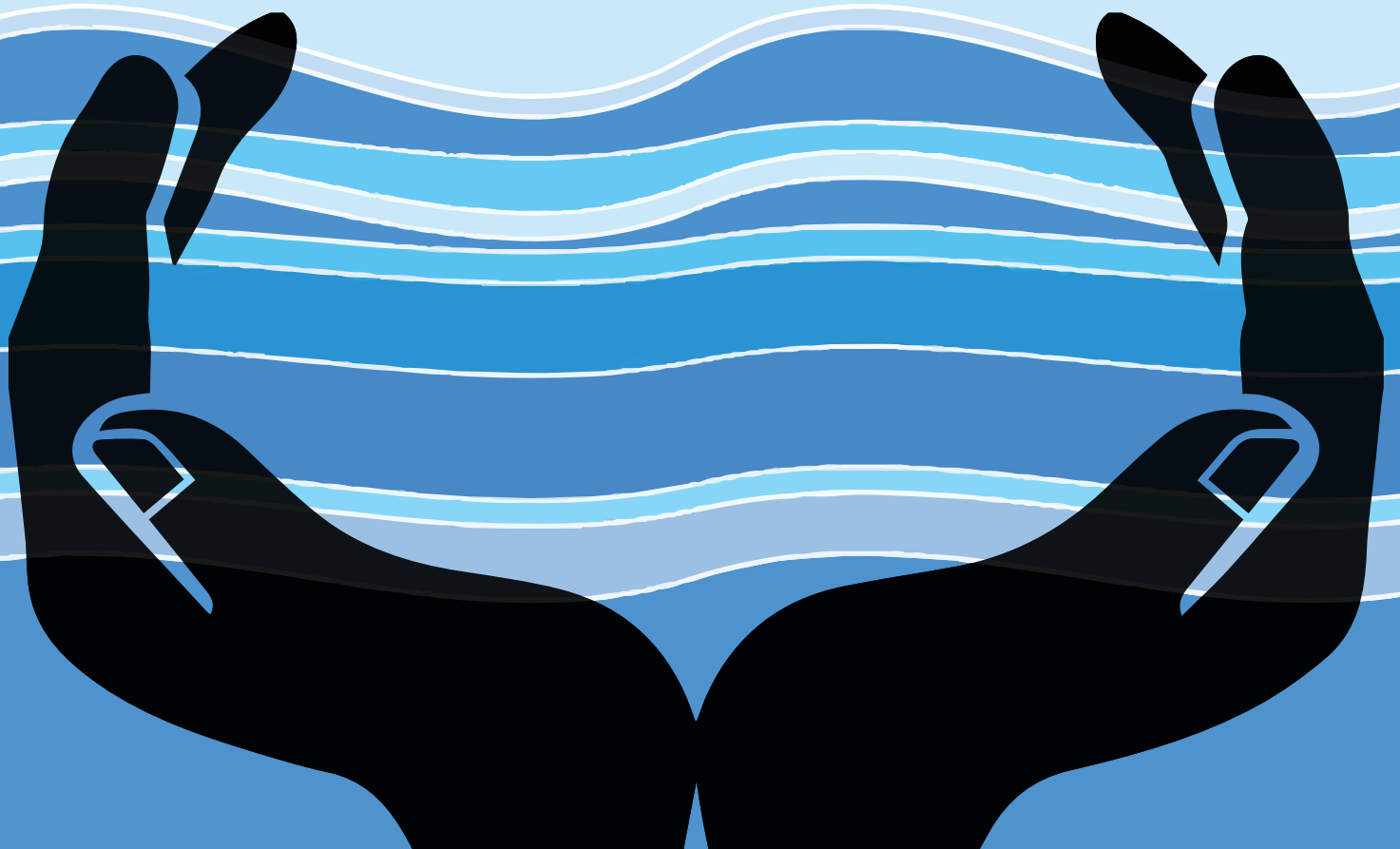




HUMAN RIGHTS-BASED APPROACH TO INTEGRATED WATER RESOURCES MANAGEMENT

TRAINING MANUAL AND FACILITATOR'S GUIDE





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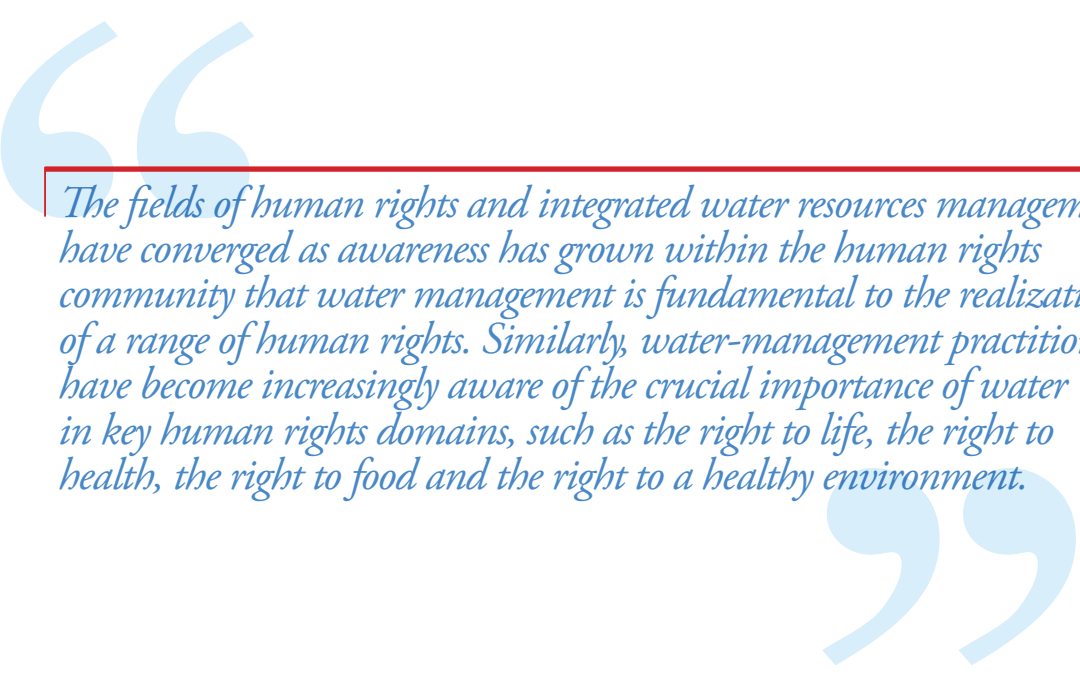


REDICA is a network of engineering faculties, higher education institutions, research centers and professional associations of Central America and the Dominican Republic, dedicated to promote sustainable development, IWRM, Gender Equity and Climate Change Adaptation and the cooperation among organizations at the region.

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The fields of human rights and integrated water resources management have converged as awareness has grown within the human rights community that water management is fundamental to the realization of a range of human rights. Similarly, water-management practitioners have become increasingly aware of the crucial importance of water in key human rights domains, such as the right to life, the right to health, the right to food and the right to a healthy environment.

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1. INTRODUCTION

1.1 CONTEXT

The 2030 Agenda for Sustainable Development was adopted in New York in September, 2015. Its overarching objective is to end poverty by 2030. The 2030 Agenda includes 17 Sustainable Development Goals (SDGs) and 169 targets. The SDGs are global and universal with the vision to “leave no one behind” and “seek to realize the human rights of all.” Covering the three pillars of sustainable development, the SDGs include a dedicated goal on water and sanitation (SDG 6) that aims to “ensure availability and sustainable management of water and sanitation for all.” While SDG 6 broadens the Millennium Development Goal on drinking water and basic sanitation (MDG 7) to include the entire water cycle, Target 6.5, “[b]y 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate,” has been described as specific, measurable and action-oriented by UN-Water. This integrated water resources management (IWRM) target is a foundation for all other water targets, as well as many targets of the other goals.

This manual brings together two fields that, until recently, have been separate: **human rights and IWRM**. These two fields have been brought together as awareness has grown within the human rights community that water management is fundamental to the realization of a range of human rights. Similarly, water-management practitioners have become increasingly aware of the crucial importance of water in key human rights domains, such as the right to life, the right to health, the right to food and the right to a healthy environment. Water is a resource that is essential to life itself, to all forms of economic production, to many forms of social interaction, to many cultural activities and to the maintenance of ecosystems.

Because water is so fundamental, a wide variety of institutions are involved in its management. This creates challenges in the spheres of complementarity and coherence. This coherence is the ‘integrated’ aspect of IWRM. IWRM seeks to unify, in one management system, all the different human interventions in freshwater within a given river basin.

As pressures on the world's freshwater resources increase, many river basins will face both increasing freshwater scarcity and increasing pollution. As this happens, organizations with IWRM responsibilities will face increasing challenges. The many competing—and sometimes conflicting—demands on water resources will give rise to questions of **equity** and **justice**, such as what would be considered to be a 'fair' or 'balanced' allocation of water for competing uses.

The human rights system offers an important entry point for such questions of justice. Within the legal system, human rights law is not a silver bullet. However, it does offer a broadly (almost universally) endorsed normative and legal framework that sets minimum standards for governance and that defines the rights and obligations of different categories of institutions. Because access to safe drinking water and sanitation has been recognized as a human right (generally abbreviated as the human rights to water and sanitation, HRWS), the human rights system offers opportunities to streamline water governance and to provide coherence both in the sphere of environmental sustainability and in terms of human development. Therefore, introducing human rights-based minimum standards for justice into IWRM is an important starting point in securing a 'just' allocation of scarce freshwater resources.

This manual introduces human rights and IWRM to the reader, progressively integrating them into a single approach that has been dubbed a 'human rights-based approach (HRBA) to integrated water resources management' or, in short, an 'HRBA to IWRM'. Whichever lens one prefers to see them through, human rights, development and governance are interlinked and mutually reinforcing. Their core principles overlap, and all of them are essential to understanding and implementing IWRM.

In this introductory chapter, we will briefly present some of the main concepts that will be used throughout the manual:

- ◆ IWRM;
- ◆ Human rights;

- ◆ HRBA;
- ◆ Water governance; and
- ◆ Customary law.

1.1.1 Integrated water resources management

At the 1992 United Nations Conference on Environment and Development in Rio de Janeiro (UNCED; also known as the Earth Summit), world leaders approved a joint guidance document for a broad spectrum of thematic areas that were included under the 'sustainable development' heading. This document, known as Agenda 21, had a chapter dedicated to freshwater resources. The chapter placed the concept of integrated water resources management (IWRM) on the global agenda and noted:

“The widespread scarcity, gradual destruction and aggravated pollution of freshwater resources in many world regions, along with the progressive encroachment of incompatible activities, demand integrated water resources planning and management. Such integration must cover all types of interrelated freshwater bodies, including both surface water and groundwater, and duly consider water quantity and quality aspects. The multisectoral nature of water resources development in the context of socio-economic development must be recognized, as well as the multi-interest utilization of water resources for water supply and sanitation, agriculture, industry, urban development, hydropower generation, inland fisheries, transportation, recreation, low and flat lands management and other activities.”

UNCED 1992, Ch. 18, para. 3

Agenda 21 resulted in IWRM becoming part of international 'soft' law. Beginning in 1992, IWRM principles would be further developed and reaffirmed in international forums and national laws and policies. A frequently used point of departure for IWRM is the definition used by the Global Water Partnership:

“Integrated Water Resources Management (IWRM) is a process which promotes the coordinated development and management of water, land and related resources in order to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.”

GWP 2016

IWRM is the sustainable development, allocation and monitoring of water resource use in the context of cultural, social, economic and environmental objectives (Cap-Net, 2005a). It is cross-sectorial and therefore in sharp contrast to the traditional sectorial approach that has been adopted by many countries. It has been further broadened to incorporate participatory decision-making of all stakeholders.

Within the complex of competing demands on freshwater resources, there was already some international agreement at UNCED on the water allocation priorities that could apply:

“In developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems.”

UNCED 1992, Ch. 18, para. 8

At the time, access to water for domestic and household needs was defined as a ‘basic need’ rather than as a human right. However, there was already international agreement on the principle that, as a matter of priority, water needed to be reserved for domestic and household needs and ecosystem maintenance. Later, this principle would be further anchored in human rights law, eventually using the language of rights rather than needs.

1.1.2 Human rights

Human rights are both legal expressions of society’s fundamental values and legally binding norms. They evolved over centuries as nations began to embrace democracy and enhance the rule of law. Based on a set of inalienable rights, they embed the principle that all human beings are equal before the law. Further, they developed as the foundations of society that

guarantee values such as life itself, freedom, justice and peace. Human rights apply to every individual regardless of nationality, gender, religious conviction, ethnic origin or any other such attributes.

At the national level, human rights have a superior status to most other laws. Expressed in many national constitutions, human rights belong to the fundamental principles upon which governments exercise authority. States have the obligation to respect, protect and fulfil these rights, regardless of whether they adopted legislative measures into their constitution. The constitutions also provide legislatures with powers to develop national laws, which in turn must be in line with constitutional provisions. Therefore, water law (among other areas) should be in line with human rights law. Similarly, IWRM laws and policies should be aligned with human rights law. This manual explains how that articulation can be implemented in practice.

The elaboration of human rights was accelerated after the Second World War in response to the horrors of war and after the United Nations General Assembly adopted the Universal Declaration of Human Rights in December 1948. One of the General Assembly’s first major declarations, it symbolized the hope of a new world order based on a community of nations united around key principles. The Universal Declaration of Human Rights provided the basis for international human rights law, and its articles have subsequently been elaborated in international treaties, regional human rights instruments, national constitutions and other such instruments.

Human rights are often classified into two different categories of rights—civil and political rights and economic, social and cultural rights. This classification is based on the existence of two major international covenants on human rights—the International Covenant on Civil and Political Rights and the International Covenant on Economic Social and Cultural Rights (ICESCR). The United Nations General Assembly adopted both covenants in 1966; both entered into force in 1976. Despite

the construction of two categories of rights, human rights are regarded as **universal, indivisible, inter-related and interdependent** (Vienna Declaration, 1993, para. 5).

1.1.3 A human rights-based approach

The human rights-based approach (HRBA) is a perspective and a framework that aims to ensure that peace, justice, fundamental freedoms, democracy and, in particular, respect for human rights are integrated and mainstreamed into various activities and programmes. In 2003, the United Nations Development Group adopted the UN Statement of **Common Understanding** on Human Rights-Based Approaches to Development Cooperation and Programming. The purpose behind this was to ensure that UN agencies, funds and programmes apply a consistent approach to common programming processes at the global and regional levels, and especially at the country level.

According to the Common Understanding,

- ◆ All programmes of development cooperation, policies and technical assistance should further the realization of human rights;
- ◆ Human rights standards contained in, and principles derived from, the Universal Declaration of Human Rights and other international human rights instruments should guide all development cooperation and programming in all sectors and in all phases of the programming process; and

- ◆ Development cooperation should contribute to the development of the capacities of “duty-bearers” to meet their obligations of “rights-holders” to claim their rights.

The approach can thus be said to work at three levels, embracing the goals, processes and outcomes as necessary. As will be described in Chapter 3, the HRBA builds on the standards and core principles of the Universal Declaration of the Human Rights from 1948 and other international human rights instruments: universality and inalienability, indivisibility, inter-dependence and inter-relatedness, equality and non-discrimination, participation and inclusion, accountability and the rule of law.

The approach is commonly operationalized by ensuring that the **procedural aspects** of these principles are duly taken into account, especially emphasizing participation, accountability, non-discrimination and transparency (abbreviated as PANT).

Taking an HRBA also includes the applicable **substantive rights** (the specific content of the right). For example, the recognition of the human rights to water and sanitation comes with a package of standards that specifies both substantive and procedural rights. These are the standards that governments have the obligation to progressively fulfil, and to which citizens have rights. Clear standards help to set benchmarks for service providers.

The recognition of the human rights to water and sanitation comes with a package of standards that governments have the obligation to progressively fulfil. Clear standards help to set benchmarks for service providers and improve the justiciability of the rights by enabling the judiciary to establish whether or not rights have been infringed.

1.1.4 Water governance

Governance is related to joint decision-making and interactions around a given problem (such as water management). The way that water is actually used, developed and managed is affected by the political, social, economic and administrative systems that are in place internationally, nationally and locally. Although governance is often associated with the actions of a government, water governance is, in practice, also affected by the UN system, international aid spending, multilateral banks, civil society, the private sector, NGOs, indigenous communities and other stakeholders at all institutional levels—all of whom engage to various degrees in processes for decision-making, regulation, control and organization of water.

These processes take place through institutions (e.g. organizations and networks). Written laws and regulations, as well as customary law and social norms, define rights, roles and responsibilities among sovereign states, among individuals and states, and among different individuals. However, these laws and regulations are interpreted and implemented through everyday social practices in institutions, resulting in a ‘culture’ of management that we call governance.

In the field of water governance, the basic institutional unit is the water-use system, which is the infrastructure created for the purposes of water intake, conveyance, supply and distribution and for the disposal of effluent on behalf of users. Water-use systems often require considerable investment from society in terms of capital costs, and once constructed require management to oversee operation and maintenance. A wide variety of water-use systems have been developed, often in response to local needs (e.g. urban domestic use or rural irrigation). In the last century, there has been an exponential growth in water-use systems, and natural water systems have been increasingly colonized by man-made water-use systems. The recurrent practices (trends) that apply across these water-use systems and the interconnections between them are what constitute a water-governance system at any point in time.

1.1.5 Customary law

It is essential to understand the significance of customary law and how it impacts HRBA to IWRM implementation (see Chapters 5 and 7 for further discussion about customary arrangements for water allocation). Customary law is a common rule or common practice that is, as the word ‘customary’ suggests, a traditional and accepted form of conduct in society (e.g. the laws, practices and norms of indigenous peoples and local communities). Customary law is derived from standardized social practices and is not necessarily enforced through a centralized authority (although local authorities may exist to rule on cases as they emerge). Such customs are accepted as obligatory for individuals living within the area in which it applies. Customary law practices are essential to the functioning of the social order. However, they are rarely codified in such a manner as to be easily enforceable before courts.

In the vast majority of cases, customary law is only transmitted orally and hence, depending on local customs and traditions, its application and implementation can vary from one area to the next. Nonetheless, customary law is a valuable source of legal rights and obligations. It can therefore be seen as a form of local law that complements codified legislation. However, there are situations where customary law and codified legislation do not lead to the same conclusion to resolve a given conflict. In such cases, the national legal framework of each country usually establishes a hierarchy among the two sources, or at least rules, to handle such conflicts of norms.

It should be noted that ‘customary law’ also exists at the international level. It then refers to established state practices in a given field that have not been codified (written and ratified) into international law. The traditional source is Article 38(1) of the Statute of the International Court of Justice, which lists “custom” among the generally recognized sources of international law in disputes and relations between distinct nation-states. However, this manual only develops more explicitly the national and local level customary laws and practice.

1.2 THE STRUCTURE OF THE MANUAL

Chapter 2 focuses on IWRM, providing some historical background to the concept, examining the definition and providing commentary on the definition in terms of how the concept has been applied in practice. Chapter 3 does the same for the HRBA, looking in detail at its origins, how it is applied and its strengths and weaknesses. Chapter 4 turns to water governance, asking what are “good water governance” normative principles and what are the various dimensions of water governance.

After this overview of the elements that need to be combined in an HRBA to IWRM, Chapter 5 looks first at the distinction between water rights and the right to water as the basic operating framework for this approach. Chapter 5 also deals with customary law and legal pluralism and how this relates to IWRM. Chapter 6 looks at the human rights to water and sanitation, highlighting the linkages between this right and the way in which IWRM can support its realization. Chapter 6 turns to the practical aspects of the manual, presenting a way in which an HRBA to IWRM can be approached in practice by linking the implementation cycle for IWRM to that of human rights. Chapter 7 treats customary arrangements for water allocation and legal pluralism. Chapter 8 provides a tool for implementing an HRBA to IWRM. Finally, Chapter 9 presents a range of tools that may be useful for facilitators of this manual in their training sessions.

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Global Water Programme (GWP), see <http://www.gwp.org/The-Challenge/What-is-IWRM>.

Kirkemann Boesen, J., and T. Martin, *Applying a Rights-Based Approach*, The Danish Institute for Human Rights, 2011, p. 9.

Office of the United Nations High Commissioner for Human Rights (UN OHCHR), 1993, *Vienna Declaration and Programme of Action*, see <http://www.ohchr.org/EN/ProfessionalInterest/Pages/Vienna.aspx>.

United Nations Conference on Environment and Development (UNCED), “Earth Summit”, *Agenda 21*, 1992, chapter 18, paragraph 3. The concept of IWRM is part and parcel of a broader package of approaches to sustainable development launched at UNCED in 1992.

UNCED, 1992, Op. Cit, paragraph 8.

United Nations Development Programme (UNDP) Cap-Net, *Basic Principles on IWRM*, 2005, see <http://www.cap-net.org/training-material/iwrm-tutorial-english>.

2. INTRODUCTION TO INTEGRATED WATER RESOURCES MANAGEMENT

This chapter introduces the basic concepts of IWRM, looking at its history, its evolution, how it has been understood and implemented, its weaknesses and misinterpretations and how it should be envisioned from a human rights perspective. The changing and increasing competition for water resources has deepened conflicts and brought out social and environmental aspects that have been missing or under-represented in decision-making processes; this needs to be urgently addressed. A human rights-based approach offers an entry point to address these issues of justice.

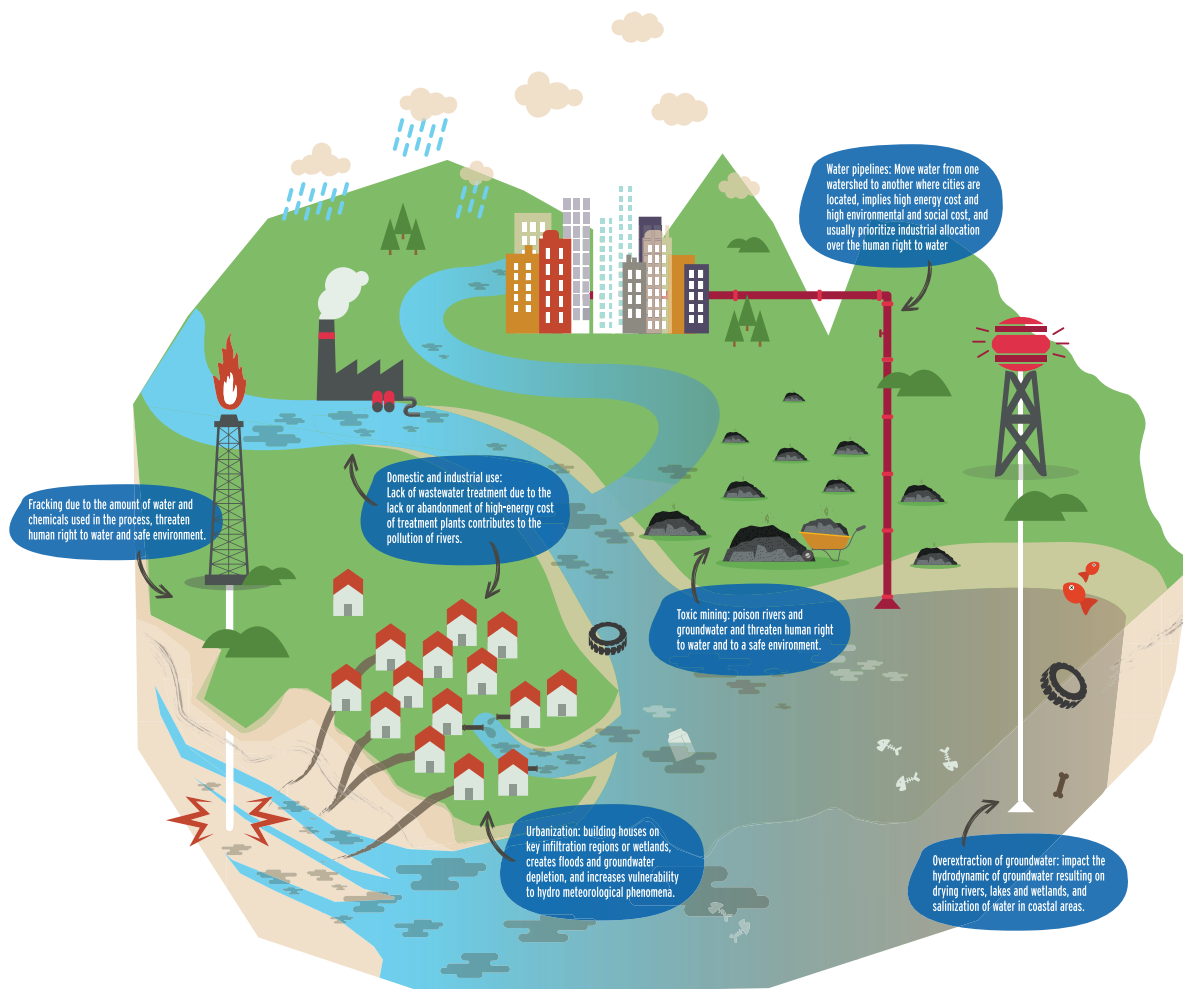
2.1 THE SUPPLY PARADIGM

2.1.1 Early water supply development

Over the past century, industrialization, economic growth and an expanding world population have not only increased demand on water supply systems in terms of **quantity**, but have also increased the risks of negative impacts water users have on each other in terms of **water quality** (due to rapid increases in pollution loads during the period). Harnessing water for uses such as domestic and industrial purposes, flood control, inland navigation, etc., has become very important.

Effective water management of rivers and canals has been a valued skill throughout the period. Industrialized countries invested heavily in state-directed water supply schemes, such as the one promoted by the United States under President Franklin D. Roosevelt. Due to their successes in combating poverty, these American schemes became a symbol of progress and a model to follow by countries aiming to achieve economic uplift.

Figure 2.1: Mismanagement of a River Basin under the Supply Paradigm – Decreases in Land and Water Quality and Increases in Disaster and Health Risk



During the Great Depression of the 1930s, much of the land in the United States had been farmed too intensively for too long, eroding and depleting the soil. Crop yields had fallen along with farm incomes, increasing impoverishment in the rural areas of one of the country’s poorest regions. This poverty brought social upheavals and set the stage for several actions taken by President Roosevelt. He initiated a programme to lift the economy out of recession—the so-called New Deal—that included the popular and influential Tennessee Valley Authority (TVA), an institution created to holistically manage water resources while generating

energy, supporting agriculture and promoting wider socio-economic development (Benson, Gain and Rouillard 2015).

Roosevelt had envisioned “a corporation clothed with the power of government but possessed of the flexibility and initiative of a private enterprise” (Tennessee Valley Authority 2015). Such integrated water management then became the blueprint for developing countries “as large-scale water engineering projects became a means to drive national development strategies” (Gain et al. 2013: 12). Beginning in the 1940s, this notion spread

all over the world (Molle 2009: 489), particularly in Asia, Africa and South America. This approach was overtly engineering-based and development-oriented (Gain et al. 2013). From the late 1970s through the early 1990s, a new way of thinking that better reflected the multidimensional nature of water management (Biswas 2008) became known, providing a voice for ecosystems and the poor. The Clean Water Act amendments (US Government 1972), and European Economic Community Water Directives were adopted. This awareness was strengthened by the 1987 release of the Brundtland Report for the World Commission on Environment and Development. Fighting diffuse water pollution and the sectorial approach stimulated a more integrated approach to river basin management. A new paradigm was required, as these views had been formalized into IWRM. In reality, however, consideration of the views merely updated pre-existing integrated approaches with an emphasis on sustainable development through the inclusion of environmental protection, participation, efficiency and equity.

Codification of IWRM via a set of universal principles came in 1992 at the UN/World Meteorological Organization Dublin Conference. These principles prioritize water as a finite resource, promote stakeholder participation, recognize the importance of the participation of women and indigenous peoples, and also treat water as an economically valuable good (UN 1992). The Dublin Principles subsequently proved highly influential. The UN then adopted IWRM as part of its Millennium Development Goals; some of the principles were incorporated into the European Union's Water Framework Directive (2000). The Directive introduces river-basin management planning for sustainable water quality and is also integrating climate change adaptation (Fritsch and Benson 2013).

Currently, IWRM addresses many problems that occur in the same basin, not only the allocation of quality and quantity of water among competing users, but also energy, climate change and food security. These diverse areas are nonetheless all related, and challenge the water-governance approach. This is the new approach of the SDGs.

2.2 INTEGRATED WATER RESOURCES MANAGEMENT

UNCED gave birth to a number of international instruments that continue to provide the framework for sustainable development. This includes the Rio declaration on Environment and Development and the groundbreaking Agenda 21, which offers a practical approach to applying local- and national-level sustainable development policies. Further, Agenda 21 seeks to provide a comprehensive blueprint for action to be taken globally, nationally and locally by UN agencies, governments and major groups. Major groups include: business and industry, farmers, indigenous peoples, local authorities, NGOs, the scientific and technological community, trade unions, women, workers and youth.

At its 1992 adoption, Agenda 21 was intended as a programme of action for sustainable development worldwide. The ambition was high, and so were the stated goals of the agenda—to improve the living standards of those in need, to better manage and protect ecosystems, and to bring about a more prosperous future for all.

Due to water's relevance to the environment and development, Chapter 18 of Agenda 21 was devoted to the "Protection of the Quality and Supply of Freshwater Resources: Application of Integrated Approaches to the Development, Management and Use of Water Resources." In addition, chapters 10 through 15 and Chapter 17 guide an integrated approach to the planning and management of land resources; combating deforestation; managing fragile ecosystems; combating desertification and drought; managing sustainable mountain development; promoting sustainable agriculture and rural development; and incorporating coastal areas into the planning cycle. It is in this document that the concept of IWRM first achieved international recognition. Thus, IWRM emerged as an accepted alternative to the state-centric, sector-by-sector, top-down management model that had been dominant. It was in the effort of integrating

environment, equity and efficiency on the use of water, inspired by the Dublin principles, that the IWRM concept was born.

The 1992 International Conference on Water and the Environment in Dublin, Ireland, adopted four principles:

1. Fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment.
2. Water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels.
3. Women play a central part in the provision, management and safeguarding of water.
4. Water has an economic value in all its competing uses and should be recognized as an economic good.

The introduction to Agenda 21, Chapter 18, announced:

“Water is needed in all aspects of life. The general objective is to make certain that adequate supplies of water of good quality are maintained for the entire population of this planet, while preserving the hydrological, biological and chemical functions of ecosystems, adapting human activities within the capacity limits of nature and combating vectors of water-related diseases. Innovative technologies, including the improvement of indigenous technologies, are needed to fully utilize limited water resources and to safeguard those resources against pollution.”

UNCED 1992

Although it is not phrased in human-rights language, reference is made to the need to guarantee adequate supplies of water for each individual while ensuring that basic ecosystem functions are not disrupted. **The securing of these guarantees is central to a human rights-based approach to IWRM.**

As seen in section 18.3, Agenda 21 mentions IWRM for the first time. In further defining the concept of IWRM, Agenda 21 highlighted the following elements:

- Water resources must be protected, taking into account the functioning of aquatic ecosystems and the perennial nature of the resource;
- In developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems; and
- IWRM should be carried out at the level of the catchment basin or sub-basin in order to:
 - ~ Promote a multisectoral approach to water resources management;
 - ~ Plan for the sustainable management of water resources based on community needs and priorities within the framework of national economic development policy;
 - ~ Design, implement and evaluate projects and programmes that are both economically efficient and socially appropriate within clearly defined strategies, based on an approach of full public participation; and
 - ~ Identify and strengthen or develop the appropriate institutional, legal and financial mechanisms to ensure that water policy and its implementation are a catalyst for sustainable social progress and economic growth.

Ten years later, at the World Summit on Sustainable Development, these IWRM-related goals were linked to a plan of action with concrete time-frames. In the so-called ‘Johannesburg Plan of Action’, states committed to developing integrated water resources management plans based on related national and regional strategies, plans and programmes.

Other definitions of IWRM focused more on an ecosystems approach, which aimed to balance the needs of human communities and ecosystems and to promote harmonious relations at all scales within this context (see Box 2.1 for a condensed version of the basic concepts).

A territorial unit for water management was missing from these definitions. In a later conceptualization, the International Network of Basins Organizations redefined IWRM to include the river basin as the unit where the process of IWRM should be implemented (as was emphasized in the Dublin conference).

2.3 DEFINITION OF 'INTEGRATION'

The IWRM concept can be summarized as the attempt to integrate all aspects of water resource interventions into a management framework at the catchment level. This replaces politically determined water resource-management areas with naturally determined catchment areas. One of the cornerstones of the IWRM is that the fundamental management unit for water should be the river basin. A river basin approach in the implementation of IWRM is being recognized as a comprehensive basis for managing water resources more sustainably, and will thus lead to social, economic and environmental benefits (UNESCO 2009).

A river basin is a naturally occurring physical entity. A basin-level perspective enables the practical integration of downstream and upstream issues, quantity and quality, surface water and groundwater, and land use and water resources. Food security, gender, HRBA, health, environment, industry and many other objectives are closely related to sound water-resources management. IWRM is a step-by-step process and takes time.

2.3.1 Catchment linkages

Land and water are ecologically linked in a natural system alternately called a catchment, watershed or river basin. A catchment is the area that catches

all the rain and directs it to the same outlet point, whether a stream, river, lake or, eventually, the ocean. Catchment land is not only comprised of a system of soil, slopes, streams, lakes and rivers, but also includes the humans, plants and animals who live in it, as well as all the things that have been added to it such as buildings and roads. Its boundaries are the highest contour points of the valley (like the boundaries of a bathtub), collecting all the water that falls in. The catchment is considered the most appropriate geographical entity for the planning and management of water resource, and therefore the best territorial area to implement IWRM processes.

A catchment can contain many smaller elements; a typical watershed is a network of smaller rivers or streams (tributaries), which link to each other to form a bigger river. Streams can be ephemeral, occurring only during a rainstorm; their channels are typically not defined and vary from one precipitation event to another. Intermittent streams generally flow in the rainy season; perennial streams flow throughout the year and their channels are usually well defined. The physical, chemical and biological make-up of a stream relates to the surrounding physical features of the watershed. Analysis of these features aids in the understanding of stream–watershed relationships and predicts the effects on human influences on different stream types.

Box 2.1: Ecosystem Approach

- All elements of an ecosystem (physical, chemical and biological) are interdependent;
- Ecosystems are of a dynamic and complex nature, which must be addressed with a flexible and adaptable approach; and
- Scientific, social and economic concerns need to be integrated.

Box 2.2: International Network of Basins Organizations Definition of IWRM

“The coordination of the water resources of a river basin across sectors and interest groups (including the environment) and at different scales (from local to international) in such a way as to balance social, economic and environmental interests.”

Source: <http://www.inbo-news.org/>

Figure 2.2: Water Uses: Interlinked and Interrelated



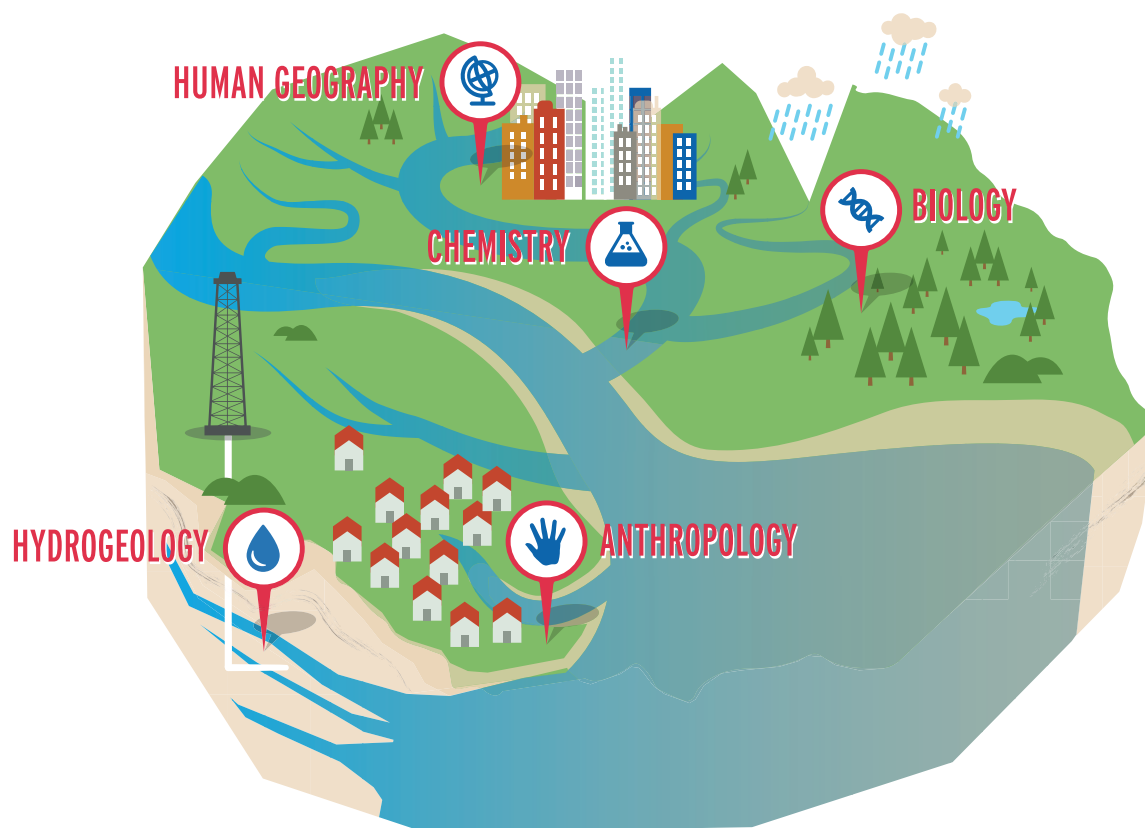
2.3.2 Scientific interdisciplinarity

IWRM attempts to incorporate into planning all aspects of the complex physical and ecological system within a catchment (including human effects). Catchments have varied habitats, each of which with a localized ecosystem. Catchments harbour different kinds of human activity, from farming to mining and from urban development to industry. Attempts to integrate all these systems into a plan at the river basin level require many types of knowledge, including biology, geography, chemistry and town planning. Therefore, ideally,

IWRM planning must be interdisciplinary so that decisions related to water resources are as comprehensive as possible.

An IWRM framework requires a multi-stakeholder platform to identify and negotiate adaptation to changes such as climate change. If regular evaluations of basin hydrology enhance the understanding of a changing water cycle, manifestations of climate change then become as much of opportunities to identify solutions through land-use changes, or the reduction of the agricultural footprint. All of which is part of a reiterative and yet evolving step-by-step IWRM process.

Figure 2.3: The River Basin as a Territorial Area to Implement IWRM, Taking into Account Interdisciplinarity



2.3.3 Multi-stakeholder participation

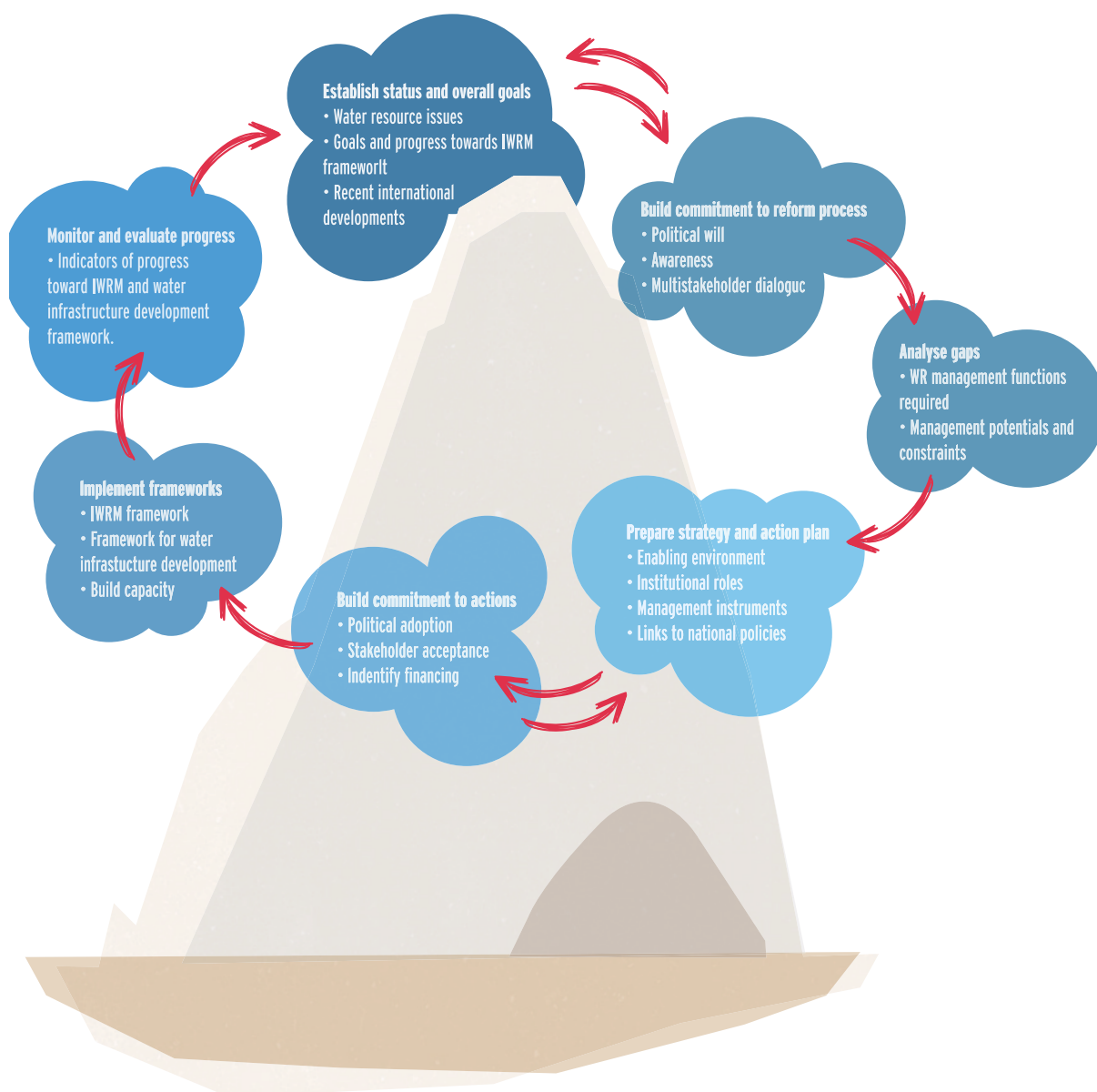
Involving all stakeholders at every level becomes increasingly central to successful planning. Consultation with stakeholders on their needs and objectives is a necessary and continuous process. Planning should be participatory, and planning teams should be accountable so that detailed information about the environment and activities (and their local-level impacts) are accounted for in plans at higher levels. Typically, catchment-management authorities function as a small core of specialists that solicit inputs from a wide variety of sources, including interacting with stakeholder forums. The process of IWRM implementation has to create an environment that ensures equity of access to water. Therefore, IWRM should ensure balance among the multiple societal interests that need to be taken

into account, with the understanding that water quantity and quality depends on the state of the ecosystem and on the entire catchment area.

Participation is needed to share knowledge and to obtain a detailed overview of the needs, challenges and ambitions present in the catchment. It is only in the act of sharing these areas from all users that comprehension can arise, and, after obtaining a negotiated consensus, difficult decisions can be taken. This fully participative consensus is the only way to achieve sustainability and ownership of the decisions taken for the watershed.

Additional rights issues that need to be considered in IWRM implementation include the recognition of indigenous people's collective rights to the lands, territories, the natural resources that they have traditionally occupied and used and their right to

Figure 2.4: Large and Small Water Cycles on Land are Considered for IWRM



development (which includes participation in the formulation, implementation and evaluation of plans and programmes for all national and regional development that may affect them).

2.3.4 Temporal integration

Catchment-management plans need to be flexible and adaptive in order to take into account the continuous changes in human and natural

environments. Economies change, settlement patterns change, and as a result, water-use patterns change. IWRM systems need to allow for these changing dynamics and evolve in step with changes in society. In addition, peak environmental events (extreme weather, floods, etc.) may take place, deforestation and urbanization may lead to instability of water courses and pollution may increase. The institution in charge needs to adapt to each new challenge it faces.

Box 2.3: Three 'E's that IWRM Strives to Achieve

- **Efficiency** on water use, to make water go as far as possible;
- **Equity** in the allocation of water across different social and economic groups; and
- **Environmental sustainability**, to protect water resources and associated ecosystems.

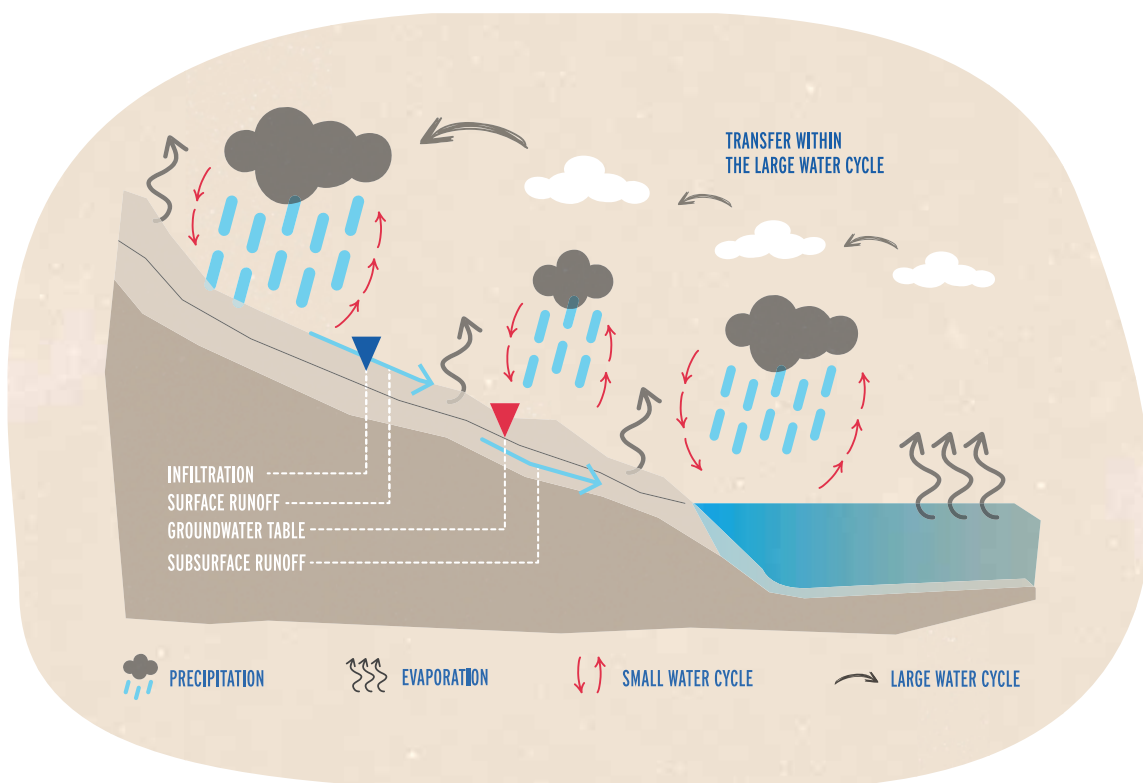
Water catchment-management plans need to be able to adapt and change in an eventual case. This is why monitoring, evaluation and new planning are intrinsically part of an ongoing IWRM cycle.

2.4 IWRM AND THE WATER CYCLE

It is only by understanding water in all its forms and states and by respecting and restoring the different water cycles that we can hope to achieve sustainable water management for present and future generations as envisioned in a human rights framework. IWRM planning should ensure the conservation and and/or restoration of water cycles.

The **large water cycle** is more widely known than the small water cycle. It refers to the exchange of water between ocean and land. Approximately 550 thousand km³ of water evaporates each year. About 86 percent of this evaporation is from the seas and oceans; 14 percent is from land. Of the total amount

Figure 2.5: IWRM and the Water Cycle



of atmospheric precipitation, 74 percent falls over oceans and seas and 26 percent falls over land. Precipitation is absorbed into the ground; if it reaches the groundwater table it is added to groundwater flows. Vegetation absorbs some of the groundwater, some evaporates, and the remainder contributes to surface water to produce streams, rivers and lakes that ultimately flow back to the seas and oceans to complete the large water cycle. Under balanced conditions, the volume of water that flows from the continents into the seas and oceans is matched by the amount of water that falls on the continents from world's oceans through precipitation.

Any variation in this cycle—no matter how small—can result in great problems on the continents. If the amount of water that flows from the continents into the oceans is greater than the amount of water that is transferred from the oceans to land through precipitation, then the land effectively loses water and dries out. This occurs, for example, when infiltration is lowered in the soil through activities such as deforestation or urbanization, which can channel water in a more accelerated and violent way into rivers and subsequently into the sea. As a result, soil moisture decreases, groundwater table levels falls, vegetation withers and less evaporation takes place.

Within the large cycle of water, there are also **small water cycles**, which are a closed circulation of water in which water evaporated on land falls back on the land in the form of precipitation. Small water cycle circulation is partially horizontal, but unlike that of large water cycles, vertical movement is the most characteristic. The small water cycle actually contributes the largest proportion to precipitation; the average annual precipitation over land is 720 mm, whereas that from the seas and oceans is only about 310 mm. In other words, land provides the larger part of its own precipitation from its own land-based evaporation. The precipitation in a region shares in the saturation of soil with rainwater, and through the small water cycle, roughly one-half to two-thirds of rainwater goes into the repeated creation of land-based precipitation.

This very important information should be incorporated into IWRM processes—any user, activity or public policy needs to take into account the transformations that may increase land drainage or reduce precipitation. The stable precipitation over land depends on the stability of evaporation.

2.4.1 The water balance and interdependencies in catchments

In hydrology, water balance is understood to be a relation that characterizes the circulation of water within a given system (mainly in a watershed or in parts of a watershed). Water balance is expressed as the relationship between elements entering a system (i.e. precipitation) and elements leaving the system (i.e. evaporation and surface or underground runoff). But a third, a very often-neglected element exists between the entry and the runoff of water—the change in the volume of water in a system. Hydrologists calculate water balance through the formula $R = E + Q + \Delta V$, where R is the total precipitation over an area per year, E is the evaporation from a region per year, Q is the surface and subsurface runoff per year, and ΔV is the change in the volume of water in the system per year.

The variation of volume per year approaches zero if it applies to natural land untouched and unchanged by humankind. This value is typically greater in highly urbanized areas with rapid drainage of rainwater into watercourses. As interventions in natural water courses expand and land cover changes induce increased outflows of water, we can imagine that considerable volumes of water can be lost to the system (particularly in the soil profile). Part of this volume leads to increased volumes in the oceans (after subtracting the increased evaporation from the ocean), and along with water from the glaciers, contributes to sea level rise. The great danger of neglecting these variations, because yearly differences are very small, is that in time it can lead to the drying of a country without hydrologists noticing the reason for it.

The hydrological, chemical and biological balance of a river basin's ecosystem will impact the social, economic and environmental spheres—and vice versa. Therefore, understanding and including this interdependency is crucial to be able to present a consensus plan for water management. To facilitate this, IWRM should emphasize involving different users in national policy and law making processes and should foster good governance by creating effective institutional and regulatory arrangements as routes to more equitable and sustainable decisions. A range of tools, such as social and environmental assessments, economic instruments and information and monitoring systems have been developed to support this process.

2.5 INSTITUTIONAL LEVELS IN A RIVER BASIN

To ensure effective management, river basins need a strategic, long-term and binding plan. Achieving this requires clear institutional structures within the river basin, with entities with varying mandates depending on the scale of the basin in question. IWRM requires water management at the level of the river basin, but the boundaries of local and provincial governments may cut across the contours of a river basin, creating fragmented water-governance structures. In turn, this fragmentation can undermine the realization of human rights.

The institutional framework of water management provides for the analysis of policies and options that will guide decisions about the management of water resources in relation to the:

- ◆ Water shortage;
- ◆ Efficiency of the service;
- ◆ Allocation of water; and
- ◆ Protection of the environment.

The institutional framework will also facilitate the consideration of the relationship between the ecosystem and the socio-economic activities of watersheds (UNDP Cap-Net 2009).

Solid interdepartmental and intersectoral cooperation, with the participation of all relevant interest groups, should be a precondition for decision-making, planning and implementing IWRM.

IWRM should ensure the integration of multiple levels of management, taking into account the environmental, economic, political and socio-cultural conditions of the respective region.

A **catchment-management agency** is the institutional entity responsible for the development, implementation and evaluation of the catchment-management plan. It does so in consultation with the catchment forum, which may be composed of various river forums for each tributary of the larger catchment. In most cases, the catchment management agency acts with an independent mandate on behalf of national or provincial governments.

A **catchment forum or council**, depending on the name that a country uses, is the platform where all stakeholders convene. It is at this forum where all geographic areas of the catchment will be represented and where all relevant interest groups may interact with each other. It is at this institutional level that the integration of different perspectives on catchment development takes place. Importantly, this is the level at which various scenarios for infrastructure development and environmental protection in the catchment can be discussed and negotiated. Although infrastructure is developed by technical specialists, it is important that it is based on a vision of water allocation over various different uses that have been agreed upon by the stakeholders. It is also important that the development scenario is very clear about how human rights guarantees (i.e. minimum allocations of water to secure human rights) will be achieved in practice. The development of this scenario may require quite extensive negotiations.

Water-user associations are usually the lowest institutional level in a given catchment. However, they are extremely important from the point of view of economic development, environmental conservation and poverty alleviation. A water-user association

Box 2.4: Case Study of Implementing IWRM Through a Human Rights Approach (The Matanza-Riachuelo River Basin Authority, Argentina)

The Matanza-Riachuelo River Basin, the most polluted in Argentina and one of the 30 most polluted in the world, made good improvements. Although far from being complete, local actors took a first step towards reversing a severe environmental deterioration process that stemmed from intense urbanization and industrialization during the 20th century, combined with ineffective wastewater laws and institutional fragmentation. Interestingly, the change has been made possible through a legal framework that is strongly supportive of human rights.

The 64 km long Matanza-Riachuelo River is located in Buenos Aires province. It flows through the city of Buenos Aires, discharging into the La Plata River. Its catchment area is 2,240 km² and it is home to 6.1 million inhabitants. The basin falls within various jurisdictions: the national government, the provincial government (Buenos Aires) of the Autonomous City of Buenos Aires and 14 municipalities located in the southern suburbs of the province. The catchment area is very dynamic, with 3,000 to 4,000 industries producing 25 percent of the country's GDP. This industrial activity has also generated heavy pollution.

The acute environmental and social degradation in the river basin is the result of limited public infrastructure investment, poor environmental management, lack of adequate urban and industrial planning and limited public infrastructure investment. The river's pollution is the result of a lack of a binding and integrated water resource management plan. Despite a multimillion dollar Inter-American Development Bank loan, the corresponding environmental management plan was never implemented due to inadequate institutional and legal frameworks to coordinate different government jurisdictions' involvement.

The National Ombudsman recommended the establishment of an inter-jurisdictional basin authority. In parallel to this process, in 2004 a group of citizens brought a legal case to the High Court of Argentina, invoking Argentina's constitutional **right to a healthy environment**. Two years later, in 2006, after the publication of the second report written by the Ombudsman, the Court ruled that the accused (municipalities, the Province of Buenos Aires, central government and companies) should submit a joint plan to clean up the river. The plan would then be submitted to the community through public hearings before the Supreme Court. As part of the ruling, the Court also summoned the private companies to prepare reports detailing the measures they would take in order to halt and reverse the pollution in the river basin.

In September 2006, the first public hearing took place. At the hearing, government authorities presented the Riachuelo Basin Clean-Up Plan and the creation of an inter-jurisdictional committee on the basin, the Matanza-Riachuelo River Basin Authority, which was henceforth in charge of plan implementation. After several other public hearings, on 8 July 2008, the Supreme Court gave its final decision in what is now known as the Mendoza Ruling (Supreme Court of Argentina 2008). The Court ruled "that the Government of Argentina, the City of Buenos Aires, and the Province of Buenos Aires were equally negligent and responsible for not controlling the degradation of the Matanza-Riachuelo."

In 2012, positive results included an increased number of environmental inspectors in the region (from three to 66), the creation of 90 sampling points for water-quality monitoring and four for air and soil quality. Three new water treatment plants had been built, providing clean water to 1 million people; 11 sewage-treatment plants had been expanded; 186 garbage dumps had been closed; and 177 polluting industrial facilities had been reconverted. However, efforts and resources are still needed to strengthen the basin authority's inter-jurisdictional power, to improve sewerage services, to support the reduction of industrial discharges and to improve decision-making for sustainable land-use and drainage planning.

The National Human Rights Institution of Argentina has been instrumental in these major developments.

Source: UNEP, *Good Practices for Regulating Wastewater Treatment: Legislation, Policies and Standards*, 2014.

is often a legally registered association formed by the agreement of the majority of groups of water users for the purposes of management, distribution and conservation of water from sources used jointly by association members. A water-user association can acquire a water license and water operating permits

and therefore it is the basic institutional building block of a catchment-management system. Internally, it has a management structure, oversees infrastructure management, resolves conflicts over water use, collects water user fees and represent special interests and values arising from water used for a

Box 2.5: Pixquiac River Sub-catchment Committee, Veracruz, Mexico

The participatory process in the Pixquiac River Basin Committee started in 2007 when different stakeholders, such as community authorities, public servants, community groups, academics and others were invited to elaborate a plan for the sub-catchment. That year, two assemblies were realized and developed a participatory diagnosis of sub-catchment problems. As a result, three geographical areas were identified corresponding to different hydric problems.

Members defined a general programme for the Pixquiac River Basin Committee. In theory, there was participation by local authorities from the sub-catchment (four municipalities), the water service operator, federal authorities (forestry and water), state authorities (climate change and environment), university researchers, production organizations (fisheries, agriculture) and civil society (environmentalists). However, political will was not always present, making follow-up on authorities' commitments difficult.

Today, the Committee brings together more than 100 people representative of different interests and institutions. The general assembly and its board is the maximum authority; a technical commission elaborates on the annual work plan. The Committee presents the annual work plan to the assembly for approval. The realization of the activities is delegated to a technical entity that has been led by an NGO called SENDAS AC, which is required to inform the assembly on progress and use of resources.

The model is a good example of how civil society organizations can participate in a constructive and responsible way in the design of a plan, and how an NGO can lead the implementation of an annual plan decided by consensus. Nevertheless, challenges remain to:

Ensure the participation and political will of public servants, such as participation of water-services operators and local and federal authorities in meeting;

Strengthen democratic and civic culture between government entities and citizens (rural and urban);

Ensure a legal framework that enables stability and continuity of the planning and collaboration with users; and

Increase the budget to reverse the environmental destruction occurring in the catchment.

Source: Paré, L., and P. Gerez, *Al filo del Agua: Cogestión de la Subcuenca del Río Pixquiac*, Instituto Nacional de Ecología y Cambio Climático, 2011.

public purpose (e.g. in an environment or conservation area or for the purpose of managing a ground-water-controlled area). The associations are usually legal entities, but they sometimes have the status of community water management linked to traditional governance structures.

Water-user associations play a very important role in water-poverty alleviation. They have been known to take the lead in solving community-level problems of access to water in areas where the local government has limited capacity. They often have intimate knowledge of the local hydrodynamics, environment and needs and challenges (environmental or political). This information is very important in elaborating a plan at the sub-catchment level.

Capacity building at this level is crucial to strengthening and ensuring the efficient and equitable participation and knowledge sharing.

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3. THE HUMAN RIGHTS-BASED APPROACH

This chapter aims to give the background to the HRBA as a concept and to provide the human rights standards and principles on which it rests. The chapter also seeks to explain terms such as duty-bearer and rights-holder, and the differences among legal, political and moral obligations. Finally, Chapter 3 sheds light on the role of indicators for strengthening of duty-bearers' capacities.

3.1 DEFINITION

The human rights-based approach or, as it is sometimes known, the rights-based approach or simply 'the rights perspective,' lies at the heart of all UN bodies' development cooperation work and recognizes the realization of human rights as its primary goal. This approach also guides many governments, agencies and organizations that strive to make people's human rights a reality. They do this with internationally agreed norms, values and standards as the point of departure.

A fundamental aspect of the HRBA is that it moves the focus from needs and charity to rights and freedoms and from voluntary commitments to obligations and responsibilities. One implication of this is that people are recognized as key actors in their own development, rather than passive recipients of commodities and services. This is, in turn, based on identifying rights-holders and duty-bearers and placing more responsibility on all involved to operationalize the goals of the development cooperation. The HRBA seeks to promote and protect human rights by strengthening and building capacities in rights-holders in order to empower them to claim their rights and valid entitlements, and in duty-bearers in order to enable them to meet their obligations to respect, protect and fulfil all human rights.

The HRBA is part of the process of mainstreaming human rights into various UN system activities and programmes. For the sake of consistency, when applying the approach, a Common Understanding to the

HRBA in development cooperation was agreed upon in 2003. Along with this, HRBA is meant to give equal attention to **what** should be done and **how** it should be done in different phases and steps of a project or programme cycle. The following is a working definition of how to take an HRBA, adapted from the UN HRBA Portal:

- **Goal:** In all policies, projects and programmes, activities, interventions, technical assistance and actions, actively strive to **further the realization** of human rights as laid down in the Universal Declaration of Human Rights and other international human rights instruments. The aim of all activities should be to contribute directly to the realization of one or several human rights;
- **Process:** Ensure that all work in all phases of the project or programming is **guided by** procedural and substantive human rights **standards and principles**, as listed under 3 below. This begins with the initial root cause analyses and programme planning and design, and is equally important throughout implementation to the monitoring and evaluation stage. The standards and principles should guide all development cooperation directed towards the achievement of the SDGs and Agenda 2030.

For the purpose of this manual, this process would start with the assessment (legal mapping) of what existing national commitments entail in the field of water-related human rights, as described in Chapter 8. In practical terms, the HRBA encourages duty-bearers to consider the concrete means by which the intended goals and outcomes are pursued. This can include the commitments of budgets and staff towards realizing the SDGs, the public provision of information on planned programmes and invitations to participate in the formulation, or the mappings that pinpoint the locations of marginalized, disadvantaged and excluded groups. By ensuring due process, measures can be taken at the water resource level to allocate water for the realization of human rights, to protect

citizens against pollution or to manage river basins in order to ensure future generations' enjoyment of the rights.

- **Outcome:** Identify and determine the relationship between individuals and groups with valid claims (rights-holders) and state and non-state actors with correlative obligations (duty-bearers); aim to contribute to the development of the capacities of the former to meet their obligations, and/or of the latter to claim their rights. The outcome should reflect the expected benefits associated with the enjoyment of the right itself. These include the direct individual or household benefits such as continuity of supply, affordability, distance from home, quality and acceptability. Outcomes also reflect society-level benefits, such as progressive increases in the standard of living and the standard of health.

3.2 BACKGROUND AND CONTEXT: HUMAN RIGHTS, DEVELOPMENT, AND GOVERNANCE

The paradigm change that resulted in the HRBA is grounded in many NGOs' and development agencies' experience that the traditional development cooperation welfare model has failed. The HRBA is often described as a way to integrate human rights into development; several such examples relate to sustainable development and to IWRM. For example, as discussed in Chapter 2, Dublin Principle Number 4 on the economic value of water recognizes "the basic right of all human beings to have access to clean water and sanitation at an affordable price."

The UNDP Human Development Report 2006 focused on water scarcity, power and poverty while recognizing the convergence of development and human rights. The 2000 Millennium Declaration acknowledged the essential linkages between human rights and development, but the Millennium Development Goal framework largely ignored human rights and did not give sufficient attention

to discrimination and inequalities. Agenda 2030, adopted in 2015, goes further in connecting the dots: it “recognizes the need to build peaceful, just and inclusive societies that provide equal access to justice and that are based on respect for human rights (including the right to development), on effective rule of law and good governance at all levels and on transparent, effective and accountable institutions” (para. 35). Altogether there are six targets under SDG Goal 6, interconnected between themselves and interlinked with other SDGs and targets. Target 6.1 (“achieve universal and equitable access to safe and affordable drinking water for all”) and Target 6.2 (“achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations”) directly refer to the human rights to water and sanitation. As mentioned in Chapter 1, IWRM is covered in Target 6.5. SDG Goal 16 contains two important targets on governance: 16.6 (“develop effective, accountable and transparent institutions at all levels”) and 16.7 (“ensure responsive, inclusive, participatory and representative decision-making at all levels”).

The concept of governance, as described in the following chapter, is sometimes seen as overarching the system of human rights. Yet, for some agencies and organizations, a traditional focus on civil and political rights remains the starting point from which the integration of human rights in development can contribute to good governance: “Human rights frameworks help people hold duty-bearers accountable, inasmuch as they empower individuals and communities to demand that the state respect, protect, and fulfil their rights” (World Bank and OECD 2013: 10). For others, human rights are defined more as a subcategory of governance or as additional dimensions to a more technical core definition of governance (ibid.).

At a more concrete level, the HRBA aims to replace *ad hoc* decision-making with structured and measurable actions to which decision makers can be held to account. The concept of **progressive realization** of human rights assumes the existence

of fixed commitments by decision-makers and of a planning cycle that is based on human rights targets (expressed as indicators of progress towards these commitments, see 3.8 below). These commitments are backed by procedural mechanisms that empower the civil society actors that monitor implementation to obtain access to information, access to mechanisms for participation in public decision-making and access to modes of redress should rights be infringed.

3.3 STANDARDS AND PRINCIPLES

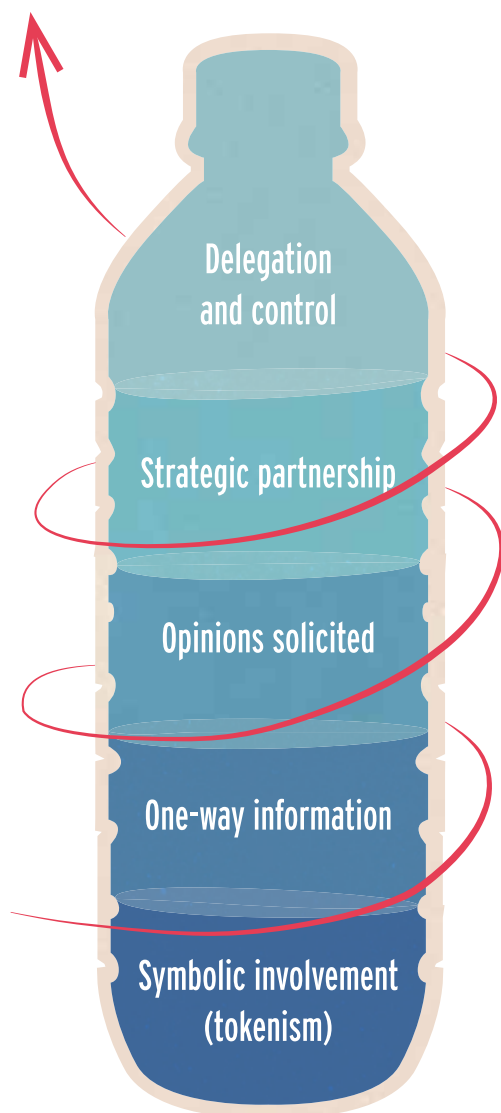
The HRBA builds on the standards contained in, and the principles derived from, the 1948 Universal Declaration of Human Rights and other international, regional and domestic human rights instruments. These core principles are universality and inalienability; indivisibility; interdependence and inter-relatedness; equality and non-discrimination; participation and inclusion; and accountability and rule of law.

Universality and inalienability: Human rights are universal and inalienable. All people, living anywhere in the world, are entitled to them. A human being cannot voluntarily give up his or her rights; others cannot take human rights away from them. As stated in Universal Declaration of Human Rights Article 1, “All human beings are born free and equal in terms of dignity and rights.”

Indivisibility: Human rights are indivisible. Whether of a civil, cultural, economic, political or social nature, they are all inherent to the dignity of every human person. Consequently, all human beings have equal status with respect to rights, which cannot be ranked, *a priori*, in a hierarchical order.

Interdependence and inter-relatedness: The realization of one right often depends, wholly or in part, upon the realization of others. For instance, realization of the right to health may depend, in certain circumstances, on realization of the right to education or on the right to information.

Figure 3.1: Participation and Inclusiveness



Box 3.1: The Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters

Linking environmental rights and human rights, the 1998 United Nations Economic Commission for Europe Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters entered into force in 2001. It goes beyond existing generations and acknowledges obligations to future generations. It established that sustainable development can be achieved only through the involvement of all stakeholders. The convention is an elaboration of Principle 10 of the Rio Declaration, which stresses the need for citizen participation in environmental issues and for access to information, justice and participation.

The Aarhus Convention goes to the heart of the relationship between people and governments. The convention is not only an environmental agreement; it is also a convention about government accountability, transparency and responsiveness and about the relationship between governments and their citizens. It grants public rights and imposes on parties and public authorities obligations regarding access to information, access to justice and public participation.

The convention has been ratified by the European Union (EU), which has acknowledged the Convention's principles in the EU Water Framework Directive (Directive 2000/60/EC). The directive notes the need to "encourage the active involvement of interested parties."

Source: WGF 2012.

Equality and non-discrimination: All individuals are equal as human beings and, by virtue of the inherent dignity of each person, they are entitled to their rights without any kind of discrimination based on factors such as race, colour, sex, ethnicity, age, language, religion, political or other opinion, national or social origin, disability, property, birth or other status as explained by human rights treaty bodies.

Participation and inclusion: Every person is entitled to active, free and meaningful participation, contribution, and enjoyment of civil, economic, social, cultural and political development in which human rights and fundamental freedoms can be realized.

Accountability and rule of law: States and other duty-bearers are answerable for the (non) observance of human rights. In this regard, they

are obliged to comply with the legal norms and standards enshrined in human rights instruments. Where they fail to do so, aggrieved rights-holders are entitled to institute proceedings for appropriate redress before a competent court or other adjudicator in accordance with the rules and procedures provided by law.

3.4 HRBA PRINCIPLES

Most organizations that apply the HRBA place special emphasis on the procedural human rights principles (mechanisms for accessing justice). Foremost among those are participation, accountability, non-discrimination, and transparency (creating the acronym PANT). Variations can be found. For example, ‘empowerment’ (including attention to vulnerable groups) may be included in the list; some organizations and agencies add an ‘L’ for ‘linkage’ to remind of the applicable human rights commitments and obligations and the laws, treaties and systems (such as complaints mechanisms, courts and human rights bodies) at the national, regional and international levels. Together, the latter make up the acronyms PANEL or PLANET.

3.4.1 Participation and inclusiveness

Participation and inclusiveness are central to the HRBA, and equally important to governance and IWRM. The realization of human rights and good governance includes a wider range of actors than just the public administration and those citizens who are immediately concerned. For example, all stakeholders should be consulted and welcomed to actively engage in the planning of river basins and water and sanitation services.

Participation also refers to the possibility for people to access information at each stage of a project cycle and to be provided with informed, timely and meaningful input so as to influence decisions at various levels. There must be sufficient time allocated for collecting information, reflecting and providing input, with particular consideration given to the elderly, people with disabilities and

other groups with special needs. The limited capacities of NGOs and community-based organizations should be recognized.

All those with legitimate interests in the outcome of a decision should be given equal possibilities to participate. Different means and channels should be established through which the concerned parties can have a voice, be encouraged to express themselves and influence processes in the political, economic and social spheres.

Participation can take place directly or through intermediary organizations. Public officials and other decision makers need to be responsive to engagement, whatever form it takes.

Non-participation is characterized by manipulation and tokenism; stakeholder involvement is then only symbolic. The different degrees of participation and inclusion can be measured as a continuum or a ladder. Giving clear and timely access to information would be the lowest rung, followed by customers’ complaints and redress mechanisms. Next, public consultation would enable stakeholders to voice their views. Better still is to invite those concerned to be strategic partners, whereby experiences and insights impact decision-making early on. At the highest rungs of the ladder, participation is exercised so that decisions are delegated and control is handed over to the stakeholders themselves.

Participation in the form of voting or protesting is an essential component of democracy. Similarly, participatory governance focuses on deepening the engagement of society and its development with and through the (often ongoing) engagement of citizens and rights-holders in different processes and institutions. The idea is that people should be both encouraged and allowed to play more direct roles in decision-making processes. In practice, a higher degree of participation can supplement citizens’ roles as voters or as watchdogs throughout a process and not just at a later stage when decision makers may need to be held accountable for bad governance outcomes.

Participation, inclusion and the role of women are also principles of IWRM. Vulnerable groups are often excluded if there are no legal requirements to engage them in a process. Legislation needs to not only recognize communities and other stakeholders' right to become involved in water-management processes, but also to encourage statutory institutions to provide incentives to participate.

The Special Rapporteur on human rights and the environment (former Independent Expert on human rights and the environment), along with the General Assembly, have concluded (in 2014) that states have a duty to facilitate public participation in environmental decision-making. This obligation flows from the rights of individuals to participate in their government in the conduct of public affairs and to safeguard a broad range of resources from environmental harm. A concrete way to meet these duties is to regulate environmental impact assessments by making them mandatory.

3.4.2 Accountability

Accountability refers to sets of controls, counterweights and modes of supervision that make public- and private-sector officials and institutions answerable for their decisions and actions—and for the lack of the same. There must be a legal framework and other mechanisms that ensure that sanctions are applied against poor performance, illegal acts and abuses of power.

Accountability requires the ability and preparedness of citizens and civil society organizations to scrutinize leaders, public institutions, governments and others, and to decide to hold them accountable when warranted. In turn, this builds on free access to information and protection for whistle-blowers.

Sound and trustworthy institutions play vital roles in promoting accountability. 'Being answerable' results from the active underpinning of the principle of accountability at all levels, rather than from a passive situation that is only actualized when an aggrieved rights-holder seeks redress through available procedural means. To this end, the HRBA is vital to building capacities among citizens and rights-holders.

As primary duty-bearers, states are obliged to respect, protect and fulfil human rights. They must have the capacity to ensure that non-state actors in water and sanitation service provision can be held accountable. This includes ensuring that victims of violations of the right to water or other water-related rights are, at all times, entitled to adequate reparations, including restitution, resolution, compensation, satisfaction and/or guarantees of non-repetition.

Accountability, transparency and integrity are interrelated (see section 4.2.3 for further discussion of integrity).

3.4.3 Non-discrimination, equality and equity

Human rights entitle every individual to equal treatment without discrimination of any kind on grounds such as race, colour, sex, ethnicity, age, language, religion, political or other opinion, national or social origin, disability, property, birth or other status. Vulnerable and marginalized groups, minorities and indigenous peoples are not always able to fend for themselves. Water-management institutions need to take such groups into special account. Non-discriminatory treatment often involves equity concerns (for example, in the design and implementation of a pro-poor policy as part of the tariff system for services).

Non-discrimination is central to HRBA, just as the role of women is a fundamental principle of IWRM according to the Dublin Principles. Gender mainstreaming and the HRBA are complementary and mutually reinforcing. Both rely on an analytical framework that can be applied to all development activities: the different situations experienced and the roles played by men and women in a society and a normative framework that is based on entitlements and obligations. Both gender mainstreaming and the HRBA call attention to activities' impacts on the welfare of specific groups, as well as to the importance of empowerment and participation in decision making. Both apply to all stages of activity and to all types of action (e.g. legislation, policies

and programmes). Finally, both require the systematic adoption of new and different approaches to existing activities (as distinct from developing new and additional activities). When backed by national accountability systems, an HRBA can greatly reinforce progress towards gender equality (see HRBA Portal 2016).

To check the achievement of non-discrimination, there is a need for the application of indicators that capture the range of development and realization of rights for all—not just statistical averages for whole countries.

3.4.4 Transparency

Transparency can be understood as a combination of factors, such as the level of openness of governance processes; free and easy access to information; the extent to which public-sector affairs are disclosed and available in writing (or other suitable formats); and the extent to which decision-making processes, mechanisms and outcomes are open to scrutiny by citizens, the media and others.

There is often a high degree of technical complexity in water-related decisions, which can lead to information asymmetry. This may, for instance, be the case where the responsibility for water services provision has been delegated to a non-state actor. The terms and conditions for such deals need to be available and comprehensible for those concerned.

Transparency as a principle for the rule of law, HRBA and good governance comprise all thinkable means of simplifying citizens and stakeholders' access to information. To this end, it needs to be analysed what methods and channels are most suitable to enable insights, spread messages and raise awareness about rights and freedoms.

It is advisable to complement text and written publications with infographics and, when suitable and/or necessary, with oral information channels. Visual presentations can take many forms, such as pictures, drawings, maps, icons and comic strips on walls. Other ways of representing and revealing

complex data to attain the desired levels of clarity and attention is to use TV soap operas, radio broadcasting and street theatre. A combination of these may be required for a successful outreach campaign, especially to individuals and groups that are not (fully) literate.

Figure 3.2: Infographics Advising against Open Defecation by a Children's Toilet in India



States sometimes have procedural obligations to make environmental information public and to give full and equal access to information. Laws that require environmental impact assessments to be made prior to decisions on plans, projects or programmes often include provisions that the public (or at least concerned individuals) be invited for commentary and consultations. It would, then, be woefully insufficient to keep a single record of the relevant evaluation documents in a room with limited access hours.

The 1989 International Labour Organization Convention on Indigenous and Tribal Peoples (Number 169) requires recognition of the cultures, traditions, and special circumstances of indigenous and tribal peoples. Whenever a government considers legislative or administrative measures that may directly affect indigenous and tribal peoples, it must inform and consult those concerned through appropriate procedures and representation. This was upheld in a 2009 landmark Chilean court decision that granted water rights and a minimum water flow to two indigenous communities. The government had failed to fully comply with the clause on the

right to prior consultation, which must be carried out “in good faith and in a form appropriate to the circumstances, with the objective of achieving agreement or consent to the proposed measures,” such as logging, agribusiness or mining projects in indigenous territories (*Aymara water rights case*).

John H. Knox, the Special Rapporteur on human rights and the environment (including obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment) compiled a list of best practices. One example is from Uganda, where the National Association of Professional Environmentalists conducts a Sustainability School Programme that builds local communities’ capacities to seek transparency and accountability from oil companies and governments on environmental matters.

3.4.5 Empowerment

Empowerment happens when stakeholders’ capacities are built to a level where they are more aware and better able to form their own development. Access to information via free media and other participatory mechanisms is essential, not least for holding decision makers accountable. The level of participation is therefore an important indicator of empowerment. Good governance can be seen as a prerequisite for empowerment.

3.5 LEGAL, POLITICAL AND MORAL OBLIGATIONS

The framework of UN human rights instruments forms the backbone of the HRBA. Treaties and conventions are binding under international law on the state-parties that have signed them (see Box 3.2). These are sometimes referred to as ‘hard law’. Note that the human rights to water and sanitation is seen as derived from binding obligations laid down in the International Covenant on Economic, Social, and Cultural Rights (ICESCR) and the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (see Chapter 6 for further discussion).

Box 3.2: Select Global and Regional Conventions

European Social Charter, and Revised Social Charter (ESC; 1961)

Convention on the Elimination of All Forms of Racial Discrimination (ICERD; 1965)

International Covenant on Civil and Political Rights (ICCPR; 1966)

International Covenant on Economic, Social, and Cultural Rights (ICESCR; 1966)

American Convention on Human Rights (1969)

Convention on the Elimination of All Forms of Discrimination against Women (CEDAW; 1976)

African Charter on Human and Peoples’ Rights (ACHPR; 1981)

Convention on the Rights of the Child (CRC; 1989)

International Labour Organization 169 Indigenous and Tribal Peoples Convention (1989)

Convention on the Law of the Sea (UNCLOS; 1994)

Convention on the Law of Non-Navigational Uses of International Watercourses (1997)

Convention against Corruption (UNCAC; 2003)

Convention on the Rights of Persons with Disabilities (CRPD; 2006)

There are also a large number of treaties, declarations, resolutions and general comments that, together with principles and guidelines, form the bulk of human rights instruments. These are sometimes referred to as ‘soft law’, and are generally recognized as a source of political obligations on states.

General comments are regarded as authoritative and widely accepted interpretations from the UN Committee on Economic, Social and Cultural Rights that serve to clarify the substance and obligations relating to human rights. The UN Committee on Economic, Social and Cultural Rights has issued several interpretations of the ICESCR, including Number 15 of 2002 on the Right to Water (see Chapter 5).

Each state will have its own model for making the provisions in treaties and other international law instruments operational and executable, such as incorporating them into the domestic legal system. Principles contained in international soft law can thereby become legally binding on a range of actors if the national legislation gives effect to them. For example, by specifying the applicable procedural and substantive standards (e.g. that the maximum distance of a water source from a home should be 200 meters).

In addition, moral or ethical norms can be seen as creating responsibilities to be shouldered by different actors, building intrinsic rationale behind the norms and values expressed in the framework at large.

Individuals have obligations to respect others' human rights, and a moral responsibility to "[meet] the needs of the present without compromising the ability of future generations to meet their own needs," as expressed in *Our Common Future* (the Brundtland Report) in 1987.

The scope of transnational corporations and other business enterprises' responsibilities and accountability has become increasingly clear over the last decade. A Special Representative of the UN Secretary-General prepared a "protect, respect and remedy" framework; the Guiding Principles on Business and Human Rights for implementing it was unanimously endorsed by the United Nations Human Rights Council in 2011. The framework and the Guiding Principles are grounded in recognition of states' existing international human-rights obligations, together with the requirement that society's business enterprises comply with all applicable laws and respect for human rights. Rather than establishing new legal standards, the aim was to address and disseminate the different roles and responsibilities that states and companies have with respect to business impacts on human rights.

Further, the CEO Water Mandate that sits under the UN Global Compact umbrella has issued guidance on corporate water stewardship (2015, with the Pacific Institute and Shift).

3.6 DUTY-BEARERS AND RIGHTS-HOLDERS

Human rights bind state parties; the **primary** duty-bearer is thus the state and government actors, including ministries, national and local authorities, public institutions and public officials.

Human rights responsibilities can also apply to non-state actors, including private individuals, international organizations and civil society organizations. Religious leaders and elders can also be seen as duty-bearers in certain situations, for instance, protecting vulnerable groups from discrimination.

In the fields of water and sanitation, it is common and fully acceptable that non-state actors, such as private or semi-private companies, are given a mandate to act as service providers by the state. This can comprise water and wastewater treatment, water distribution, metering and billing. In such cases, states need to adopt and implement effective regulatory frameworks, including effective monitoring of all service providers and their complaint and redress procedures. As primary duty-bearers, states must ensure equal access to all. As contractors, private actors can be held accountable for actions or omissions that result in human rights violations. Similarly to the state, non-state actors have a general responsibility to respect human rights and to supply safe, accessible, affordable water.

Other business activities can have positive and negative impacts on the realization of the human right to water. Private enterprises are increasingly expected to act with due diligence to avoid infringing on the rights of others. The 2011 UN Guiding Principles on Business and Human Rights and the CEO Water Mandate guidance documents apply to this area.

Right-holders are understood as persons with recognized rights, persons who are entitled to demand their rights and persons who are entitled to establish the liability of the obligation-holder(s). Rights-holders must have the capacity to exercise rights, formulate claims and seek redress.

Box 3.3: A Human Rights-based Approach to Water Programming: WaterAid

By demanding rigorous political and social analysis, an HRBA to water programme design and implementation can improve access to water and prevent interventions that inadvertently reinforce existing conflicts and power imbalances.

In the Kileto District, Tanzania, the international NGO WaterAid implemented a project to improve residents' water access. By integrating human rights principles—in particular participation, non-discrimination, equality and empowerment—into the programming process as explicit programme goals, WaterAid was able to identify the underlying obstacles to equitable access to water. The participatory approach and analysis revealed that power imbalances, lack of land rights and exclusion from national policy decisions had impeded access to water for two of the three main ethnic groups. The project was therefore able to work with communities to overcome the inter-group conflict.

By involving each ethnic group in the analysis and assessment stage of the project, WaterAid was able to identify each group's water needs. A participatory assessment and planning methodology enabled WaterAid to develop an understanding of inter- and intra-group power relations and the wider social context. WaterAid improved the understanding among the groups by bringing all project stakeholders into the discussion.

To influence national policy and practices, WaterAid developed a coherent advocacy strategy in Tanzania. The strategy included working with and training national government staff responsible for water services and policies. WaterAid analysed the political and legal context to see how national policies and legal issues positively and negatively affected the access of the groups. The organization looked at inequitable land distribution and the subsequent lack of access to water due to the less powerful people's lack of knowledge of land rights and application processes.

WaterAid found that considerable time and effort had to be invested in discussions among the Kileto partnership management team, field staff and project communities. In doing so, it was able to achieve genuine community management of water services by building partnerships with civil society organizations and training them to plan and implement the programme.

Source: World Bank and OECD 2013: 239-41

Remember that a stakeholder is any party that has an interest in a project, programme, activity or other development. Stakeholders can include both duty-bearers and rights-holders.

3.7 'HOW' AND 'WHAT': PROCESS BASED ON SITUATION ANALYSIS

The HRBA and the core human rights principles should guide all processes, phases and steps, including planning and designing (including the setting of goals, objectives and strategies), assessing and analysing, implementing, monitoring and evaluating. Existing human rights standards and principles should establish the work within relevant government units. These standards and principles also apply when interventions, activities or projects (or parts thereof), are contracted to third parties. Likewise, rights-holders can take guidance from these principles when seeking to assert their rights themselves.

An early part of the process is often referred to as the 'situation analysis'. This involves considering a problem's root causes (see Facilitators Guide in this Manual for an exercise on root causes) and power dynamics. This step is carried out to map the factors, actors and environment that form the context within which projects, programmes or activities are planned.

Situation analysis first requires identification of the key actors and stakeholders, including aggrieved parties, those discriminated against and those who may be causing or supporting the problem. Situation analysis then requires the identification of the relationship between those involved—the rights-holders (individuals and groups), and duty-bearers (state and non-state actors).

The identification of rights-holders and duty-bearers, in turn, depends on which human rights are at stake. This requires determining which inequalities lie at the heart of the situation, which human rights

instruments and domestic laws apply, which claims and entitlements are valid, and what the range of corresponding obligations and commitments are.

With that, situation analysis requires identification of the capacity gaps that right-holders and duty-bearers seem to have and then determining how those gaps are hindering efforts to claim rights or meet duties. Capacity can be understood as the ability to effectively perform functions for setting and achieving objectives and identifying and solving problems with respect to one's roles and responsibilities. Capacity will mean different things for rights-holders and duty-bearers.

3.8 STRENGTHENING DUTY-BEARERS' CAPACITIES: THE ROLE OF INDICATORS

In line with the saying “what gets measured gets done,” indicators play an essential role in opening up the ‘black box’ of implementing and realizing human rights. States bear an obligation to progressively realize human rights. A key legal and policy question to be resolved is which indicators will be used to measure progress on the various attributes of a right. The application of a few selected, well-formulated and context-specific indicators to measure progress in realizing rights can help policy- and decision makers make informed decisions in water resource allocations. Indicators compel actors to strengthen accountability and embrace methods that empower people, especially the most vulnerable and the most marginalized. In Chapter 8, indicators are integrated into the implementation cycle for an HRBA to IWRM.

It is essential that planners and policy- and decision makers understand the concepts of statistics, indicators, benchmarks and the various implications of data collection and analysis. Indicators can be quantitative (statistical or numerical) and qualitative (information beyond statistics that cover any data articulated as a narrative or in a categorical form). Indicators can also be categorized as fact-based (objective) or judgement-based (subjective). (See Figure 3.3.)

Indicators can be used to monitor attributes of human rights' normative content (for example, the “proportion of targeted population that was extended access to an improved drinking water source in the reporting period”). This alludes to the key principle of water being of ‘safe’ quality. Indicators can also be used to determine whether water services delivery is continuous or intermittent or whether it is physically available to the elderly and disabled.

The state should also identify and independently monitor process indicators. Process indicators are more often qualitative in nature and aim to measure such things as how people participate in water-related decisions, who was invited to take part in planning (and who was not), and what they contributed. Process indicators can also be used to check or review whether governance processes were sufficiently transparent.

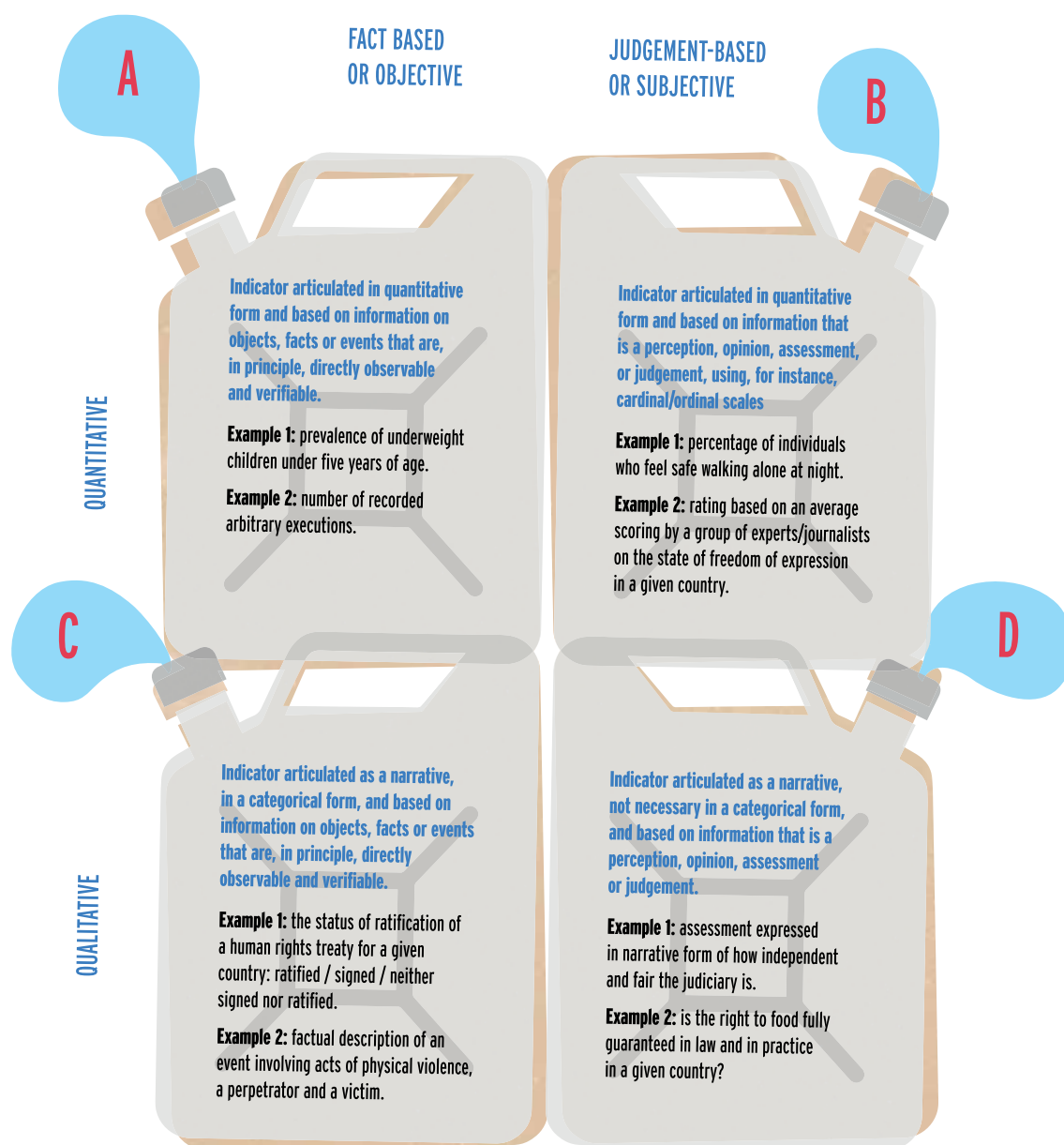
It is also possible to consider non-discrimination and equality, participation, access to remedy and accountability as cross-cutting indicators, in line with the Office of the United Nations High Commissioner for Human Rights (OHCHR).

3.8.1 Selected examples of indicators

There are a number of different sets of indicators and indices, all with their own pros and cons. One example is the *Water, Sanitation, and Hygiene (WASH) Performance Index* (UNC Water Institute 2015), which compared different countries' performance in realizing universal access to water and sanitation. One of the findings was that progress towards equality in sanitation is significantly associated with governance indicators, including control of corruption, government effectiveness, regulatory quality and rule of law. These results suggest that the enabling environment for WASH contributes to progress in sanitation equity.

Another example is the OHCHR *Human Rights Indicators: A Guide to Measurement and Implementation*, developed to function as a reference resource with operational tools. The guide aims to

Figure 3.3: Categories of Indicators for Human Rights



Source: OHCHR 2012

be used together with national human rights action plans, baseline studies, the HRBA and norms for ‘good’ governance. The guide defines human rights indicators as “specific information on the state or condition of an object, event, activity or outcome that can be related to human rights norms and standards; that addresses and reflects human rights

principles and concerns; and that can be used to assess and monitor the promotion and implementation of human rights.”

The OHCHR guide is a reminder that indicators cannot substitute for qualitative, judicial, quasi-judicial or other more comprehensive assessments of progress. Moreover, there is always the potential

for the misuse of statistics. The guide calls for strong stakeholder involvement in human rights measurement and documentation (OHCHR 2012).

The OHCHR guide contains a framework that assesses the steps taken by state parties to meet their obligations to respect, protect and fulfil human rights—how acceptance, intent or commitment to the HRBA translates into measurable actions. The guide lists three types of indicators: structural, process and outcome.

Structural indicators: Structural indicators assess the formal commitment to human rights instruments, the domestic laws in relation to specific rights (i.e. whether the laws incorporate the required international standards), and the institutional mechanisms that promote and protect these standards. Such indicators are often qualitative in nature.

Process indicators: Process indicators measure duty bearers' ongoing efforts to transform their human rights commitments into the desired results on the ground. This includes budget allocations and redress interventions. Process indicators function as an interface between the structure and the outcome. Examples include the “share of public expenditure on provision and maintenance of sanitation, water supply, electricity and other services of homes,” and the “number of cases of deterioration of water sources brought to justice.”

Outcome indicators: Outcome indicators measure the long-term impact of various underlying processes (that can be captured by one or more process indicators). For instance, mortality could be a function of public accessibility to WASH and health awareness of the population. Another example from the Guide is “improved drinking water (public/private) source, sanitation facility.”

3.8.2 Indicators for the Sustainable Development Goals

The process of formulating goals, targets and indicators for the proposed SDG framework that entered into force on 1 January 2016 formally began with the Rio+20 Conference in June 2012. A number of indicators were identified for monitoring each target.

Box 3.4: Data for People and Planet

At the 46th session of the UN Statistical Commission in March 2015, UN Deputy Secretary-General Jan Eliasson said that data are the “lifeblood of decision-making and the raw material for accountability,” illustrating the importance of monitoring progress towards the SDGs. He also reminded the audience that no target should be seen as met until it is met by all, highlighting the need for data disaggregation by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.

Source: UN-Water website 2016

Figure 3.4: Data for People and Planet



Though there are many targets linked to water, freshwater and wastewater, many indicators had to be voted out to bring the total number down. The Member State-led Inter-agency and Expert Group on SDG Indicators is responsible for developing an indicator framework for SDG monitoring at the global level and to support its implementation.

The final list contains the following mix of quantitative and qualitative indicators (ibid.):

- ◆ Target 6.1:
 - ~ Percentage of population using safely managed drinking water services;
- ◆ Target 6.2:
 - ~ Percentage of population using safely managed sanitation services including a hand washing facility with soap and water;
- ◆ Target 6.3:
 - ~ Percentage of waste water safely treated; and
 - ~ Percentage of water bodies with good water quality;
- ◆ Target 6.4:
 - ~ Percentage change in water use efficiency over time; and
 - ~ Level of water stress: freshwater withdrawal in percentage of available freshwater resources;
- ◆ Target 6.5:
 - ~ Degree of IWRM implementation; and
- ◆ Target 6.6:
 - ~ Amount of water and sanitation related official development assistance that is part of a government coordinated spending plan.

Some water-related indicators that were suggested along the way not only had an ability to provide the most impact for the target in question, but also supported and impacted many other SDG goals and targets. Among those that did not make it to the final list of indicators were “proportion

of households within 15 minutes of nearest water source” and “average weekly time spent in water collection (including waiting time at public supply points), by sex, age and location.”

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- HRBA Portal: The UN HRBA portal features a collection of resources designed to assist the practitioner at the country office level integrate a human rights-based approach into their programming work. <http://hrbaportal.org/>. See also the [UN Common Learning Package](#) on the HRBA.
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4. WATER GOVERNANCE

This chapter aims to give an overview of water governance and the principles of transparency, accountability and participation (the TAP principles) of ‘good’ water governance. These principles overlap with what is described in Chapter 3 on Transparency, Accountability and Participation. Good water governance is generally also defined in terms of integrity. Water governance can also be discussed as having four dimensions; social, economic, political and environmental.

4.1 INTRODUCTION

In short, and in relation to water resources, **water governance consists of the actors, processes and institutions by which decisions that affect water are made.**

Originally denoting ‘how to steer’ a nation through its government, the concept of governance has evolved over time and now has a much wider meaning. In today’s scenario, it is recognized that governance is exercised across multiple levels—from the international to the very local. Consequently, it also involves a range of actors outside the state bureaucracy (what can be called the public administration), including from civil society, the private sector, NGOs, indigenous communities and other stakeholders. To various degrees, all of these actors engage in processes for decision-making, regulation, control and organization of society.

These processes take place through institutions (typically organizations and networks). Written laws and regulations, as well as customary law and social norms, define rights, roles and responsibilities between sovereign states, between individuals and states and between different individuals. These ‘rules of the game’ are often complemented with non-binding policies. The processes and institutions can function as the arenas through which citizens and groups articulate their interests, apply the rules, exercise their legal rights, meet their legal obligations and mediate differences.

Box 4.1: Rule of Law

The rule of law principle mandates that every nation-state should be governed by publicly announced laws. This should be characterized by uniformity, generality, certainty, accountability, predictability, fairness, equality and due process. All these aspects are important to counter arbitrary, unforeseeable decisions and actions. All persons, institutions and entities, in public and in private—even the state itself—are subject to and accountable to the law.

A rule of law-based society generally employs a separation of powers: the state is divided into branches, each with separate and independent areas of responsibility. The legislature, the executive and the judiciary that upholds a possibility for redress, should form different and autonomous parts of the system.

There are two diverse theories to explain the rule of law. The **formalist**, narrower school is satisfied with the above-mentioned criteria. Hence, the protection of an individual's human rights is not a prerequisite. In the **substantive** school, extensive understanding builds on democracy and requires justness from the legal framework in addition to the listed criteria. The UN and its entities subscribe to the latter interpretation of the rule of law.

In addition, an independent judiciary is fundamental to good governance and the effective implementation of all human rights (see Box 4.1).

According to the 2002 Johannesburg Plan of Action, Governance covers the “rules of decision-making, including who gets access to information and participates in the decision-making process as well as the decisions themselves, who implements decisions and how they are implemented; and who is held accountable and how they are held accountable.”

UNESCO considers “in essence, water governance deals with how a society governs the access to and control over water resources and their benefits” (UNESCO 2001). Water governance is characterized by a multitude of components and relations. Water systems are, for a large part, physical phenomena and a part of good governance is related to the realization and management of water infrastructures. Water

governance takes place in, and at the same time generates, a complex system of interrelations and interactions in physical and social systems. Water governance combines two main features, a physical and technically oriented water systems approach and a multiple governance processes orientation.

4.2 PRINCIPLES OF ‘GOOD’ WATER GOVERNANCE

4.2.1 Good water governance and IWRM

Numerous principles for what constitutes good water governance have been developed. Some interpretations appear to have been heavily influenced by IWRM principles (especially as defined by the Global Water Partnership). Principles on governance can be compared with the administrative procedural rules of public and private organizations. Such rules can regulate how a decision-making process should build on core values, involve steps of operation and flow in a certain sequence. This helps to ensure accountability and to guarantee that decisions are made in an objective, fair and consistent manner that is perceived as legitimate by all concerned actors. Rules of procedure are neutral in the sense that they do not regulate the outcome; there are no set objectives as to where decision-making processes will lead.

Along the same line of comparison, IWRM differs from governance because IWRM has predefined outcomes. According to the often-cited definition by the Global Water Partnership (2000), IWRM is a “process which promotes the coordinated development and management of water, land and related resources, in order to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.”

Consequently, it can be argued that IWRM is by nature more normative and prescriptive than ‘governance’ (Lautze et al. 2011). The role of good governance is not just in the implementation of IWRM, but rather to provide an enabling environment for actors and institutions involved in decision-making processes.

Since every country already has some form of water governance structure, it is useful for water managers to compare their structure and rules with a set of norms that reflect the current state of the art in order to highlight areas in need of improvement (UICN 2009).

4.2.2 The TAP principles – transparency, accountability and participation

At a practical level, the most important discussion related to water governance centres on identifying principles of ‘good’ as opposed to ‘poor’ governance. The closely interrelated principles of transparency, accountability and participation (TAP) are useful entry points from which to analyse governance processes (TAP principles were introduced in Chapter 3).

With special regard to participation, the Organization for Economic Co-operation and Development (OECD) notes in its 2015 publication *Stakeholder Engagement for Inclusive Water Governance*:

“The public sector is facing not only financial constraints but also increased demands from citizens to be more engaged in how public policy decisions are taken ... Stakeholder engagement holds specific importance in water because this is a highly decentralized and fragmented sector, with multiple, inter-dependent players at different levels.”

OECD 2015: 13-14

The organization distinguishes among the following:

- ◆ **Core stakeholders:** governments, service providers, river basin organizations, businesses, civil societies, farmers, legislators and trade unions;
- ◆ **Newcomers to the water sector:** Property developers, long-term institutional investors and others who require special attention; and
- ◆ **Under-represented groups:** Women, youth, the poor, indigenous peoples, nature and non-consumptive users.

4.2.3 Integrity

Lack of transparency and accountability opens the door for corruption, undermines the legitimacy of decisions and governing bodies and fuels an increase in power asymmetries. Lack of transparency and accountability hampers the attainment of IWRM goals and the realization of human rights. It is critically important to ensure that both decision-making processes and institutions are characterized by integrity and that they work towards anti-corruption. Public, private and civil society sector representatives must be honest and professional when carrying out their functions, whether awarding multi-billion dollar contracts to companies or just reading water meters.

Transparency International defines corruption as an abuse of position or entrusted power for private gain. The binding, 2003 UN Convention against Corruption (UNCAC) encompasses bribery, undue advantage, misappropriation and embezzlement of property and public funds, misuse of resources by a public official, trading in influence, abuse of functions, illicit enrichment and money laundering. The Convention devotes attention to good governance and the roles of rights-holders. For instance, Article 5 mentions that preventive anti-corruption policies shall “promote the participation of society and reflect the principles of the rule of law, proper management of public affairs and public property, integrity, transparency and accountability.” A violation of the obligation to respect the human rights to water and sanitation among water and sanitation service officials through small bribes and favours from water users serves as another example of corruption. According to UNCAC Article 19, “abuse of functions refers to a public employee or public office holder that is doing something which is illegal or something that the official has no legal authority to do, in order to obtain a personal economic benefit or cause an illegal damage to others” (cf. Baillat 2013).

The UNDP Water Governance Facility at the Stockholm International Water Institute defines ‘water integrity’ as the adherence of water

stakeholders and institutions to the governance principles of transparency, accountability and participation, based on core values of honesty, equity and professionalism. Decision makers must not place themselves under any financial or other obligation to individuals or organizations that may influence their ability to perform their duties.

It is vital to recognize how integrity and corruption are phenomena that reflect the culture and norms of organizations and society at large; the practices are often institutionalized. The *World Development Report 2015* stresses that acts of corruption should not be viewed as committed by autonomous individuals; there are elements of expectations and social norms that perpetuate the mental models on which corruption is often founded (World Bank 2015).

Corruption is often the result of a ‘window of opportunity’ in combination with pressure of one or another kind, such as from within the authority or even the actor’s own family, to use situations where those requesting services feel obliged to pay ‘speed’ or ‘hush’ money.

To address issues of integrity, all levels of society must be well-structured, financed, trained and equipped to counteract situations where corruption is the norm. This requires institutional capacities and capabilities to manage expectations from clients, customers and beneficiaries; to identify and minimize the risks of being compromised; and to establish and live up to codes of conduct.

In Kenya, the **Not in My Country** organization launched a campaign focused on raising funds to have security measures in place for whistle-blowers as well as to have access to assistance from a local law firm. This was needed to back efforts to send reports to media, judicial bodies and other organizations focused on eradicating corruption—and ending the fear of those who hold power. It was also seen as necessary to rid universities of corruption and to help ensure that future generations of Kenyan leaders will not be burdened by the corruption of the current ones.

It is widely known that women and men have unequal access and control over resources, development benefits and decision-making processes related to water (Cortobius, Grönwall and Jacobson 2017). Despite the important role that women play in water management, they are often under-represented in decision-making processes related to water management and services. This is partly a result of social and cultural norms related to women’s gender roles, where they are seen as caretakers of the household and not as breadwinners and decision makers in the public spheres.

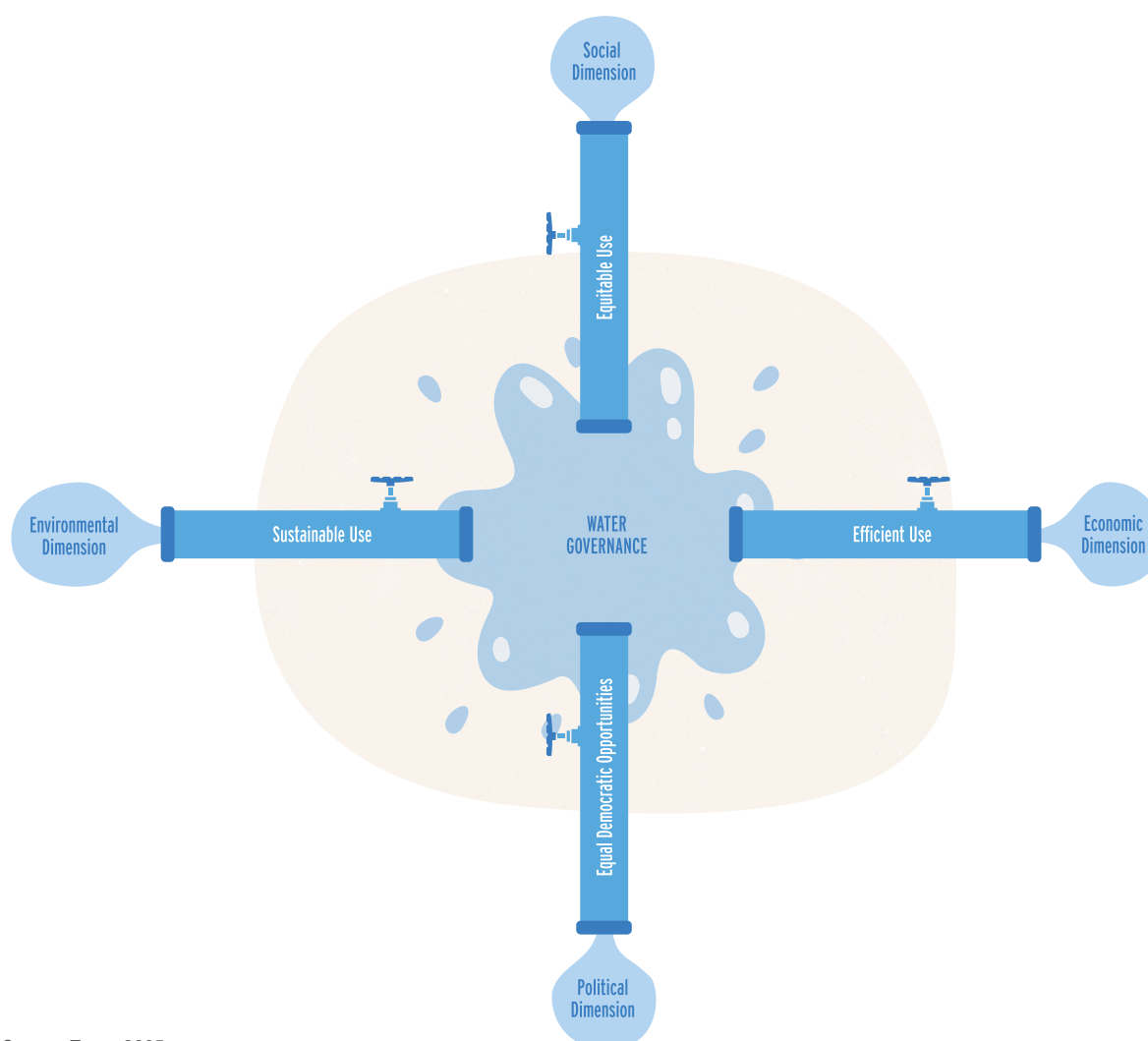
What is less known is that women, in general, also seem to be worse-affected by corruption in the water sector than men are. Recent studies (ibid.) suggest that women perceive and tend to have a wider definition of what corruption entails than men, for example, by including sexual exploitation, physical abuse and non-delivery of public services. Corruption also seems to impact women more severely than men due to their dependence on basic water and sanitation services and their disadvantaged position in society. In addition, women tend to have lower levels of education, which restrains their access to information and ability to voice their opinions. These gender roles also affect women’s opportunities to participate in anti-corruption work.

However, recent studies (ibid.) also indicate that women can be just as corrupt as men in systems and environments where corruption is the norm and take advantage of opportunities both in their role as professionals in the sector and as customers and beneficiaries of public services.

4.3 DIMENSIONS OF WATER GOVERNANCE

To conclude, it is useful to discuss water governance from different perspectives and to see its four interconnected dimensions (social, economic, political and environmental). As far as possible, these should be incorporated into decision-making processes at different scales. Notably, three of the dimensions

Figure 4.1: Dimensions of Water Governance



Source: Tropp 2005

overlap with the three ‘E’s that denote the key principles of IWRM: environmental sustainability, equity, and economic efficiency.

The social dimension refers to the equitable use of water resources, the enhancement of human development and the needs and rights of prioritized groups (poor people, vulnerable and marginalized groups; see Figure 4.1). Apart from being unevenly distributed in time and space, water is also unevenly distributed among various socio-economic strata of society in both rural and urban settlements.

The economic dimension emphasizes the importance of using water resources efficiently and the role of water for overall economic growth in society.

The political dimension points to the need for empowering and granting water stakeholders and citizens at large equal democratic opportunities to influence and monitor political processes and outcomes. At both national and international levels, marginalized citizens, such as indigenous people, women, slum dwellers, etc., are rarely recognized as legitimate stakeholders in water-related decision-making, and typically lack voices, institutions and capacities for promoting their water interests to the outside world.

The environmental dimension shows that improved governance allows for a more sustainable use of water resources and ecosystem integrity.

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5. A HUMAN RIGHTS-BASED APPROACH TO IWRM IN INTERNATIONAL LAW

This chapter looks at the sources of an HRBA to IWRM in international law. It covers important aspects of the right to water and sanitation, the right to food, the rights of indigenous peoples and the right to a healthy environment, showing how these are connected to IWRM. The discussion starts in a philosophical realm, dealing with rights as viewed in religion, culture and beliefs before moving on to an overview of key chapters of international human rights law that impact on water governance.

5.1 INTRODUCTION

IWRM has been a key element of international agreements on water governance for more than two decades. It belongs to what is known as international soft law: documents that are not legally binding on states but that nevertheless have an impact on international relations and, ultimately, on international law. IWRM is a good example of soft law because its key principles are not derived from international law but from an international conference at the ministerial level—the International Conference on Water and the Environment, which took place in Dublin in 1992. A second reason it is a good example of soft law is because these principles have found their way into the legal and policy frameworks of an increasing number of national governments over time.

Currently, difficult choices need to be made with regards to competing demands for water in society and across economic sectors. Freshwater sources are among the most degraded ecosystems in the world, and they are becoming increasingly scarce and polluted. In response, IWRM was approved internationally in 1992 as a tool for comprehensive water management that balances competing economic, social and environmental

needs. This central goal of IWRM as a balancing tool hints at the fact that IWRM also contains elements that help to achieve justice in society (see Figure 5.1).

During the last decade, the international community has given more and more attention to questions of justice in water management. Recently, very influential changes have taken place and water management has become not only the subject of justice, but has also been shown to affect the deepest and most fundamental aspects of justice—human rights.

Since the year 2000, the way in which we look at water has shifted fundamentally in that both water and sanitation have come to be officially recognized as a human right under international law.

The human rights system offers a moral and legal framework that is accepted almost everywhere. It sets minimum standards for governance in different areas of work—such as water management—and it defines the rights and obligations of different categories of institutions. And because water has been recognized as a human right, the human rights system offers opportunities to streamline global and national water governance and to provide coherence both in terms of environmental sustainability and in terms of human development. This has implications for IWRM.

IWRM and human rights are interconnected. IWRM is a cornerstone of water governance, and water governance is, in turn, essential for the realization of human rights (see Figure 5.2).

Figure 5.1: IWRM as a Tool for Justice and Human Rights

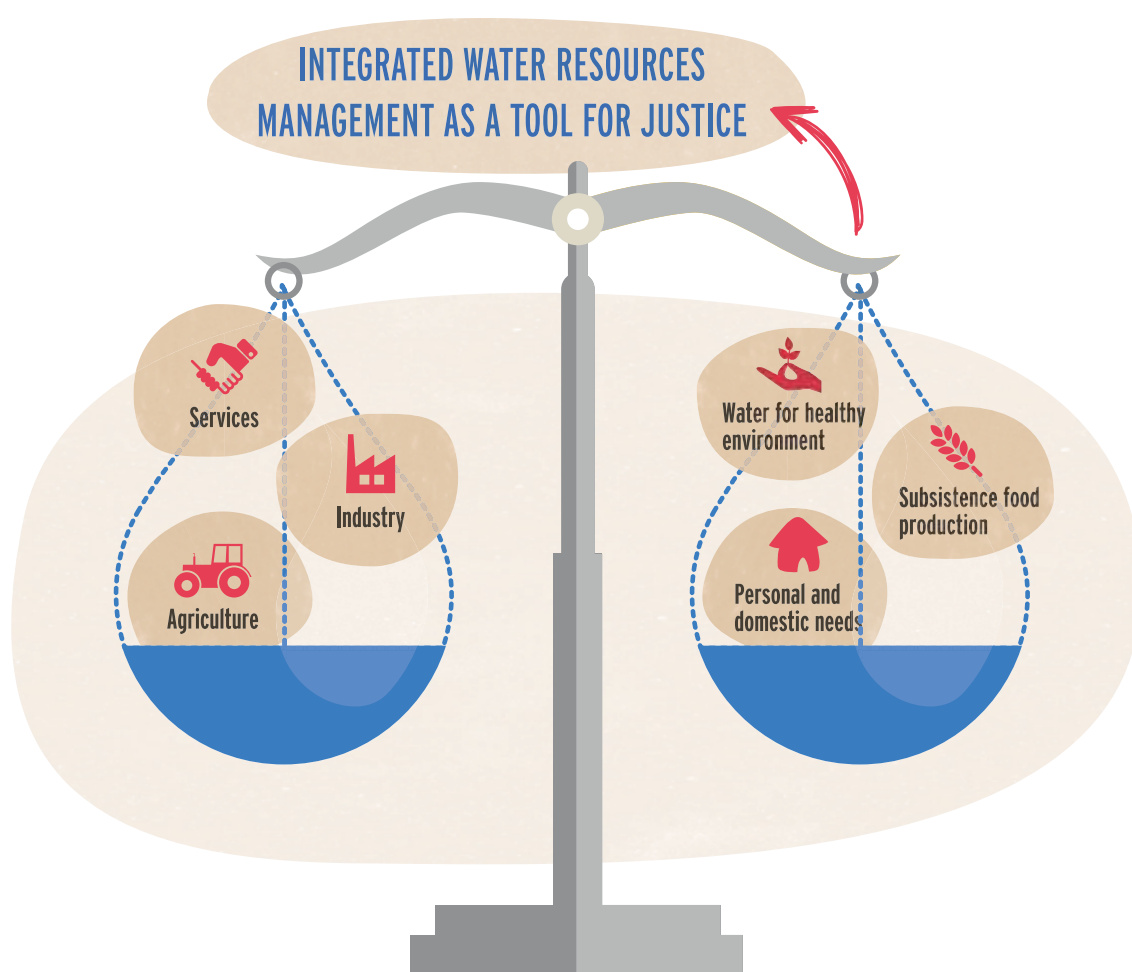
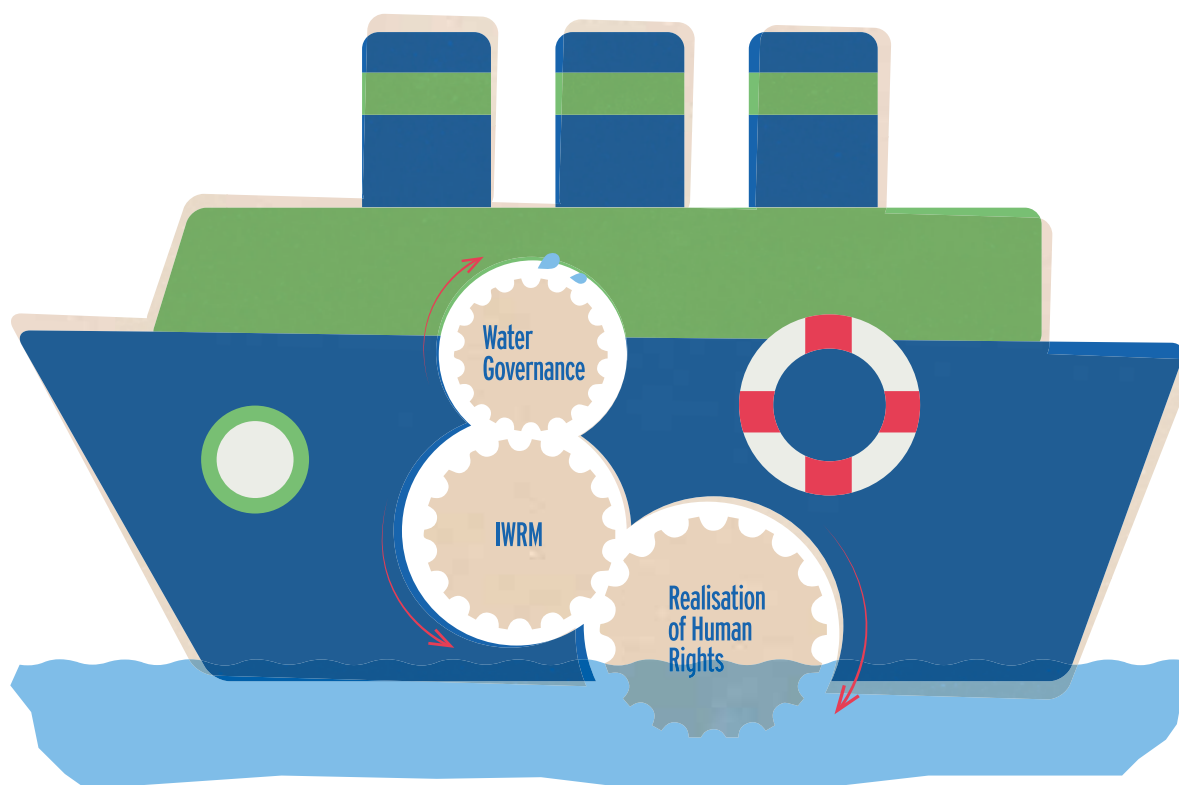


Figure 5.2: IWRM as a Tool for the Realization of Human Rights



Approaching IWRM from the point of view of the realization of human rights, therefore, is to approach IWRM as a tool for the realization of human rights. Human rights are the point of reference, and the assessment of the performance of IWRM is conducted through a human rights lens. The norms and standards that specify the contents of the rights of individuals and groups ‘set the bar’, and IWRM is judged as a tool that ensures that this bar is met.

In this light, it is important to clearly identify the norms and standards that international law provides in order to generate an IWRM assessment framework. This chapter provides an overview of the key elements of international human rights law that need to be used in an assessment framework for the ‘human rights performance’ of IWRM.

5.2 THE CONVERGENCE OF IWRM AND HUMAN RIGHTS

At the 1992 Earth Summit, the importance of IWRM as a tool for sustainable development achieved official international recognition with the agreement to Agenda 21 (see section 1.1.1). At the time, the interconnections between the governance of natural resources and human rights had yet to be directly elaborated. However, as early as 1972, during the United Nations Conference on the Human Environment held in Stockholm, delegates agreed:

“Both aspects of man’s environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights including the right to life itself.”

UNCHE 1972 , para. 1

Box 5.1: Special Procedures Mandate Holders

The Special Procedures Mandate Holders are independent human rights experts who have a mandate from the UN to report and advise on specific thematic areas or countries. They contribute to the development of human rights standards by undertaking country visits, conducting thematic studies, holding expert consultations and reporting to the Human Rights Council (and often also to the UN General Assembly). Ms. Catarina de Albuquerque was the first UN Special Rapporteur on the right to safe drinking water and sanitation.

A human rights-based approach only emerged in the 21st century; it is rapidly evolving. For example, in 1999, the Committee on Economic Social and Cultural Rights published General Comment Number 12 on the right to food, which requires that states take measures to ensure that the population can either feed itself from productive land or other natural resources, or when this is not possible, that a functioning distribution, processing and marketing system guarantees that food is available (see section 5.6). This presupposes the availability of water. In 2002, The Committee published General Comment Number 15 on the right to water, which affirmed that water for personal and domestic uses is a human right.

In 2003, the United Nations produced a statement of Common Understanding on an HRBA to development cooperation. In 2009, the United Nations Development Group, consisting of 19 organizations and entities, established the Human Rights Mainstreaming Mechanism (United Nations 2003). Human rights, therefore, increasingly provide a common point of departure within the UN system as regards to human development issues, especially water governance (WaterLex 2012). Furthermore, between 1972 and 2014, more than 117 countries have adopted the constitutional right to a healthy environment. At Rio+20 in 2012, the Special Procedures Mandate Holders of the Human Rights

Council sent an open letter to states that were negotiating the Rio+20 outcome document. The letter stated that Rio+20 should ground global commitments on sustainable development in human rights (OHCHR 2012).

The Special Procedures Mandate Holders called for a ‘constitutional moment’ similar to the post-World War II period when the United Nations and Bretton Woods institutions were created. Their argument was that because there is a strong body of evidence to show that humanity is crossing planetary boundaries and approaching dangerous tipping points, an effective international environmental governance system needs to be instituted soon.

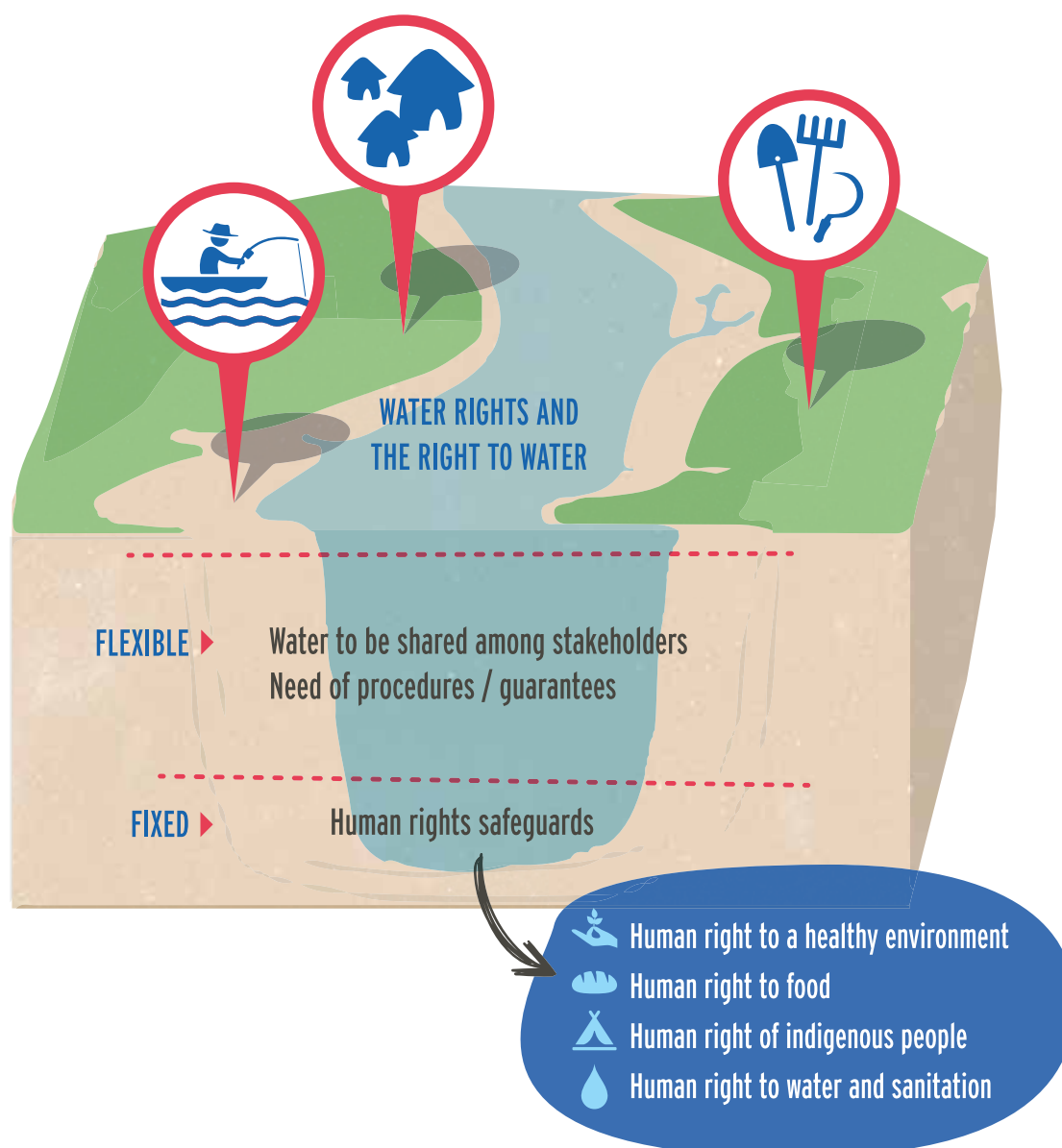
Since 2002, international and national laws, policies, strategies and coordination mechanisms of the water sector have become increasingly anchored to human rights standards and mechanisms. **Legally speaking, in most cases, human rights have a higher status than water laws.** All legal systems establish a hierarchy among different kinds of laws, claims and rights, and usually constitutional and human rights guarantees take precedence over other types of laws, claims and rights (IUCN 2009). However, this is not to say that human rights completely dominate or overshadow water law—**human rights set minimum standards for water governance**, leaving considerable room for sectoral laws to apply above the bar set by human rights law.

5.3 WATER RIGHTS AND THE RIGHT TO WATER

In order to understand how IWRM can support the realization of the right to water and sanitation and other related rights, we need to briefly describe the rights that IWRM helps secure.

In water law, a water right refers to the right of a user to use water. Water rights holders, in this sense, may be individuals, groups or legal entities (such as corporate bodies). In many societies and legal traditions, the rights of individuals and/or groups to use water have been defined and enforced through both customary systems and through central government

Figure 5.3: Water Rights and the Right to Water



systems. History demonstrates that when water is abundant and available in sufficient quantities to meet all local demand, there is no need to define water rights. It is also unnecessary to define water rights when pollution levels are well within the capacity of the environment to absorb and purify toxic substances. In contrast, water rights have been defined in areas where water is scarce and where the use of water by one individual or group affects the quantity and/or quality of water used by another individual or group. Water rights cannot be

expressed simply as a relationship between an individual and a liquid; they are a way of organizing the allocation and management of water in society. Rights come with corresponding obligations to use and dispose of water in ways that are considered beneficial to society and the environment, or at least do no harm. Therefore, there is a strong social element to water rights. In water law, water rights usually fall into two related categories—the right to access and withdraw water and the right to make or participate in decisions about water.

Water rights cannot be expressed simply as a relationship between an individual and a liquid; they are a way of organizing the allocation and management of water in society. Rights come with corresponding obligations to use and dispose of water in ways that are considered beneficial to society and the environment or at least do no harm. Therefore, there is a strong social element to water rights. In water law, water rights usually fall into two related categories—the right to access and withdraw water and the right to make or participate in decisions about water.

In human rights law, these rights are referred to as substantive rights and procedural rights.

Substantive rights refers to the body of law that defines the precise (technical) standards that must be realized for the full enjoyment of a right (for example, water quantity, water quality, maximum distance from the home, continuity of supply, etc.).

Procedural rights refers to the body of law that defines the rules, procedures and institutions that help realize substantive rights (for example, the right to information on water issues or the right to participate in decision-making that affects the exercise of water rights). The substantive and procedural standards that apply to IWRM are drawn from different sources of human rights law.

Although the international community has only recently recognized water as a human right, this is not a new phenomenon. An enormous range of allocation mechanisms exist that are based on customary law. It has been estimated, for example, that in sub-Saharan Africa, 90 percent of land and related resources such as water are governed under customary arrangements (Van Koppen et al. 2014). It is common to customary law and religious traditions all over the world that nobody can be denied the right to water for personal needs. In many cases, this right is extended to animals. This kind of customary and/or religious law has been applied by traditional and spiritual leaders for thousands of years.

A good example is Shari'ah or Islamic law. Interestingly, Shari'ah is directly descended from customary water law: The Arabic word "Shari'ah" originally

meant "the place from which one descends to water." An older and similar Arabic expression (*shir'at al-maa*), referred to permits that gave the right to drinking water. In the Islamic tradition, water is spiritually connected to purity and is seen as a gift from Allah that should be freely available. Further, withholding the right of another to access surplus water is considered a sin. In terms of Shari'ah, every human being has a right to drink (*shafa*) and quench his or her thirst to ensure survival. Mankind has priority of access to water over animals, which have the successive right to water. Water rights in agriculture are also provided (*shirb*), but domestic use has precedence over agricultural or industrial use.

In the 'modern' state system (which dates back more than 2000 years), it is common for the ultimate authority over water to be vested in the state. In some cases, the ultimate ownership and control of water resources is symbolically given to the state or to the head of state. In other cases, the state is considered to own water as a public trust, which means that the state has the obligation to manage water in the public interest.

In order to manage water in the public interest, water managers need to allocate water to different kinds of uses, such as human consumption and hygiene, sanitation, food production, energy, agriculture, mining, industry and tourism. Water allocation requires judgement in making trade-offs between different stakeholders' priorities, between different economic sectors and between the needs of mankind and the need to conserve the natural environment, protect biodiversity and ensure the long-term sustainability of the hydrological cycle (sustainable access to water). This is a highly challenging task because globally, many freshwater ecosystems are suffering from over-abstraction and some of the world's major rivers are running dry for stretches of time. It has been estimated that the proportion of the world's population living in countries facing significant freshwater stress will increase from 34 percent (in 1995) to 63 percent by 2025. On what basis should these difficult choices between competing water uses be made (Hoekstra and Mekonnen 2012)?

Typically, national legal and policy systems provide the criteria that water managers use to make judgments in balancing between competing water needs. An established set of rules lays down the level of priority accorded to different categories of water use. For example, the user with the highest priority receives its full demand, after which the user with the second priority receives their demand, and so on.

Where ownership of water is vested in the state, most national legislation on water resources use two related administrative tools for water allocation: water permits (including licenses and concessions) and exemptions from permits.

Water use licenses and permits—and exemptions from licenses and permits—are some of the most important ingredients of IWRM. Licenses or permits are mostly issued for large scale uses of water. They typically define the duration of time for which a certain amount of water can be used for a certain purpose and the conditions under which the water may be used (such as guidelines on water pollution, water quality, requirements to release water back into the environment, special conditions such as droughts in which different rules apply, etc.). Most licenses and permits describe the type of water use that is permitted, the volume of water use, the rate of water abstraction allowed, the times at which water may be abstracted and the point at which water may be abstracted. Water use permits are powerful tools that modern state systems use for allocating water over competing demands and for regulating the ways in which water is used.

Exemptions from licenses also constitute an important tool for water allocation where the ownership of water is vested in the state. In this situation, a country's water law typically allows citizens to use water for small-scale uses such as domestic uses, small scale gardening and stock watering without applying for a water use license. Such small scale uses are commonly assumed to be trivial from the point of view of other water uses, but this is a mistake: water used for personal consumption needs a high level of assurance of supply and high water quality. Shortages of water for domestic

purposes or temporary water pollution can have major consequences for communities dependent on natural drinking water sources (Moriarty et al. 2004).

There is a fundamental difference between a water right and the right to water; the difference is related to the degree of security provided by law. This difference is crucial to understanding human rights in the context of IWRM. A **water right** is a temporary right that can be provided to an individual and, importantly, that can be withdrawn from that individual. The (human) **right to water** is not temporary, it is not subject to state approval, and it cannot be withdrawn. It is inalienable.

The main goals of water laws are:

- “To provide a framework for legal security for water use of rights holders while protecting the rights of third parties;
- To promote water use that is technically and economically efficient in allocation, distribution and application; and
- To encourage the development, protection and conservation of water resources.” (Boelens et al. 2010)

States provide different kinds of water rights to achieve these goals. These water rights have different levels of security (or assurance of supply) attached to them. Of these water rights, **human rights have the highest level of security.**

5.4 SETTING THE BAR FOR IWRM: THE RIGHT TO WATER

The recognition of safe drinking water as a human right has consequences for the way in which we need to approach IWRM. The UN Special Rapporteur on the Right to Water has affirmed this, stating “the rights to water and sanitation ... have significant implications for how water resources and wastewater are managed (OHCHR 2013).”

Figure 5.4: Human Rights Set the Bar for IWRM



The idea that access to safe drinking water services is a human right has been evolving in international law for some time. Various articles in international human rights treaties refer to rights that, taken together, amount to the recognition of the right to water for certain categories of use. Those states that have ratified these human rights treaties have, by doing so, included the treaties into their national law. Normally, once a treaty has been negotiated, a representative of the government first signs the treaty, indicating political approval of the treaty by the country in question. After this, the treaty is submitted to the legislature, and if it is approved, it becomes part of the national law. For the right to water, the following articles of human rights treaties are important:

- ◆ Article 11, paragraph 1 of ICESCR indicates that the signatory states recognize the right to an adequate standard of living, including

adequate food, clothing and housing and to the continuous improvement of living conditions. In 1995, this was officially interpreted as including the right to water;

- ◆ Article 12, paragraph 1 of ICESCR indicates that the signatory states recognize the right to the enjoyment of the highest attainable standard of physical and mental health;
- ◆ Articles 1 and 3 of the Universal Declaration of Human Rights indicate the right to dignity and the right to life respectively;
- ◆ Article 12, paragraph 2 of the Convention on the Elimination of all forms of Discrimination against Women indicates that rural women have the right to enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity, water supply, transport and communications; and

- Article 24, paragraph 2 of the Convention on the Rights of the Child recognizes the right of a child to the enjoyment of the highest attainable standard of health. In this light, the Convention emphasizes that combating disease and malnutrition involves the provision of clean drinking water.

The link between international human rights law and water governance was strengthened considerably in November 2002, when the UN Committee on Economic, Social and Cultural Rights (in charge of monitoring and interpreting ICESCR) dedicated a General Comment to the right to water. A General Comment is a document that has been drafted by a body of experts on human rights treaties and that provides clarity for states on the interpretation of specific aspects of a treaty; it shows states how to comply with human rights law. General Comment Number 15 of 2002 declared that access to water was an integral part of the right to life. It declared:

“The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. An adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements.”

UN CESCR 2002

This passage highlights the fact that the right to water is part of the right to life as well as the right to health. From the point of view of IWRM, the consequences of this right are that each rights holder should be provided with sufficient and safe water. This has various implications for IWRM regarding water allocation and protection of quality. On allocation, General Comment Number 15 states:

“Water is required for a range of different purposes, besides personal and domestic uses, to realize many of the Covenant rights. For instance, water is necessary to produce food (right to adequate food) and ensure environmental hygiene (right to health). Water is essential for securing livelihoods (right to

gain a living by work) and enjoying certain cultural practices (right to take part in cultural life). Nevertheless, priority in the allocation of water must be given to the right to water for personal and domestic uses. Priority should also be given to the water resources required to prevent starvation and disease.”

Idem, para. 6; emphasis added

This passage indicates water’s overriding priority for personal and domestic uses over other uses. On water quality, General Comment Number 15 states:

“Environmental hygiene, as an aspect of the right to health under article 12 paragraph 2 (b) of the Covenant, encompasses taking steps on a non-discriminatory basis to prevent threats to health from unsafe and toxic water conditions. For example, state parties should ensure that natural water resources are protected from contamination by harmful substances and pathogenic microbes. Likewise, States parties should monitor and combat situations where aquatic ecosystems serve as a habitat for vectors of diseases wherever they pose a risk to human living environments.”

Idem, para. 8

And,

“The water required for personal or domestic use must be safe and therefore, free from micro-organisms, chemical substances and radiological hazards that constitute a threat to a person’s health. Furthermore, water should be of an acceptable colour, odour and taste for each personal or domestic use.”

Idem, para. 12(b)

These passages show that within IWRM, priority needs to be given to ensure that water is safe from the point of view of threats to health from contaminants.

In the early 2000s, the focus of discussions at the UN General Assembly and the Human Rights Council was on water for personal and domestic uses, i.e. water for direct consumption, for cooking and for personal and domestic hygiene. This right to water, however, cannot be considered in isolation

from other human rights such as the right to food and freedom from hunger, which place specific demands on water use for agriculture. Nor can it be considered in isolation from the right to a healthy environment, which is recognized in more than 115 national constitutions. In short, **all human rights are interlinked and interdependent**, and cannot be considered in isolation from one another.

5.5 SETTING THE BAR FOR IWRM: THE RIGHT TO A HEALTHY ENVIRONMENT

Currently, there is widespread awareness of environmental issues and the need to protect the natural environment. This awareness has grown steadily over time. If one could pinpoint a moment in time that was crucial for the emergence of this environmental consciousness, it could arguably be 1962, when Rachel Carson published her book *Silent Spring*, a testimony to the effects of widespread use of pesticides on biodiversity. Writing three decades before the recognition of the right to a healthy environment, Carson wrote:

“If the Bill of Rights contains no guarantee that a citizen shall be secure against lethal poisons distributed either by private individuals or by public officials, it is surely only because our forefathers, despite their considerable wisdom and foresight, could conceive of no such problem.”

Carson 1962: 29

In this quote, Carson is clearly already posing the question why environmental health is not protected by the US Constitution as one of the core values of the nation. Almost 50 years later, this question was followed up very practically through an investigation proposed by the UN Human Rights Council following resolution 19/L.8/Rev.1 of 2012:

“The Human Rights Council ... decides to appoint, for a period of three years, an independent expert on the issue of human rights obligations related to the enjoyment of a safe, clean, healthy and sustainable environment, whose tasks will be ... to

study, in consultation with Governments, relevant international organizations and intergovernmental bodies, including the United Nations Environment Programme and relevant multilateral environment agreements, human rights mechanisms, local authorities, national human rights institutions, civil society organizations, including those representing indigenous peoples and other persons in vulnerable situations, the private sector and academic institutions, the human rights obligations, including non-discrimination obligations, relating to the enjoyment of a safe, clean, healthy and sustainable environment.”

In international law, the human right to a healthy environment is still the subject of investigation. The UN Independent Expert, Prof. John Knox, has conducted a 14-volume study on the right to the enjoyment of a safe, healthy environment, as contained in international law. He has established that environmental degradation can and does adversely affect the enjoyment of a broad range of human rights. His conclusion is that a very substantial body of international law is in agreement on three fundamental issues:

First, states have **procedural obligations**: assessing environmental impacts and making environmental information public; facilitating public participation in environmental decision making; and providing access to remedies for harm.

Second, states have **substantive obligations** to protect against environmental harm that interferes with the enjoyment of human rights by adopting legal and institutional frameworks that protect against environmental harm; taking action to protect citizens from harm induced by private actors (non-state parties, such as private corporations); and fulfilling their obligation to protect human rights from the extraterritorial environmental effects of actions taken within their territory.

Third, states have **obligations relating to members of groups that are particularly vulnerable to environmental harm**. The right to equal protection before the law implies an obligation of

non-discrimination and therefore to pay particular attention to groups in vulnerable situations. These include women (ensuring their participation in environmental decision-making and protecting their rights to health, property and development); children (protecting their right to health through, for instance, access to clean drinking water); and indigenous people (states have a duty to recognize the rights of indigenous peoples with respect to the territory that they have traditionally occupied, including the natural resources upon which they rely and an obligation to facilitate the participation of indigenous peoples in decisions that concern them) (UNHRC 2013).

It is important to underline the fact that this interpretation of international law took place after two decades in which there had been a rapid expansion of the recognition of the right to a healthy environment at the national level. Portugal and Spain were the first nations to recognize the right to live in a healthy environment (in 1976 and 1978 respectively). Since then, the number of countries recognizing this right has expanded enormously. Currently, three quarters of the world's constitutions (147 out of 193) include explicit references to environmental rights or responsibilities. Of these, 92 national constitutions recognize the substantive right to live in a healthy environment. Further, 30 constitutions provide procedural rights specifically related to environmental protection, including the right to information, the right to participate in decision making and the right of access to the judicial system (Boyd 2012).

5.6 SETTING THE BAR FOR IWRM: THE RIGHT TO FOOD

The human right to food was first recognized in the 1948 Declaration of Human Rights. The 1966 ICESCR acknowledges that every person has a right to an "... adequate standard of living for himself and his family, including adequate food, clothing, and housing, and to the continuous improvement of living conditions" (Art 11).

The scope and content of the right to food has been further elaborated by the treaty body experts in General Comment Number 12 of 1999. Thus, 'availability' of food refers to either the possibility to feed oneself directly from productive land or other natural resources, or to obtain food from market systems. 'Economic accessibility' implies that the financial costs to acquire food for an adequate and acceptable diet should not threaten or compromise the attainment and satisfaction of other basic needs. In essence, the right to food can be realized in many ways and state governments are entitled to determine how for as long as they proactively strengthen people's access to resources and means to ensure their livelihood.

If General Comment Number 12 does not lay down a concrete connection between water and food; then the connection is clearly established by General Comment 15, three years later in 2002, when the Committee declares:

"Para. 6. Water is required for a range of different purposes, besides personal and domestic uses, to realize many of the Covenant rights. For instance, water is necessary to produce food (right to adequate food), and ensure environmental hygiene (right to health). [...] Priority should also be given to [...] water required to meet the core obligations of each of the Covenant rights."

This interpretation does not treat the subject of trade-offs, competition and priorities among other water-affected human rights. It clearly establishes the priority to first satisfy the human right to safe drinking water, followed by the priority to satisfy "water allocations for other human rights," which explicitly includes the right to food. It is only after these rights are satisfied that water allocation should consider other types of water uses. Ensuring the right to water for personal and domestic needs and preventing starvation are minimum conditions for survival. Winkler (2015) justifies the Committee's choice by the fact that these needs must be fulfilled before the core obligations of the right to food can be pursued.

In the realm of access to food, three groups in society are typically vulnerable: small landholders with limited access to productive resources, landless labourers, pastoralists and fisher-folk. The Committee therefore goes on to address the specific situation of subsistence agriculture.

“Taking note of the duty in article 1, paragraph 2, of the Covenant, which provides that a people may not ‘be deprived of its means of subsistence’, [the Committee asserts that] States parties should ensure that there is adequate access to water for subsistence farming [emphasis added] and for securing the livelihoods of indigenous peoples. ”

Para. 7

Water for subsistence farming is hence given a specific value above traditional irrigation rights to avoid any negative impact on livelihoods including customary land and water rights (see next section).

When it comes to quantification, the amount of water necessary to produce food at subsistence levels (staple crops) varies with climatic area and cultural needs. It is therefore difficult to set a benchmark for water needs necessary to secure the right to food. Nevertheless, this calculation is easier to achieve at the level of individual (sub) catchment, where local needs can be specified with more precision. Allocating (and protecting the actual availability of) water for subsistence production is therefore a key to an HRBA to IWRM.

To conclude, the Committee also “... notes the importance of ensuring sustainable access to water resources for agriculture” (para. 7). The emphasis placed on the sustainable access requires specific considerations not only in terms of social and environmental, but also economic safeguards for human rights protection. The latter will become increasingly important with the rise of market-based mechanisms for water-rights allocation by authorities (see Murray–Darling basin) (Baillat 2010). To realize the right to food for coming generations, societies must plan for their own and shared water resources in efficient, sustainable and equitable ways. Windfuhr

(2013) argues that the principles of IWRM should be (further) developed and implemented to avoid and mitigate conflicts that can be predicted and aligned with decisions on land and water use. To this end, the global and independent Land Matrix (see www.landmatrix.org) would be a useful monitoring tool to promote transparency and accountability in decisions over land acquisitions and investment.

5.7 SETTING THE BAR FOR IWRM: THE RIGHTS OF INDIGENOUS PEOPLES

The world has some 5,000 groups of indigenous and tribal peoples, with an estimated population of 370 million living in 70 different countries. Each group has its own distinct language, cultural traditions, customary laws and ancestral lands. In many cases, indigenous peoples have a history of colonial and post-colonial dispossession of lands, territories and natural resources that set them apart or marginalized them from mainstream society. This marginalization has become a concern from a human rights perspective. In general, their economic social and cultural traditions set them apart from the rest of the national community in present day national states, and their status is partly regulated by their own traditions and institutions. Each nation may have separate laws entitling them to a measure of self-determination in natural resource management (including water) (ILO 2009).

In 1989, the International Labour Organization adopted the Indigenous and Tribal Peoples’ Convention (ILO convention Number 169), with a view to enhancing the protection of indigenous peoples’ rights. The convention has since been ratified by 22 countries; it is the most important element of international law protecting indigenous peoples’ rights. It is also the predecessor of the United Nations Declaration on the Rights of Indigenous Peoples, which was adopted by the United Nations General Assembly in September 2007. Convention Number 169 was drafted in recognition of the desire of indigenous peoples to exercise control over their territories, natural resources, institutions and economic, social and cultural practices. In other words, to preserve an

element of self-determination with the intent to enhance indigenous people's self-determination. ILO 169 has been ratified predominantly by South and Central American countries.

Although the Declaration on the Rights of Indigenous Peoples has thus far enjoyed the support of a large number of states, technically speaking, the Declaration is not a binding document unless the states' practices support the principles of the declaration and unless states consider themselves legally bound by it. However, its broad endorsement by Member States carries weight in that a large majority of states are in support of its principles.

In the context of the Declaration, the rights of indigenous peoples have key features in the context of water resources management:

- ◆ They are, generally speaking, rights that are held collectively by a group rather than being rights held by an individual, as is the case with most human rights;
- ◆ Indigenous peoples' rights include their rights to lands, territories and natural resources, including water;
- ◆ Law and policymakers are required to engage with indigenous peoples in such a way as to obtain their free, prior, informed consent before engaging in interventions that might affect their rights. Free, prior, informed consent are key principles that frame the rules for participation in public decision making.

Two points, as mentioned in Chapter 18 of Agenda 21, are important to conceptualizing concrete methods in which the rights of indigenous peoples can be incorporated into IWRM frameworks. First, with regards to interventions in water resources, there is the issue of technology choice. The present day, dominant cultural practices of dam building, hydropower generation, canal construction, bulk water distribution networks, etc., are, in many ways and intentionally or unintentionally, instruments of cultural assimilation. In this respect, for each intervention in water courses, a question should be posed—to what extent are modern technology choices appropriate from the point of view of local

communities? In many cases, the improvement of indigenous technologies can provide an alternative point of departure and are often rooted in long-term interactions with nature that have proven to be sustainable. In short, indigenous knowledge systems may provide keys to sustainability that will be much needed in the context of the evolving water crisis.

Second, a key to indigenous peoples' effective participation in IWRM is contained in the principle of subsidiarity, which favours smaller, decentralized decision-making. Adhering to the principle means that water resources should be managed at the lowest appropriate institutional level. The introduction of participatory techniques in IWRM, which assist local groups in visualizing plans for catchment areas and in voicing their perspectives, are important in ensuring that water system interventions are in the public interest as defined and negotiated by local stakeholders (indigenous peoples in particular).

5.8 CONCLUSION

This chapter has provided an overview of the key anchor points for an HRBA to IWRM in international law. It argued that IWRM needs to be adjusted to balance competing needs while complying with human rights in order to ensure the long-term sustainability of the resource.

Because safe drinking water has been recognized as a human right, this is an important point of entry to assess how IWRM can be judged from a human rights perspective.

The chapter argued that there is a difference between a water right and the human rights to water and sanitation, and that this difference is of fundamental importance to understanding human rights in the context of IWRM: a water right is a temporary right that can be provided to an individual and, importantly, that can be withdrawn. In contrast, the human right to safe drinking water is not temporary, it is not subject to state approval and cannot be withdrawn—it is **inalienable**. Further, a number of other water-related human rights trigger **inalienable water rights entitlements**, which need to be satisfied as a matter of priority by

authorities before allocating water for other uses. These water rights entitlements are derived from other human rights and include: water rights for subsistence agriculture (which is especially well protected for indigenous communities), and water quality standards (including water treatment considerations) to avoid infringing on the human right to a healthy environment.

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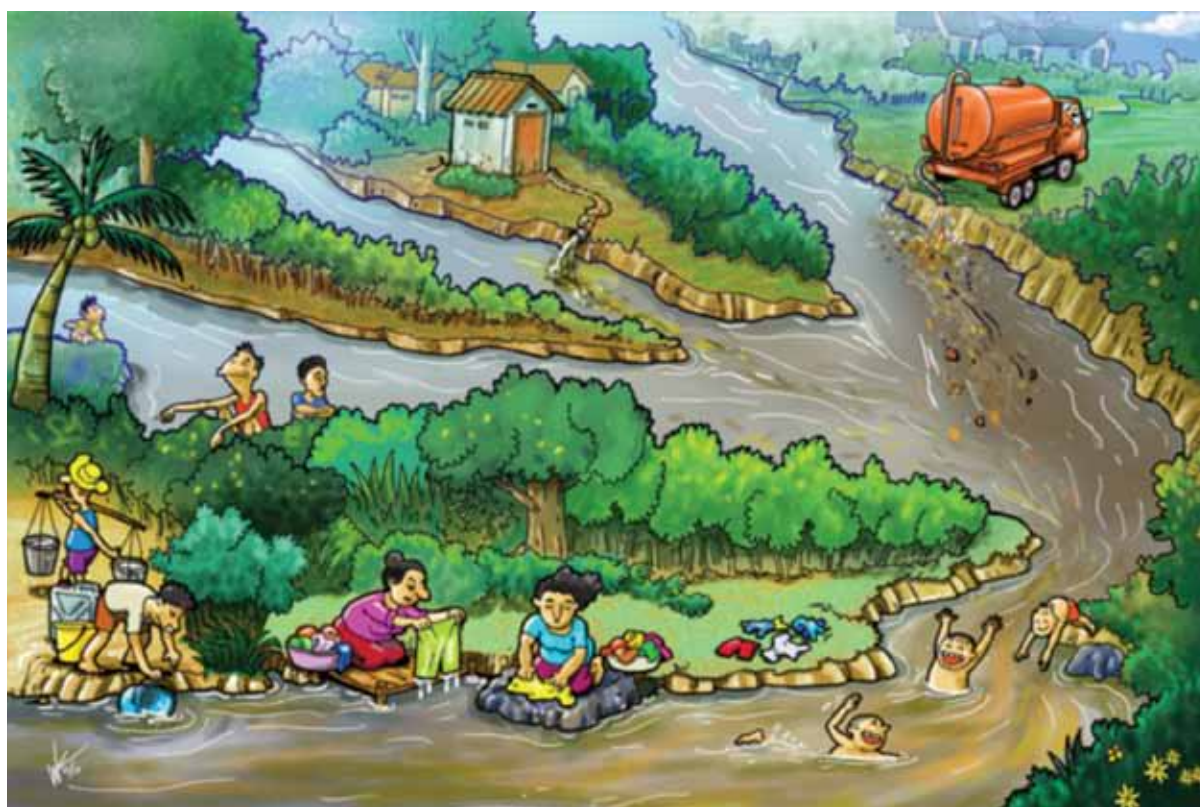
6. CORE PROVISIONS OF THE HUMAN RIGHT TO WATER

6.1 INTRODUCTION

This chapter provides an overview of the key provisions of the human rights to water and sanitation (HRWS) that have an impact on IWRM. In many regions of the world, freshwater is a scarce resource—one that is facing rapidly growing demand. In many arid regions, the expansion of irrigated agriculture, tourism and urban areas is gradually leading to water stress. This water stress is expressed through the depletion of groundwater supplies, decreases in the options available for further surface-water development and increased pollution. Growing world trade and changing consumption patterns have effectively increased the per capita consumption of water and the world's 'water footprint'. Changing land-use patterns (such as agricultural expansion and urban growth) and climate change are affecting overall water availability and the predictability of water-flow patterns.

Against this background of competing uses and water stress, it is crucially important that water resource-related decision-making processes are clear and unambiguous and that prioritizing water uses takes place within a balanced framework, giving due regard to efficiency, equity and sustainability considerations. The human-rights framework, being based on universally accepted conceptions of justice, provides just such a framework. The 2010 international recognition of the right to water and sanitation was a landmark moment in this sense, because it provided both the normative and the legal basis for a balanced decision-making framework. Even if General Comment Number 15 of the UN Committee on Economic, Social and Cultural Rights on the right to water had only focused on the water necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements which is only a small portion of total world water utilization, the realization of the right to water and sanitation requires an approach to IWRM based on the human rights framework.

Figure 6.1: Water Uses are Interlinked and Interrelated



In order to ensure the realization of the human rights to water and sanitation, many basic conditions need to be met at the resource level. For example, the standards for drinking water are much higher than most other types of water use. To ensure the provision of high-quality water to human settlements and places of work, measures need to be taken to prevent contamination by other activities, such as the disposal of excreta. Also, since access to a minimum quantity of safe water is essential for consumption, cooking and maintaining personal hygiene, attention must be paid to local capacities to ensure a continuous minimum supply—irrespective of other demands.

Because the right to sanitation is related to the right to health, care should be taken to ensure that the disposal of human waste by individuals or households does not affect the right to health of other individuals or households. Sources of drinking water need to be protected from both

over-abstraction and contamination by irrigation systems, mining companies or factories. In a given river basin, water uses and sanitation practices are interlinked and interrelated. Therefore, ensuring basic access to drinking water and sanitation is part of the broader IWRM process.

This chapter looks at the human rights to water and sanitation from an IWRM perspective, and addresses fundamental questions regarding the basic conditions that must be satisfied by water resource management in order to ensure the realization of the human rights to water and sanitation in practice. To answer these questions, we first need to examine the contents of the right to water and sanitation. This chapter provides a background to the human rights to water and sanitation and then explores the substantive and procedural aspects of IWRM. These aspects are derived not only from the human rights to water and sanitation, but also from all other provisions discussed in Chapter 3.

6.2 THE ORIGINS OF THE RIGHTS TO WATER AND SANITATION

There is no human rights convention specifically to the issue of safe drinking water or sanitation; the right is derived from the contents of other conventions. Access to safe drinking water is explicitly mentioned in some international human rights conventions (e.g. the Convention on the Elimination of All Forms of Discrimination against Women, the Convention on the Rights of the Child, and the Convention on the Rights of Persons with Disabilities). The human right to water was also considered to be implicit in the International Bill of Human Rights (right to life and dignity) and the ICESCR (the rights to an adequate standard of living, to the highest attainable standard of health, to housing and to food). There was, therefore, already a substantial basis for this right in international law (A. Baillat and H. Boussard 2012).

General Comment Number 15 set in motion a global debate on a human rights approach to water and sanitation, eventually resulting in the UN General Assembly recognizing the right, the UN Human Rights Council reaffirming the right, and more than 30 countries adopting legislation to incorporate water and sanitation as a human right. In terms of content, General Comment Number 15 focused on the right to water and flagged the possibility of a separate right to sanitation (cf. C. de Albuquerque 2012). Later, the first UN Special Rapporteur on the right to water and sanitation, in her capacity as an independent expert on human rights obligations related to access to safe drinking water and sanitation, defined sanitation from a human rights perspective as “a system for the collection, transport, treatment and disposal or reuse of human excreta and associated Hygiene” (UNGA 2013).

Box 6.1: Right or *Rights* to Water and Sanitation?

The resolutions of both the UN General Assembly and the Human Rights Council referred to a **single right to water and sanitation**:

- On 28 July 2010, the United Nations General Assembly voted in favour of recognizing water and sanitation as a human right through resolution A/64/292, which declared that the General Assembly “recognizes the right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights” (UNGA 2010).
- On 24 September 2010, the Human Rights Council adopted a resolution (A/HRC/RES/18) declaring that it “affirms that the human right to safe drinking water and sanitation is derived from the right to an adequate standard of living” (UNHCR 2010).

However, the UN Special Rapporteur on the Right to Water was of the opinion that water and sanitation should be treated as **two distinct human rights**, for the following reasons:

- When water and sanitation are mentioned together, the importance of sanitation is downgraded due to the political preference given to water;
- Naming both water and sanitation as separate human rights provides an opportunity for governments, civil society and other stakeholders to pay particular attention to defining specific standards for the right to sanitation and subsequently for the realization of this right;
- Further separating the right to sanitation from the right to water recognizes that not all sanitation options rely on water-borne systems (UNGA 2013).

The [Resolution](#) adopted by the UN General Assembly on 17 December 2015 affirmed the Special Rapporteur’s position. It stated: “Recalling the designation of 19 November as World Toilet Day, in the context of Sanitation for All, pursuant to General Assembly resolution 67/291 of 24 July 2013, in which the Assembly encouraged all Member States, as well as the organizations of the United Nations system and international organizations and other stakeholders, to approach the sanitation issue in a much broader context and to encompass all its aspects, including hygiene promotion, the provision of basic sanitation services, sewerage and wastewater treatment and reuse in the context of integrated water management,” and “Recalling the understanding by the Committee on Economic, Social and Cultural Rights and the Special Rapporteur on the human right to safe drinking water and sanitation that the rights to safe drinking water and sanitation are closely related, but have distinct features which warrant their separate treatment in order to address specific challenges in their implementation and that sanitation too often remains neglected if not addressed as a separate right, while being a component of the right to an adequate standard of living.”

The Special Rapporteur has further stated that the right to sanitation entitles rights holders to sanitation that is safe, accessible, affordable, hygienic, secure, socially and culturally acceptable, provides privacy and ensures dignity.

6.3 THE CONTENTS OF THE RIGHT TO WATER AND SANITATION

Because it is an authoritative interpretation of international law, General Comment Number 15 provides guidance on the content of the human rights to water and sanitation. This interpretation provides clarity on the obligations of states and on the specific entitlements of individuals and groups related to water and sanitation.

6.3.1 The obligations of states

The ICESCR is a key legal source for the rights to water and sanitation. It is a multilateral treaty to which many states have bound themselves

Figure 6.2: Prioritize Personal and Domestic Uses of Water



politically through signature and, in most cases, legally through ratification. In terms of the ICESCR, states are the primary duty bearers in the implementation of the rights to water and sanitation. States have the obligation to use all appropriate means and take all necessary steps to ensure that everyone enjoys the rights to water and sanitation. Decentralizing responsibilities to local levels or subcontracting tasks to service providers does not reduce the status of states as the primary duty bearer for service provision and maintenance. States have several obligations related to the rights to water and sanitation: the principle of progressive realization, the principle of non-retrogression, and the principles to respect, protect and fulfil the rights.

States' first obligation related to the right to water is the **principle of progressive realization**. One of the common misconceptions about the human rights to water and sanitation is that states have the obligation to provide it immediately or that a state is in violation of the right to water if not all people have water and sanitation. This is not true: the right requires a state to take deliberate, concrete and targeted steps to the maximum of its available resources in order to progressively realize the right. In order to ensure that this is monitored, states are required to submit reports to treaty bodies, such as the Committee on Economic Social and Cultural Rights, which monitors the implementation of the treaty.

A second obligation falls under the **principle of non-retrogression**. There is a strong legal basis to assert that states are prohibited from taking measures, intentionally or unintentionally, that would lead to the deprivation of peoples' 'rights to water and sanitation. The Nature of States' Parties Obligations states in paragraph 9 that "any deliberately retrogressive measures...[...]...would require the most careful consideration and would need to be fully justified by reference to the totality of the rights provided for in the Covenant and in the context of the full use of the maximum available resources, (UN Committee on Economic, Social and Cultural Rights 1990 para. 9). A reduction in the level of enjoyment of a right goes against the principle of

progressive realization. Therefore, non-retrogression is a cornerstone of progressive realization. Progressive realization also relates to sustainable access, which includes the protection of the resource.

States have a triple obligation to respect, protect and fulfil the rights to water and sanitation. The **obligation to respect** requires states to refrain from interfering directly or indirectly with the enjoyment of the right to water. This could include interfering with customary or traditional arrangements for water allocation, polluting water through waste from state-owned facilities or limiting access to water as a punitive measure (UN CESCR 2002 para. 21).

The **obligation to protect** requires that the state takes measures to ensure that third parties do not interfere with the enjoyment of the right to safe drinking water. This includes the adoption of legislative and other measures to prevent third parties from denying equal access to adequate water and polluting or inequitably extracting from water resources. The **obligation to fulfil** requires states to take positive measures to assist communities and individuals to enjoy the right, including public education on hygienic water use, protection of water sources and methods to minimize wasting water. The obligation to fulfil includes an explicit orientation towards vulnerable and marginalized groups and individuals. The state is obliged to fulfil the right when individuals or a group are unable, for reasons beyond their control, to realize that right themselves by means they have at their disposal (See UN CESCR 2002: para. 25).

6.3.2 The substantive freedoms and entitlements of the right

The right to water contains both freedoms and entitlements.

- ◆ **Freedoms** include the right of access to existing water supplies, the right to be free from interference, the right to be free from arbitrary disconnections and the right to be free from water supply contamination.

- ◆ **Entitlements** include the right to a system of water supply and management that provides equality of opportunity for people to enjoy the right to water.

6.3.3 The right to sufficient and continuous water

The water supply for each person must be sufficient and continuous for personal and domestic uses. These uses include drinking, personal sanitation, washing of clothes, food preparation and personal and household hygiene. These are minimum rights and refer to a very limited quantity of water. General Comment Number 15 refers states to World Health Organization guidelines, which set the minimum amount of drinking water to satisfy personal and domestic needs at around 50 litres per person per day (the amount depends on specific context and health status). In emergency conditions, this can be reduced to 20 litres per day for short periods of time, but this amount is insufficient to maintain hygiene and may only be seen as a temporary survival ration.

Box 6.2: Free Basic Water in South Africa

South Africa enshrined the right to water in its 1996 constitution. Immediately after apartheid ended in 1994, the South African government set itself the short-term goals of providing every person with a minimum of 20 litres per person per day located at a maximum of 200 metres from the household. In the 1997 Water Services Act, this was elevated to 25 litres per person per day. Following the government's realization that the poorest households could not afford even very low-cost water services, the Free Basic Water Policy was passed. The Free Basic Water policy of 2001 entitled each person to a minimum of 25 litres per day (or 6 kilolitres per household per month) free of charge. Households (and businesses) consuming more than this pay progressively more in a steeply rising block tariff system, intended to both provide 'lifeline support' to the poor and to discourage excessive water consumption by raising the price for high-volume consumers.

Box 6.3: Water Quality and Untreated Wastewater in Córdoba, Argentina

In 2004, residents challenged the Province of Córdoba in Argentina, alleging that a sewage-treatment plant owned by the municipality of Córdoba was malfunctioning and was releasing untreated wastewater into the Suquia river and polluting groundwater. It was alleged that the municipality had authorized new sewage connections without increasing the capacity of the treatment plant. As a result, the plant had begun to release untreated wastewater into the river and a well, which was the city's only source of drinking water. The well became contaminated, leading to serious health hazards. Citing, among others, the ICESCR and the Universal Declaration of Human Rights, a court ruled that the province had failed in its duty and should take all measures necessary to minimize the environmental impacts of the treatment plant. The municipality was ordered to provide 200 litres of potable water per household per day until the public water service was restored.

Box 6.4: Physically and Economically Accessible Services

There is no international legal standard for the physical accessibility to water. However, according to the World Health Organization, water sources should not be located further than 1000 metres from households, and collection time should not exceed 30 minutes. Similarly, there is no international legal standard for affordability of services, even though in many cities poor slum dwellers can pay five to 10 times more for water than consumers in high-income suburbs. The Water Supply and Sanitation Collaborative Council recommends that the costs for water and sanitation services should not exceed 5 percent of a household's income

Box 6.5: Non-discrimination in Access to Services

The San (Bushman) community in Botswana has lived legally inside the Central Kalahari Game Reserve since the Reserve was established in 1961. The community has drawn water from a borehole maintained by the District Council. In 2002, the community was relocated outside the game reserve against their will and the pump engine and water tank were removed. The community, already vulnerable and marginalized in Botswana, was now exposed to acute water shortages. One member of the community took the case to the High Court and the Court of Appeal. The latter court held that the San did not require a water right to use the borehole and issued them permission to return the borehole to operation.

6.3.4 The right to safe and acceptable water

The right to water specifies basic water quality conditions that must be met to realize the right. Per General Comment Number 15, “the water required for personal or domestic use must be safe and therefore free from micro-organisms, chemical substances and radiological hazards that constitute a threat to a person's health. Water should be of an acceptable colour, odour and taste for personal and domestic use.”¹ Sanitation facilities must be hygienic, safe to use, and must effectively prevent human, animal and insect contact with human excreta to protect the health of users and the community. Toilets must provide hygiene facilities for washing hands with soap and water and must enable menstrual hygiene management for women and girls, including the disposal of menstrual products.

1. Committee on Economic Social and Cultural Rights (2002): General Comment no. 15. The Right to Water, par. 12

6.3.5 The right to accessible water

Water and sanitation facilities must be accessible to all without any discrimination. This includes physical accessibility: facilities and services must be within physical reach (in the immediate vicinity of a household or place of work). It also includes economic accessibility: facilities must be affordable for all. The cost of securing water may not affect the realization of other rights (e.g. the cost of water

should represent a small proportion of household income). Non-discrimination extends to the most vulnerable and marginalized sections of the population, in law and in fact. In other words, the delivery and maintenance of services should not discriminate between individuals and groups on the basis of income, religious belief, ethnic background, etc.

6.4 THE PROCEDURAL CONTENTS OF THE RIGHT

The recognition of water and sanitation as a human right implies that there are also procedural rights related to the enjoyment of the right. These are the rights that provide access to information, to participation, to non-discrimination and to sustainability.

6.4.1 The right to information

The right to information includes the right to seek, receive and impart information concerning water issues. It requires giving individuals and groups full and equal access to information held by public authorities or third parties that concerns water,

water services or the environment. This includes the obligation to ensure full and timely disclosure of information on measures that may interfere with the enjoyment of the right.

6.4.2 The right to participation

Individuals' and groups' rights to participate in those decision-making processes that may affect their exercise of the right to water must be an integral part of any policy, programme or strategy concerning water. In order to ensure that substantive rights are realized, the formulation of national water strategies and the operation and control of water and sanitation services must be subject to independent monitoring and genuine public participation.

6.4.3 The right to enjoyment without discrimination

States have an obligation to ensure that the right to water is enjoyed without discrimination. This implies a responsibility to target and protect vulnerable and marginalized groups. Both the allocation

Figure 6.3: The Right to Information



Box 6.6: Sustainability

In Colombia, the Ombudsman's Office was asked to evaluate the performance of the state's obligations in respect to the human right to water. In its investigations, the Ombudsman classified the country's municipalities into a hierarchy from worst to best in terms of water supply and environmental sustainability. The indicator for environmental sustainability classified the country's municipalities according to their performance on three axes: natural water-regeneration capacity (extent of plant cover, wetlands, etc. in the municipality), water scarcity (risk of water shortages in adverse environmental conditions), and vulnerability (the relationship between natural regeneration capacity and water scarcity). The results of the investigation identified 46 of the 1,097 municipalities as being "high risk" municipalities in which a declaration of a health emergency was recommended. The study added that only 17 percent of the Colombian population has acceptable levels of vulnerability, indicating an urgent need to build regenerative capacity and reduce water scarcity in the majority of municipalities.

Hungary has the world's first Ombudsman for Future Generations. In 2011, the country passed a law on fundamental rights declaring that "agricultural land, forests and drinking water supplies, biodiversity—in particular native plant and animal species—and cultural assets are part of the nation's common heritage, and named the state and every person to be obliged to protect, sustain and preserve them for future generations."

of water resources and investments in water should facilitate access to water for all members of society. Care needs to be taken to ensure that investments do not favour expensive water-supply services or facilities that are accessible only to a privileged fraction of the population. Rather investments should be directed towards services and facilities that benefit the far larger group.

6.4.4 The rights of present and future generations

The right to water places obligations on states to develop integrated strategies to ensure that there is sufficient water for present and future generations.

The concept of sustainability in the context of the right to water implies economic, environmental and social sustainability. Investments in services need to take future operations and maintenance costs into account and adapt technology choices to ensure that the maintenance will be affordable. They need to ensure that sufficient water resources are available for uninterrupted, ongoing service delivery and that services are matched to social needs.

6.5 THE RIGHTS TO WATER AND SANITATION AND IWRM

In its introductory paragraph, General Comment Number 15 declares that water is a limited natural resource and that "the continuing contamination, depletion and unequal distribution of water is exacerbating existing poverty" (UN CESCR 2002). Based on this, it calls for effective measures to realize the right to water, i.e. to secure minimum rights. Many of these measures are described in detail in General Comment Number 15 and they have a direct impact on IWRM.

6.6 SUBSTANTIVE RIGHTS: PRIORITY OF ALLOCATION

Paragraphs 6 and 7 of General Comment Number 15 provide clarity with regard to the priority of water allocation. Paragraph 6 makes it absolutely clear that the right to water for personal and domestic uses should receive top priority within allocation systems.

In the second part of paragraph 6, some indication is given that beyond water for personal and domestic uses, water resources should be reserved to "prevent starvation." This presumably refers to the allocation of water for subsistence production. This interpretation is confirmed by paragraph 7, which states:

"The Committee notes the importance of ensuring sustainable access to water resources for agriculture to realize the right to adequate food (see General Comment

Number 12 (1999)).⁷ Attention should be given to ensuring that disadvantaged and marginalized farmers, including women farmers, have equitable access to water and water management systems, including sustainable rain harvesting and irrigation technology. Taking note of the duty in article 1, paragraph 2, of the Covenant, which provides that a people may not “be deprived of its means of subsistence”, States parties should ensure that there is adequate access to water for subsistence farming and for securing the livelihoods of indigenous peoples.”

UN CESCR 2002: para. 7

6.7 SUBSTANTIVE RIGHTS: WATER QUALITY

Within the framework of the human right to water, water quality is protected to ensure access to safe water for personal and domestic uses. This is derived from the right to the highest attainable standard of health guaranteed in paragraph 12 of the International Covenant on Economic, Social and Cultural Rights. General Comment 15 refers to this in paragraphs 10 and 12:

“The right to water contains both freedoms and entitlements. The freedoms include the right to maintain access to existing water supplies necessary for the right to water, and the right to be free from interference, such as the right to be free from arbitrary disconnections or contamination of water supplies.”

And ...

“The water required for each personal or domestic use must be safe, therefore free from micro-organisms, chemical substances and radiological hazards that constitute a threat to a person’s health.”

UN CESCR 2002: paras. 10 and 12, emphasis added

Protecting water quality from the point of view of preventing water-related diseases should therefore be one of the key aims of IWRM.

The 1992 United Nations Economic Commission for Europe Convention on the Protection and Use of Transboundary Watercourses and International Lakes is an example of a convention containing such clauses in the context of IWRM:

“The Parties shall take all appropriate measures to prevent, control and reduce water-related disease within a framework of integrated water-management systems aimed at sustainable use of water resources, ambient water quality which does not endanger human health, and protection of water ecosystems.”

UNECE 1999

Disposing sanitary waste safely is very important in the context of preventing water-related diseases. It is in its relationship with water quality that sanitation is of crucial importance in supporting the realization of the right to water: water and sanitation are tightly interdependent. On this topic, General Comment Number 15 states:

“Ensuring that everyone has access to adequate sanitation is not only fundamental for human dignity and privacy, but is one of the principal mechanisms for protecting the quality of drinking water supplies and resources.”

By implication, **the realization of the right to sanitation is a key to a human rights approach to IWRM.** The former Special Rapporteur on the right to water, Ms. Catharina de Albuquerque, has commented on sanitation from the point of view of the right to health. She defines sanitation not only in terms of protecting one’s own health but also in terms of protecting the health of others:

“Human rights bodies thus understand sanitation broadly to include the treatment and disposal or reuse of excreta and associated wastewater. Sanitation does not stop simply with the use of latrines or toilets, but includes the safe disposal or reuse of feces, urine and wastewater. Such a broad understanding is warranted, as sanitation concerns not only one’s own right to use a latrine or toilet, but also the rights of other people, in particular their right to health, on which there might be negative impacts.”

UNGA 2013

Figure 6.4: Protecting Water Quality to Prevent Water-related Diseases through IWRM



Arguing in this vein, the Special Rapporteur sees the need to view all wastewater from a human rights perspective, and not just wastewater resulting from the disposal of excreta, because other kinds of wastewater can have an equally negative impact on health:

“Moving beyond the direct link to sanitation and wastewater from households, the Special Rapporteur sees the need to consider wastewater from other sources, including the industrial and agricultural sectors, because contamination from those sources has a significant impact on water quality, and the impact of domestic wastewater cannot be considered in isolation. As long as wastewater is generated, whether it be from agriculture, industry, or settlements, and is not confined and appropriately treated, human rights will be at risk of being violated.”

UNGA 2013

6.8 PROCEDURAL RIGHTS AND IWRM

6.8.1 Participation and access to information

General Comment Number 15 is clear on the need to ensure that decisions that impact the enjoyment of the right to water need to take place in a consultative manner and on the basis of full access to information by interested and affected parties. Paragraph 56 states:

“Before any action that interferes with an individual’s right to water is carried out by the State party, or by any other third party, the relevant authorities must ensure that such actions are performed in a manner warranted by law, compatible with the Covenant, and that comprises: (a) opportunity for genuine consultation

with those affected; (b) timely and full disclosure of information on the proposed measures; (c) reasonable notice of proposed actions; (d) legal recourse and remedies for those affected; and (e) legal assistance for obtaining legal remedies ... Where such action is based on a person's failure to pay for water their capacity to pay must be taken into account. Under no circumstances shall an individual be deprived of the minimum essential level of water.”

UN CESCR 2002

Given the number of countries that have ratified ICESCR, this is an important comment on the need to ensure public participation related to water infrastructure projects.

6.8.2 Sustainability and the rights of future generations

The manner in which the right to water is realized must be sustainable, ensuring that the right can be realized for the present and for future generations (UN CESCR 2002 para. 11). It is in this area that General Comment Number 15 is perhaps the most explicit in its call for IWRM, indicating the measures that need to be taken to ensure the sustainable realization of the right to water:

“States parties should adopt comprehensive and integrated strategies to ensure that there is sufficient and safe water for present and future generations. Such strategies and programmes may include: (a) reducing depletion of water resources through unsustainable extraction, diversion and damming; (b) reducing and eliminating contamination of watersheds and water related ecosystems by substances such as radiation, harmful chemicals and human excreta; (c) monitoring water reserves; (d) ensuring that proposed developments do not interfere with

access to adequate water; (e) assessing the impacts of actions that may impinge upon water availability and natural ecosystems and watersheds such as climate changes, desertification and increased soil salinity, deforestation and loss of biodiversity; (f) increasing the efficient use of water by end users; (g) reducing water wastage in its distribution; (h) response mechanisms for emergency situations; (I) and establishing competent institutions and appropriate institutional arrangements to carry out the strategies and programmes.”

UN CESCR 2002, para. 28

This section provides the most clear-cut bridge between the rights to water and sanitation and the conditions it places on water resource management in general. While it is not specific about which strategies and programmes are necessary to ensure the enjoyment of the rights to water and sanitation, it is clear about the need to manage water resources in such a way so as to guarantee the fulfilment of basic needs.

6.9 CONCLUSION

This chapter has looked at the content of the human rights to water and sanitation from an IWRM perspective. The central question it answered was: what basic conditions need to be satisfied at the level of water-resources management in order to ensure the realization of the human rights to water and sanitation in practice? We argued that against the background of competing uses and water stress, it is of crucial importance that decision-making processes with regard to water resources are clear and unambiguous and that the prioritization of water uses takes place within a balanced framework, giving due regard to considerations of efficiency, equity and sustainability.

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7. WATER, LEGAL PLURALISM AND HUMAN RIGHTS

7.1 INTRODUCTION

This chapter expands the discussion from Chapter 6 on customary arrangements for water allocation. It begins with a brief theoretical outline of legal pluralism, including a discussion of what makes pluralism a contested field. Section 7.3 discusses the challenges involved when applying the law or embarking on water law reform in jurisdictions with legal pluralism.

7.2 LEGAL PLURALISM

7.2.1 The theoretical framework

The IWRM concept relies heavily on the use of interconnected resources and legal arrangements to regulate behaviour. IWRM calls for all parts and sectors of the legal framework to be organized into a coherent structure that integrates management activities and decision-making processes related to water.

Good water governance is characterized by allowing and encouraging different actors to participate in decision-making processes. Customary water arrangements practiced by indigenous peoples, tribes, rural communities and other groups also need to be included during such processes.

Section 21 of General Comment Number 15 deals with the obligation to respect; it requires states to refrain from arbitrarily interfering with customary or traditional arrangements for water allocation. Affording respect to indigenous groups and tribal people is a matter of acknowledging plurality and diversity in society; such peoples were awarded special protection in the 1989 ILO Convention No. 169, which requires recognition of their cultures, traditions and particular circumstances.

As shown in Chapter 6, there are a multitude of legal bases for water allocation that give rise to disparate but legally enforceable water rights. This results from the presence of multiple societies and political systems that operate under a **plural** or mixed legal system. These societies should allow for statutory law to coexist with customary law and justice mechanisms as well as spiritual, sacred and religious practices.

In other words, the legal system is wider in scope than just ‘statutory law’, a term used in this context for (according to the theory of legal positivism), written, formal or state law as opposed to informal or non-state law.² Statutory law consists of acts, rules, regulations and ordinances from designated lawmakers at different levels, court precedents and doctrines (such as in former colonies of the British Empire)—or a mix of the above.

Legal pluralism is common in Africa, Asia and Latin America, including former colonies and post-conquest countries into which the new rulers introduced their administrative and legal systems. In today’s world, unwritten law and customs regulate the majority of family affairs. For example, in India and Singapore, the minority Muslim population refer their (family) law matters to special Islamic courts that apply the Koran, Sunnah or Shari’ah law principles instead of secular law. In Ethiopia, official recognition of customary law and practices is confined to dispute settlement in family matters.

Water and other natural resources belong to a field that remains guided by the special relationship and dependence that many indigenous peoples and rural communities have with Mother Earth. This is reflected in numerous local norms and customary practices.

.....
2. It should be noted that there are elements of cultural relativism and colonial views involved in the choice of terminology.

7.2.2 Legal pluralism debates

Customary law and legal pluralism are subjects of a rather heated ideological debate that tends to polarize non-state and statutory law, rural communities and urban establishment, tradition and reform. With regards to HRBA to IWRM, the broader theme is the management of natural resources; universal values and diversity are sub-themes. Elements of distrust are possible on both sides—proponents of the customary system do not necessarily see the state as a credible trustee that can be entrusted to manage water resources for the common good. Adherents to institutionalized law may associate customary arrangements with inequality and non-inclusive practices.

Anthropologists and socio-legal scholars have noted that, despite the presence of statutory laws, customary arrangements tend to rule most decisions pertaining to local water allocation. The discourse builds on the understanding that customs exist *de facto* among water users, whether or not the customs fulfil state-defined criteria of certainty and consistency (see Section 4.2).

At a general level, the legalistic and state-centric approach to customary arrangements is often riddled with democratic deficits, diversions from the ideal rule of law and frequent violations of minimum human rights standards (Harper, 2011). Recognizing this, some experts hold that the majority of multilateral and bilateral donor agencies, including the UN, are now officially embracing legal pluralism. There are several reasons cited behind this potential shift in approach. One is the perception that in the eyes of citizens, ‘informal’ systems and ‘non-state’ actors are more accessible and effective justice providers than the statutory law regime. Another reason is the increasing agreement that donors need to engage more constructively with customary systems to improve the legitimacy of the state and its formal institutions and to broaden the entire justice system. Finally, many donor agencies now wish to involve customary leaders as a way to stem human rights violations by targeting the places where such incidents occur (Harper 2011: 36, Kyed 2011).

It seems as if there is an agenda behind the pursuit to further mainstream human rights into all parts of development interventions through various channels rather than an actual desire and willingness to embrace plurality. It is unclear if this new approach has extended to IWRM and related reforms, but the legitimacy of a centralized state authority over the traditional practices of indigenous groups and rural communities is widely debated, especially in some post-colonial African countries and in Central and Latin America.

There are several reasons why customary arrangements are both contested and controversial outside the purely theoretical domain. For example, there are generalizations—well-founded in empirical experience or not—that these practices not conforming to standards of the HRBA and the rule of law. Supposedly, the water arrangements of rural and indigenous communities do not reflect the spirit of the Dublin Principles (and the three related E's: efficiency, equity and environmental sustainability) or the HRBA standards such as inclusion, participation, accountability, equality and non-discrimination.

State governments and those acting on their behalf are obliged to realize and ensure equal rights for all with the minimum standards of universal human rights as guiding lights. The HRBA requires that legislation, policies and programmes undergo review and reform where necessary, particularly to secure the rights of traditionally vulnerable and marginalized groups such as women and children. At the same time, states have obligations to respect customary and traditional arrangements for water allocation (as mentioned above).

Issues of poverty, privatization and protection of scarce natural resources are powerful factors that influence the legal pluralism debate (ICHRP 2009). A major disadvantage with customary water rights is the structural inequalities often found at the family, community and other levels; such inequalities are central to any discussion on human rights, plural legal orders and water allocations. In terms of priority entitlements, there are plenty of examples

of inequitable sharing where the traditional role of women, such as collecting drinking water, is insufficiently appreciated or where social stigma prevents some community members—or a whole group of people—from accessing water at certain places and times. In rural environments experiencing water scarcity, cattle are sometimes given preference for water over (some) human beings. There are also numerous illustrations of traditional water sources of indigenous peoples being neglected in favour of commercial opportunities or other uses such as urban development or tourism.

7.3 MANAGING WATER RESOURCES UNDER LEGAL PLURALISM

7.3.1 Challenges and responsibilities in water sector reform

Legal pluralism has policy implications that raise questions about the state's responsibilities towards its citizens, the international community, the ecosystem and future generations. One relevant question is what happens if the state imposes 'its' legal system on all citizens within its jurisdiction at the expense of customary norms and rules? Or as (rhetorically) expressed by Maganga (2003: 995): How participatory can IWRM be when it relies solely on statutory systems and neglects customary arrangements that the majority of the people in the villages rely upon? From another angle, Donovan and Assefa (2003) posed a similar question: how can a state maintain the necessary levels of protection for human rights while simultaneously respecting and incorporating territorial customary law systems within its legal system?

Every nation that has an indigenous population needs to apply and relate customary laws to the institutional arrangements. This is a matter for both the courts and the legislature. Many countries go through the processes of drafting new legislations to govern and regulate the water sector—sometimes incorporating the Dublin principles on IWRM—after reviewing the existing institutional and legal framework. The process of recognizing pre-existing

rights and non-statutory legal orders can involve incorporating or safeguarding customary rules and decentralizing decision-making to the community level. In practice, however, community representatives often perceive the outcome as a de-authorization of their legitimate rights.

From the state's perspective (the rule of law), the issues that arise include jurisdiction (over territory, subject matters and persons), authority (who has it, who bestows it and how), procedure, and enforcement of decisions. It is desirable but rare that all of these elements are clearly defined (ICHRP 2009). There are two common approaches to pre-existing rights and non-statutory legal orders. One approach is that they are largely recognized (at least on paper), with provisions on water access and utilization that can continue to be applied alongside of the statutory law. The other approach is that pre-existing rights are replaced through new legislation after reform. Examples of these two approaches follow.

Several countries have secured the traditional practices and rights of indigenous peoples in their national constitutions, thus acknowledging the practices as a source of law. For example, in 1993 in Chile, the *Chilean Indigenous Peoples' Act* (No. 19, 253) was invoked in the landmark *Aymara water rights case* (2008) in which a water bottling company's arguments relied on its private license to extract water and its ownership of the land from which water was being extracted. The Chilean Supreme Court upheld the Indigenous Peoples' Act along with the ILO Convention No. 169 that embraced a broad interpretation of the human right to property with reference to the special rights that indigenous peoples have with their traditional land and natural resources.

In Tanzania, some customary laws are accepted under the *Judicature and Application of Laws Ordinance* (No. 453) of 1961. Accordingly, the *Water Resources Management Act* of 2009 places customary rights on an equal level to administratively granted water permits. In Namibia, the *Water Resources Management Act* of 2013 recognizes

the country's customary law with reference to the *Traditional Authorities Act* of 2000. It is unknown whether the implementation of these Acts has been satisfactory from all rights-holders' point of view.

In Guyana, the *Water and Sewerage Act* (adopted in 2002) and provides that "any right, privilege, freedom or usage possessed or exercised by law or by custom by any person" will be recognized alongside the new statutory rights. However, to qualify as "customary," there must be proof that the right or freedom is ancient, certain, reasonable and continuous. The concerned communities have the burden to prove the existence of their customs it is unclear as to what extent they should pre-existing such that the customs meet the rather unclear legal requirements (Janki 2004). A similar approach is reflected in Indonesia's *Law on Water Resources* 2004 and in Bangladesh's *Water Act* 2013 (Burchi 2005).

In Asia, greater acceptance for customary rights has been seen recently in Bangladesh, India, Indonesia, Malaysia and the Philippines. In the Bornean States of *Malaysia*, native courts deal with legal and administrative matters (Shimray 2011). Ancient customary rights may be adhered to in countries that derive their water law from the Chinese system (China, Japan, Korea and Vietnam) in parallel to the modern, codified water law that is in place. Among remote ethnic groups in China, traditional norms and principles still prevail. The country's Constitution and the *Law of the People's Republic of China on Regional National Autonomy* of 1984 provide a framework in which the use of customary indigenous law may be applied, but the implementation of ethnic minorities' norms of local water management is subject to approval from state authorities (Wong and Guo 2014).

To some extent, Hindu and Buddhist principles still influence the water rights of Bali, Cambodia, Laos, Myanmar (Burma), Sri Lanka, Vietnam, Thailand, and, to a lesser degree, India. Likewise, customary law is of great relevance in many Sub-Saharan African countries and in several Latin American countries (Caponera and Nanni 2007).

In addition to the nations mentioned above, there are others that attempt to safeguard pre-existing customs. The difference is that customary rights are eventually extinguished after a grace period.

Ghana's Water Resources Commission Act abolished customary rights and decoupled the laws on water and land allocation. Although the Act provided a twelve-month window of opportunity before it came into force in 1996, as far as it is known, no right-holder came forward with a claim (possibly on account of the widespread illiteracy among the villagers). It should be noted that 80 percent of the land in Ghana is owned by the indigenous communities, held in trust by the male elders (Sarpong 2004).

Likewise, the Argentinian Province of Tucuman's *Water Act* of 2001 called for applications of 'traditional' rights that pre-dated the Act. A year after it came into force, it appeared as if no-one attempted to claim any such right within the time frame (Burchi 2005).

7.3.2 Bridging customary law and the HRBA for IWRM

In general, societies operating under legal pluralism need to adapt their regimes to the parallel tracks that the many applicable streams of law constitute. After implementation, customary law users risk suffering from a lack of respect within the 'formal' system, and it may indirectly lead to violation of indigenous peoples' rights to water and other natural resources.

Legislators who aim to simultaneously acknowledge the HRBA, IWRM and customary rights during water law reforms must consider a range of issues. For example, failing to recognize the existence and resilience of customary water rights in 'modern' water legislation is a recipe for social tension (Burchi 2005).

Political will to address the inherent tensions between the systems is a prerequisite during water reforms. This must be based on greater awareness of the fundamental distinguishing principles

between statutory and customary legal systems and the nature and common rationale of customary law. Among other things, two opposite perceptions need to be weighed against each other—that customs are 'astructured' and unsuited to the needs of the modern nation-state, and that customs are 'institutions of social control' that regulate collective responsibilities and inter-village relations (cf. Shimray 2011).

The situation can be mediated by designing a statutory and codified legislation that promotes the interests of all sides. Local and flexible practices can be rendered as legal autonomy while ensuring that the minimum standards of the universal and inalienable human rights are not compromised. Donovan and Assefa (2003) point to the following competing pairs of values to be analysed and reconciled:

- ◆ The rule of law vs. the preservation of customary law;
- ◆ Certainty in the law vs. flexibility;
- ◆ Uniformity in the law vs. local autonomy; and
- ◆ Protection of human rights vs. protection of customary law.

The initial practical hurdle may be the (generally) non-codified nature of the rights. Because the majority of customary water law and arrangements are unwritten, other sources of information need to be relied on to determine their substantive and procedural content. The rights described in anthropological and other literature pertain mainly to irrigation purposes, whereas personal and domestic needs are largely missing from the analyses (cf. the literature review in Jiménez et al. 2014a).³

It is all too common that insufficient time and resources are allocated to achieving shared understanding or to establishing a set of definitions (cf. Jiménez et al. 2014b). On-the-ground compilation

3. As a side note, Water Users' Associations are predominantly connected with irrigation management, but may also be concerned with community organization of domestic water supplies and general conservation efforts among, by and for its members.

Box 7.1: Legislative Reform in Bolivia

Bolivia is a case concerning the legislative amendments and the sometimes long, drawn out process of recognizing the water rights of indigenous peoples and rural communities. The absence of documents or records attesting to the practices purported as rights served as a major obstacle. The objective of regulating the uses and customs of water resources, prevailing in each region, implied, on the ground “a sort of inventory or codification of ‘valid’, ‘official’ and ‘legitimate’ uses and customs according to government criteria” (Bustamente 2006: 122). This put a heavy burden of proof on the rights-holders in relation to water sources used by communities—including demonstration of land ownership among irrigation practitioners, despite the fact that the system at the time contained no agrarian property records (ibid).

Against the backdrop of the country’s recent conflicts over water service privatization, consensus-seeking has been particularly high on the agenda. To reach common understanding on the regulation of the water sector, an open and transparent dialogue was crafted with researchers, NGOs and public administration officials at the table together. One objective was to convince indigenous users to trust the science-based modelling of water availability. A database of existing customary (or traditional) water rights was also developed through lot-by-lot field work and surveys, involving members of irrigators’ groups and farmers. Researchers simulated two scenarios with the help of geographic information systems. The administration granted concessions by litres per second for specific uses and managing water according to the traditional uses and customs currently in place based on collective ownership of water for multiple uses. The customary users clearly preferred the latter (IDRC, undated).

Law No. 2878 was eventually promulgated in 2004; it has since gained widespread acceptance. However, water management in Bolivia still seems to suffer from poor governance, illustrated by their decision-making processes and their non-transparent negotiations over water allocation agreements that were characterized by integrity issues. Effective implementation of their hard-fought water law remains a challenge, but it has been shown that a combination of hard and soft technologies can aid the process towards more equitable and sustainable resource use.

of customary laws may be considered too time-consuming as a step to evaluate the pre-existence and functions of customary rights. Nonetheless, water sector reforms need to involve genuine elements of public consultation during the early stages that lead to the framing of IWRM principles. This requires users to be given opportunities to act in their capacity as stakeholders and to participate ‘at all levels’. Likewise, the ILO Convention protects indigenous peoples’ right to prior informed consent.

States wishing to operationalize the HRBA to IWRM need to assess the pros and cons of pre-existing customary water rights from the human rights’ and IWRM perspectives. Based on Donovan and Assefa (2003), the following steps seem pertinent to take, preferably after studying the case of Bolivia (see Box 7.1):

- ◆ Conduct an inventory, followed by analysis, of the substantive and procedural rules of customary law systems—especially those that have never been studied by legal anthropologists—with special attention to ensuring that customary water rights allow users to take *de minimis* volumes of water for basic needs;
- ◆ Establish the expected level of conformity with the minimum standards of human rights;
- ◆ Educate ethnic groups to eliminate, for instance, discrimination against women; and
- ◆ Devise techniques to monitor the performance of the customary laws for compliance with human rights norms and to upgrade the performance in this regard.

7.4 CONCLUSION

Customary water rights, particularly those that are unrecorded or undocumented, remain elusive and challenging to analyse from a HRBA to IWRM perspective. Legal pluralism is demanding on nation-states, and has a history of resulting in neglect and dismissal.

Plural legal orders are being debated and are becoming increasingly important as they engage significant political and economic interests in a resource-hungry world (ICHRP 2009). Access to and influence over natural resources such as land and water have led to an increasing number of conflicts over property rights, with claims and counter-claims from different actors and where private and commercial interests stand against preservation and self-determination. Both individual users and the state as trustee play vital roles in balancing the demands between rights, development needs and responsibilities towards future generations.

When governments that are undertaking water sector reform take into account customary water rights that are claimed and satisfactorily proven, it neither satisfies the HRBA nor the IWRM. There is a danger—as realized in several cases described above—that the formal system misses rights-holders that do not come forward. This not only shows a lack of respect and recognition for different uses and user groups, but also risks creating problems on account of the rule of law. The legitimacy of the statutory law and the state's ability to enforce it are also at stake. In addition, questions regarding lawmakers' integrity may be raised in different forums, further undermining and delaying enforcement.

When states take necessary steps to realize human rights, it is imperative that they build these on a comprehensive picture of the water rights that apply within their jurisdictions, including rural and indigenous communities' customary arrangements for water allocation. While doing this, they must ensure that principles, standards of inclusion and participation, equality and non-discrimination are reflected in the water rights in question.

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8. A TOOL FOR THE IMPLEMENTATION OF A HUMAN RIGHTS-BASED APPROACH TO INTEGRATED WATER RESOURCES MANAGEMENT

8.1 INTRODUCTION

Building on the contents of the previous chapters, this chapter covers the human rights-implementation cycle and then presents a five-step implementation cycle for an HRBA to IWRM.

For river basin organization its means to incorporate the HRBA in all phases of the programming cycle of IWRM: assessment, analysis, planning, implementation, monitoring and evaluation. The operators and managers have to be in position to conduct a human rights assessment and analysis that will enable the establishment of human rights objectives, to identify the gaps, program planning and design goals, objectives and strategies, apply implementation tools and the measure indicators to monitoring and evaluate the fulfil human rights standards.

In order to apply IWRM to realize human rights, it is necessary to have a road map to ensure the enjoyment of these rights (see Figure 8.1). The human rights implementation cycle starts with the national recognition of international human rights treaties and conventions. Through its signature and ratification of human rights treaties, a state incorporates the provisions of these treaties into its national law. There is a list of water

Figure 8.1: The Human Rights Implementation Cycle

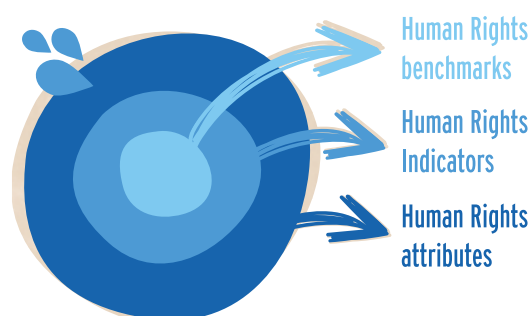


governance-related obligations that stem from this ratification process that need to be incorporated into planning systems.

The contents of rights and obligations need to be further specified in national law and policies. In national law, the ‘contents of these rights and obligations’ refers to the attributes of a right that belong to its enjoyment. In the case of water, these include physical accessibility, economic accessibility, acceptability and quality. The clarification of attributes in national law provides the basis to develop indicators to measure progress in realizing the right.

Indicators provide concrete and practical tools to enforce and monitor human rights. Indicators can be both quantitative (e.g. litres per day) and qualitative (e.g. access to information). Based on this, the corresponding benchmarks or standards (national minimum norms for each indicator) can be defined. The country in question will use these benchmarks to define indicators such as water quality, affordability and accessibility. The benchmarks or standards represent the concrete goals that IWRM should strive to achieve if it is to act in support of human rights.

Figure 8.2: Human Rights, Attributes, Benchmarks and Standards



A country's first step in preparing IWRM from a human rights-based perspective is to assess what existing national commitments entail and to define the collection of commitments in international and national law that provide the framework within which implementation should take place. Contained in national law and international treaties, these commitments provide insight into the right and the specific attributes of the right to which the national government has committed.

This assessment could be referred to as a 'legal mapping.' Through research into a national legal system that has both a human rights and a water law focus (referred to as a legal mapping), it is possible to create a research report that lists the national commitments contained in treaties that can be used to provide the human rights framework that IWRM planning needs to take into account. This can be done by collecting answers to the following two questions:

- What are the concrete water-related legal commitments that a country has made by ratifying treaties and promulgating legislation?
- Which indicators and benchmarks should be used to measure progress on each individual right?

A legal mapping can be commissioned by entities such as river basin organizations, national ministries or by a secretariat serving

on a catchment-management forum. Once this document is prepared, the HRBA to IWRM cycle can begin.

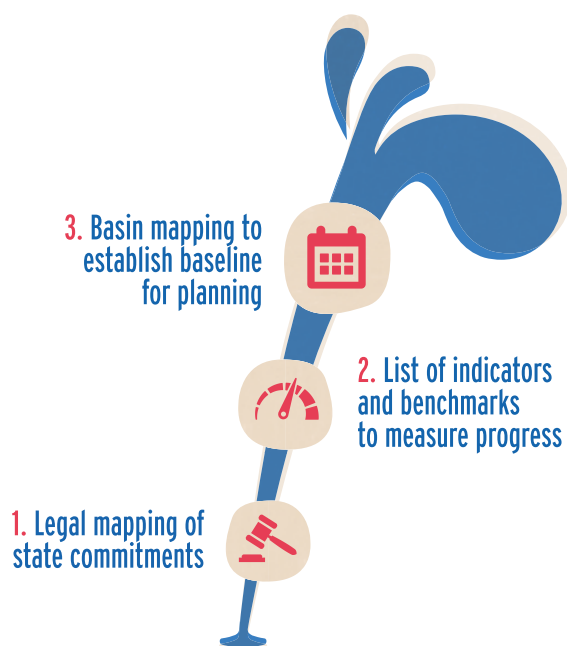
Constructing a baseline is necessary to measure progress on these commitments and their respective indicators and benchmarks. The baseline needs to be created by conducting a mapping that provides a systematic evaluation or 'snapshot' of the current state of commitment implementation. A multi-disciplinary assessment of the existing governance situation in the country or a given river basin can be conducted in direct consultation with all stakeholders, resulting in the publication of a country or basin mapping. The indicators for the research are based on an up-to-date assessment of the obligations of a given country under both international and national law, as well as the existing structure of the WASH sector from the point of view of policies, institutions, data, finances, sustainability and poverty alleviation.

The conclusion of the mapping exercise provides key information to authorities and development partners to strengthen an integrated and coordinated approach to water governance while complying with international and national human rights obligations. A human rights mapping is essential to elaborate river basin-management plans, which are oriented towards the realization of water-related human rights.

Once the current state of implementation of water-related human rights has been evaluated, it is possible to develop a catchment-management plan to ensure further realization. It is important that the development of catchment-management plans—in as far as human rights are concerned—should be carried out using the same indicators and criteria as those that the basin and country mappings used to structure consultations and expert inputs.

These indicators and criteria provide coherence between institutional mandates and development partners. They also serve as a central point of reference for access to information and participation in the water sector. In many cases,

Figure 8.3: State Commitments, Their Indicators, and Creating a Baseline in the Basin



water-management practitioners are not fully aware of the implications of articulating their work to a human rights framework, and capacity building and training may be needed. These activities should be tailored to the needs of stakeholders on the scope, content and concrete implications of water-related human rights. Over the longer term, institutional support for strategic platforms (e.g. catchment forums), municipalities and water user associations is essential to maintaining momentum in IWRM implementation.

8.2 THE HRBA TO IWRM CYCLE

There are five key steps involved in elaborating a catchment plan that uses IWRM to realize human rights. The traditional IWRM cycle is being merged with key elements of the human rights obligations of states, i.e. the obligation to respect, protect and fulfil human rights (see Figure 8.4). The obligation to respect means that the state must refrain from interfering in or curtailing the enjoyment of human rights. The obligation to protect means that

states should protect individuals and groups against human rights abuses. The obligation to fulfil means that states must take positive action to facilitate the enjoyment of basic human rights.

Before proceeding with activities related to the respect for, protection and fulfilment of human rights, a mapping is needed at the catchment level to create a baseline for planning: this is step one. At this stage, an intermediary agency, secretariat or group of trusted stakeholders may be mandated to facilitate the mapping and planning process (in regular consultation with the appropriate stakeholder bodies, such as catchment-management forums, responsible ministries and technical bodies, such as water resources engineers, national bureaux of statistics and meteorological services).

8.2.1 Step one: Mapping

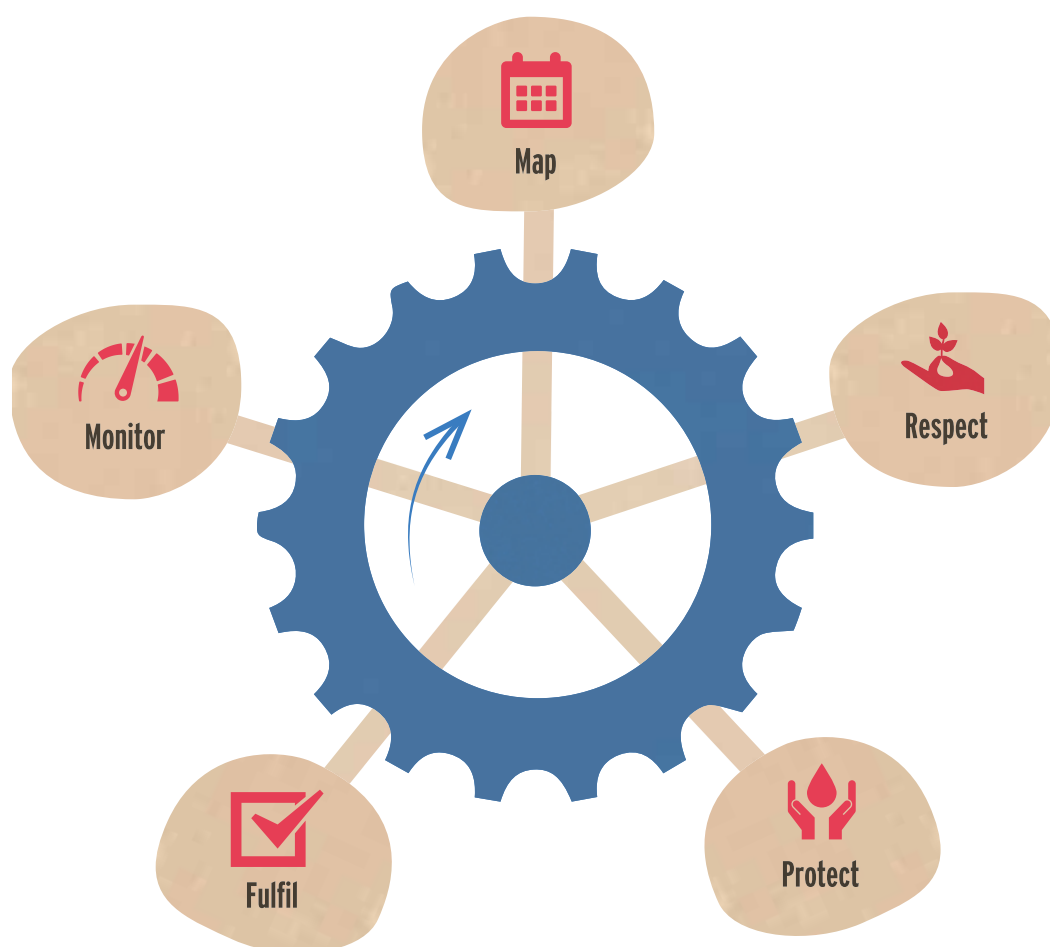
The first step in the planning cycle is a catchment-level mapping in order to establish a baseline for planning. Four sub-elements comprise the key constituents of the mapping:

1. Exploring and validating the water resources' potential;
2. Measuring progress on the individual elements of each relevant right;
3. Mapping of priority groups and priority needs; and
4. Validating the information.

Mapping: Explore and validate water resources potential

The first task of step one is to look at the water balance in the basin, the inventory of renewable freshwater supply options, the impact of land-use planning on runoff and groundwater infiltration, the potential use of forest resources and the protection of mountain slopes and terraces, wetlands and river banks to conserve water resources. Estimating annual renewable freshwater resources in a catchment area is a challenging task, because not all relevant data may be collected or available, the

Figure 8.4: The HRBA to IWRM Cycle



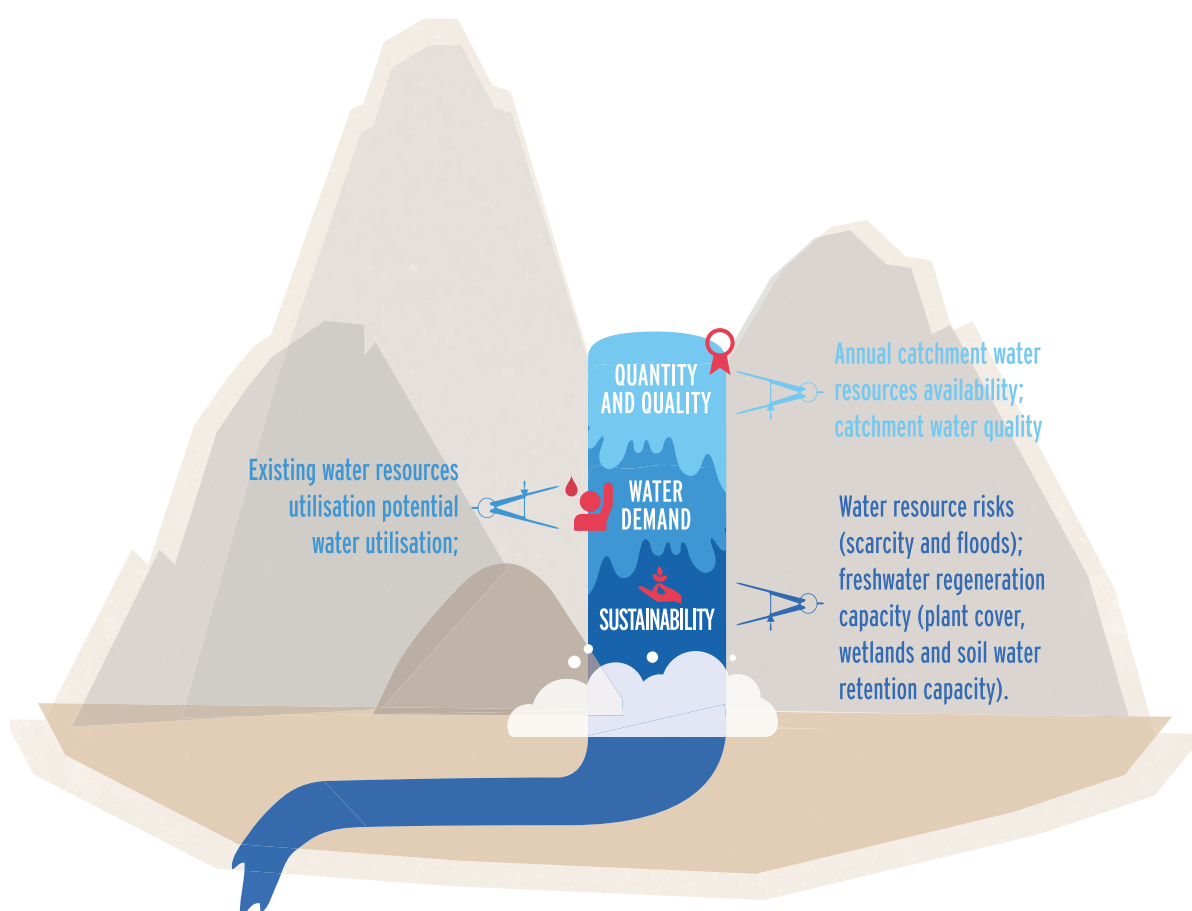
impacts/effects of precipitation vary from year to year, and the impact of dams, wetlands and land use changes (for example, surface and groundwater availability is difficult to spatially aggregate). In most cases, the expertise of hydrologists and engineers can be called upon to estimate the annual surface water availability and groundwater recharge. Significantly, this usually excludes the potential freshwater availability that could be gained through rainwater harvesting. A large proportion of the water that enters a catchment through precipitation is lost because it evaporates before it can be converted into extractable groundwater or surface water.

Another aspect of mapping is the focus on the demand side. This involves collecting data on the existing annual water demand of different economic

sectors, such as agriculture, mining, industry and services; the existing annual demand for domestic use and key public institutions, such as health care facilities, schools, prisons, etc.; and the demands of the ecosystem for the maintenance of biodiversity and for freshwater regeneration.

Finally, mapping needs to focus on risks in water resources availability. The catchment in question may be naturally water-scarce, which generates challenges at the level of allocation between competing uses. Or the catchment may be prone to natural fluctuations in annual water availability as well as to anthropogenic influences, such as climate change, local over-abstraction of water, pollution, removal of natural vegetation cover, increasing risk of floods and mudslides.

Figure 8.5: Mapping: Explore and Validate Water Resources Potential



In short, for mapping water resources availability, the key areas to focus on include the annually renewable quantity and quality of freshwater available; existing and future water demand; and risks and opportunities with regard to sustainability (see Figure 8.5).

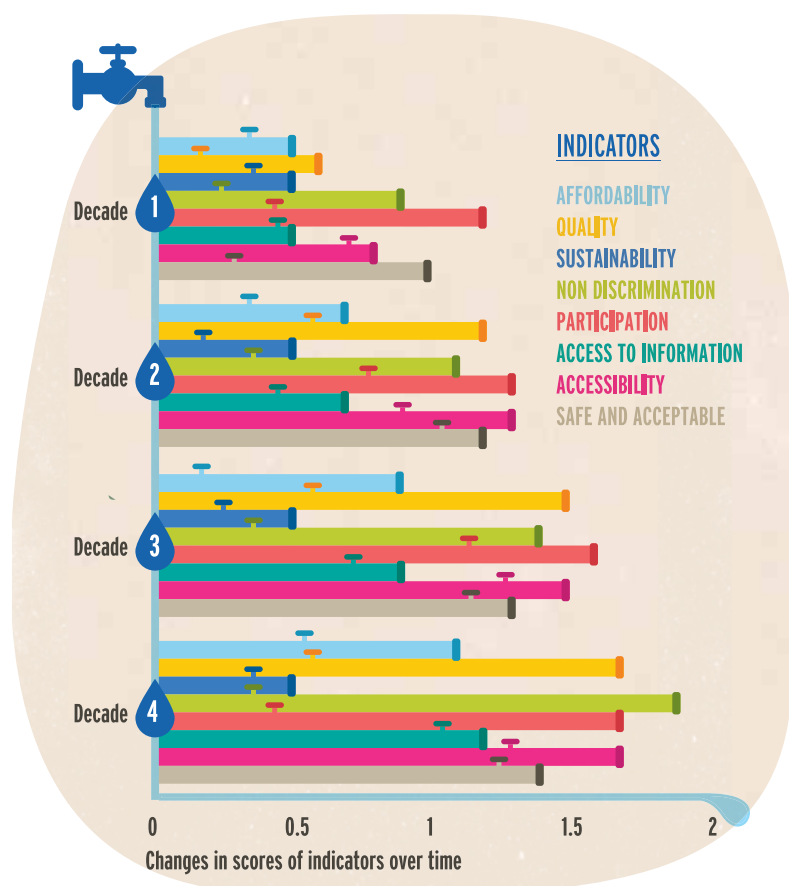
Mapping: Measure progress on the elements of each right

The second task is to look at each water-related human right for which there are clear state commitments and to assess the progress made on the elements that are an attribute of that right. This requires clarity on the indicators and benchmarks that were chosen to measure progress in the realization of each right. These indicators and benchmarks are derived from the legal mapping. As time progresses and different indicators are tracked, it

becomes possible to monitor changes in indicator scores over time. Having such an overview of developments enables one to effectively monitor how an implementation is progressing. Figure 8.6 shows how this could be visually represented for the human right to water. In this hypothetical, most indicators of the right to water are improving over a period of four decades; sustainability remains stagnant over the same period.

To measure progress on the elements of each right, it is important that the underlying data can be disaggregated such that a clear picture can be generated at the catchment. In most countries, data collections uses local government boundaries as spatial and administrative units. IWRM, however, requires planning at the hydrological unit level—which is the catchment area. There may not necessarily be a match between municipal (or district or provincial,

Figure 8.6 Mapping: Measure Progress on Elements of Each Right



etc.) boundaries and the watershed of the catchment in question. If data is collected at the catchment or basin level, this can be used directly. However, in most cases it will need to be inferred from data that is collected at the level of municipalities or districts lying within the catchment’s boundaries.

Over time, for each right to which the state has committed, progress can be tracked and monitored. It is important to aggregate these results in order to create an overall picture of how water governance is being used for the realization of a range of human rights.

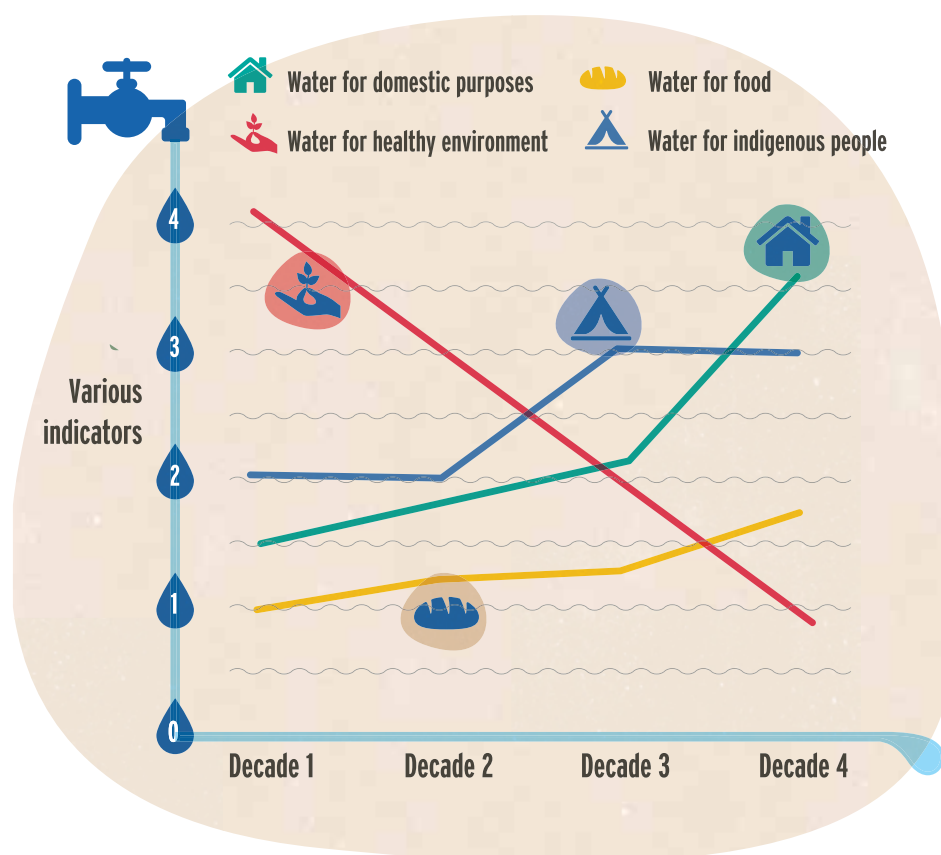
Figure 8.7 is a schematic and highly summarized representation of a much more detailed process. In full, the progress in the realization of each right is mapped and described in detail for the catchment area in question. This provides a baseline on the

basis of which planning for the realization of human rights can begin to take place. In Figure 8.7, the realization of four different kinds of water-related rights have been tracked over four decades on a hypothetical aggregate scale. The graph shows progress in the realization of the right to water, water for food and water for indigenous people, but a steady decline in progress on securing the right to a healthy environment.

Mapping: The mapping of priority groups and priority needs

The targeting of vulnerable and marginalized populations is a key priority within an HRBA. Within the mapping phase of an HRBA to IWRM, it is crucial to identify the priority groups and priority needs. When progress in the realization of each water-related right in the catchment has been described

Figure 8.7: Aggregating the Indicators of Each Right



and mapped, it is also possible to highlight what has not yet been achieved (i.e. it is possible to cast light on the remaining gaps in the realization of these rights). Assessing these gaps will make it clear which priority groups and priority needs still need to be addressed in order to move towards the full realization of the right. The most vulnerable groups and the areas that are most at risk can be pinpointed, and plans can be made within the overall catchment-management plan to focus on these as a matter of priority.

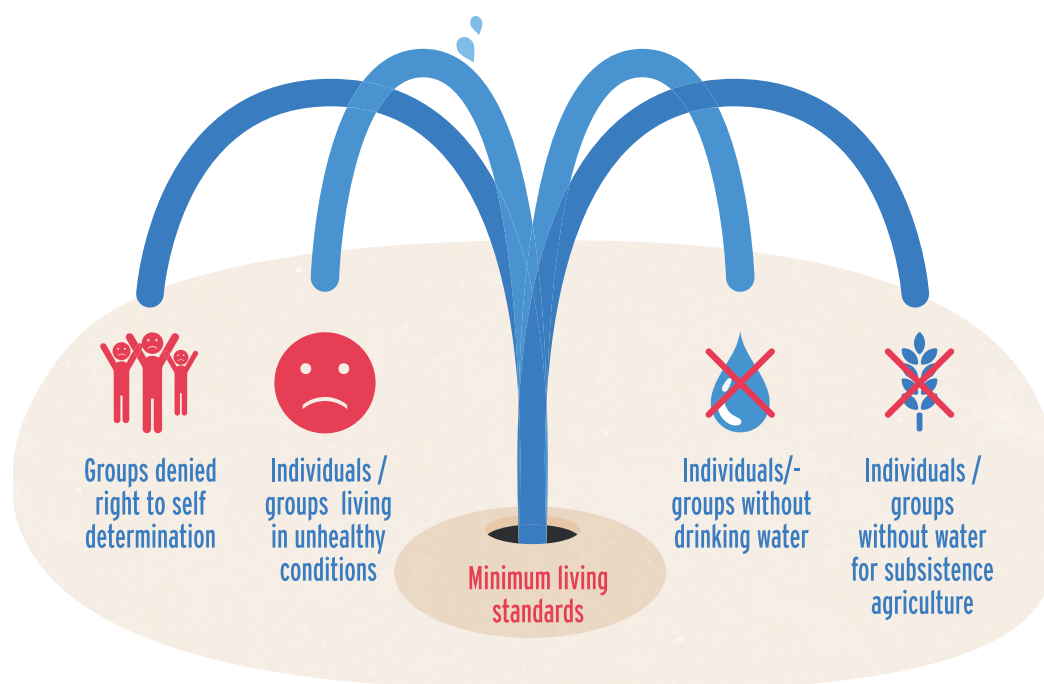
The process of mapping marginalization and vulnerability is closely related to questions of power and privilege in society. Therefore, mapping priority groups and priority needs involves a power and vulnerability analysis of the stakeholders in question from a water governance perspective. While some

groups and individuals in society may have secure access to water for production and consumption, and may already have an established position in representative forums, others may not have this degree of security or position in water-governance institutions. Also, because interventions in water at one location have an impact on the quantity and quality of water in another location, the water-related activities of one stakeholder may influence the water-related activities of other stakeholders. Ensuring that minimum standards are respected belongs to step 3: respect.

Mapping: Validating the information

Documenting all of these aspects creates a baseline that can be used for planning purposes. However, the contents of the baseline could possibly be

Figure 8.8: Mapping Priority Groups and Priority Needs



contested by government officials, local communities, indigenous peoples, etc. Therefore, before commencing with planning it is important to validate the baseline through a public consultation exercise. The overview document needs to be distributed and presented to stakeholders in an appropriate form. This could include translation into local languages or visually representing key aspects of the document. It is important that stakeholders who do not have a water-governance background are able to understand what interventions have already taken place, what the resource potential is, and what future interventions could mean for them. At this stage it is possible to receive feedback about the local environment (such as information on water points), about the state of local water resources and about needs and priorities that may either confirm the existing document or lead to changes. It is important to review the document in response to the inputs so that the final document is validated as a solid basis for planning.

The mapping process is complete after the catchment baseline has been validated. The mapping process has thus moved through four phases:

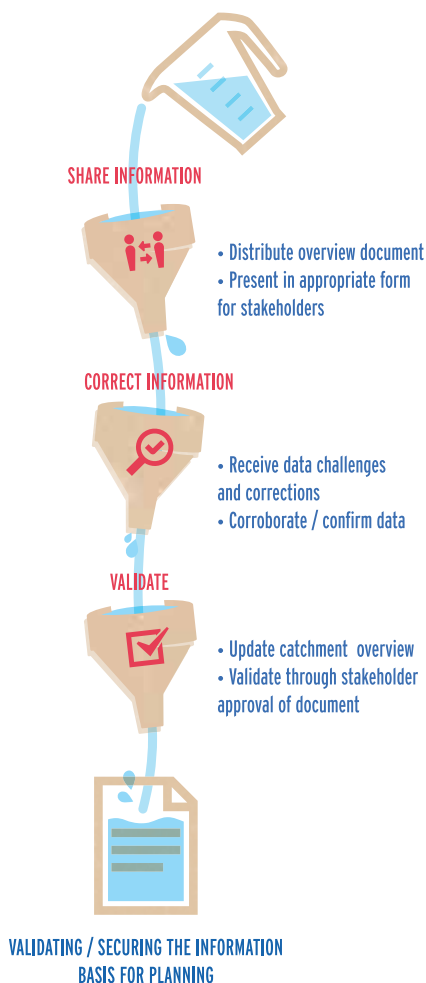
1. Exploring and validating the freshwater resource potential;
2. Measuring progress on the elements of each water-related right;
3. Mapping priority groups and needs; and
4. Validating the planning information.

The next step in the HRBA to IWRM process is to ensure respect for existing human rights obligations.

8.2.2 Step two: respect

It is the duty of the state to respect, protect and fulfil human rights obligations. In order to do this, it is essential that inalienable rights be established at the basin level and that they are preserved in the water allocations. To do this, the first step is to identify existing rights.

Figure 8.9: Validating/Securing the Information Basis for Planning

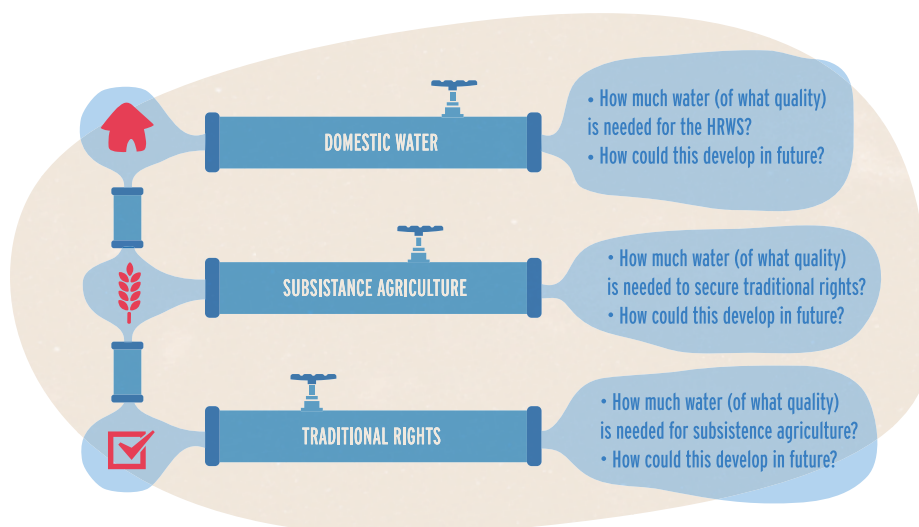


Respect: Identify water allocation needs per right

A common oversight in water allocation systems is the conscious reservation of the (relatively small) quantities of water that are required to meet personal and domestic needs, subsistence agriculture, the rights of indigenous peoples and the requirements of ecosystem maintenance. A human rights approach consciously puts this element first, thereby securing needs that require a 100 percent assurance of supply before determining how other water demands can be met.

This exercise brings into focus the water resources that cannot be freely allocated. The work in this phase serves to illustrate and pinpoint the amount of water in the basin that needs to be reserved for the realization of human rights. These rights are inalienable. Therefore, they need to be realized before any other planning considerations can be taken into account. To bring effect to these rights, they need to be formally registered, and the rights holders need to be informed about their rights. Water resources for the realization of these rights need to be actively reserved.

Figure 8.10: Identifying Water-allocation Needs



Respect: Formalize allocations per inalienable right

A significant aspect of being vulnerable and marginalized is the lack of formal recognition of and lack of knowledge about entitlements. A key element in the process of including poor and marginalized groups and individuals in water-related planning is therefore the formalization and awareness-raising around existing rights. Conversely, the lack of information about vulnerable groups' needs at the catchment management agency level may lead to planning that does not take account of their needs. Therefore, these rights need to be formalized and mainstreamed within the planning system (see Figure 8.11).

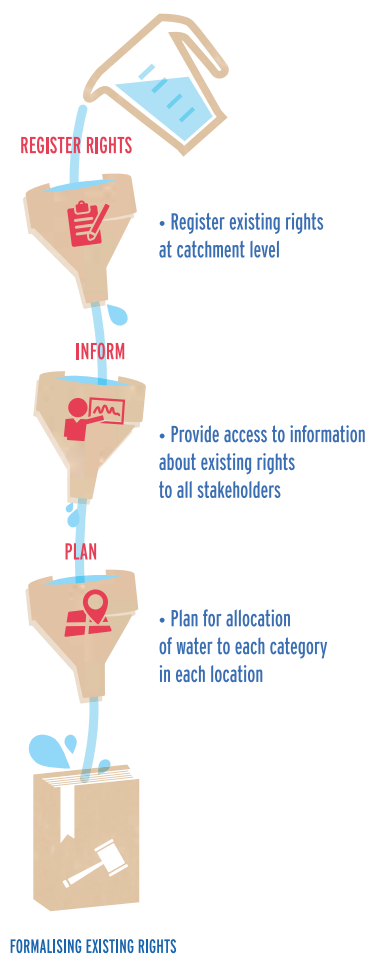
At the end of the step two, the following documents should have been produced:

1. A publicly validated baseline document that stakeholders will use as the basis for planning;
2. A registry of individual and group water-use rights for the various categories of inalienable rights; and
3. An overview of where and for what water should be allocated in order to secure the progressive realization of these rights.

8.2.3 Step three: protect

It is also the state's duty to protect water-related human rights. The state is required to take measures that prevent interference with the enjoyment of water-related rights. This involves examining existing and potential threats to the enjoyment of water-related rights. Certain stakeholders in the catchment could negatively affect the rights of others by over-abstracting water from a source, leaving too little for the enjoyment of basic minimum rights by other stakeholders. Alternatively, stakeholders could release pollutants into common water resources, interfering with the rights of others to water of sufficient quality. To avert this, those who could affect the rights of others need to be informed of this and tools need to be developed for demand management and / or waste reduction such that

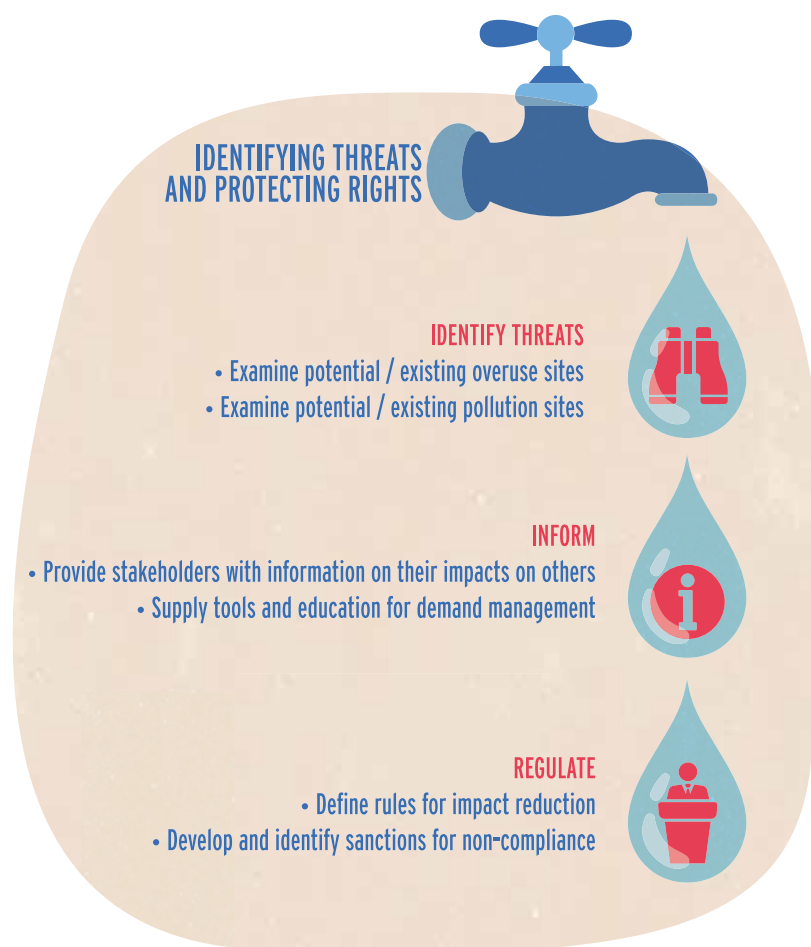
Figure 8.11: Formalizing Existing Rights



the rights are no longer infringed. Sanctions need to be developed and enforced for areas with non-compliance.

At this stage of the inventory, it is important that the facilitator of the catchment-management planning process hosts consultations with stakeholders. Among other benefits, these consultations will help establish existing and potential threats to the enjoyment of rights. Not all negative impacts of local interventions in water resources on other users may have been documented, and not all relevant actors using water may be informed of the effects of their actions on the availability and quality of water used by others. Therefore, if the state is going to be able to protect water-related human rights from infringement, then a full inventory of the threats to

Figure 8.12: Identifying Threats and Protecting Rights



the enjoyment of those rights needs to be developed. It is also important to establish strong monitoring mechanisms whereby reports of infringement can be received by the catchment-management forum, the relevant ministry or by national human rights institutions. Individuals and groups who believe that their rights have been infringed need appropriate avenues of complaint and redress. In many cases, the national human rights institution is legally empowered to receive, investigate and propose remedies in response to citizen complaints about the infringements of their rights.

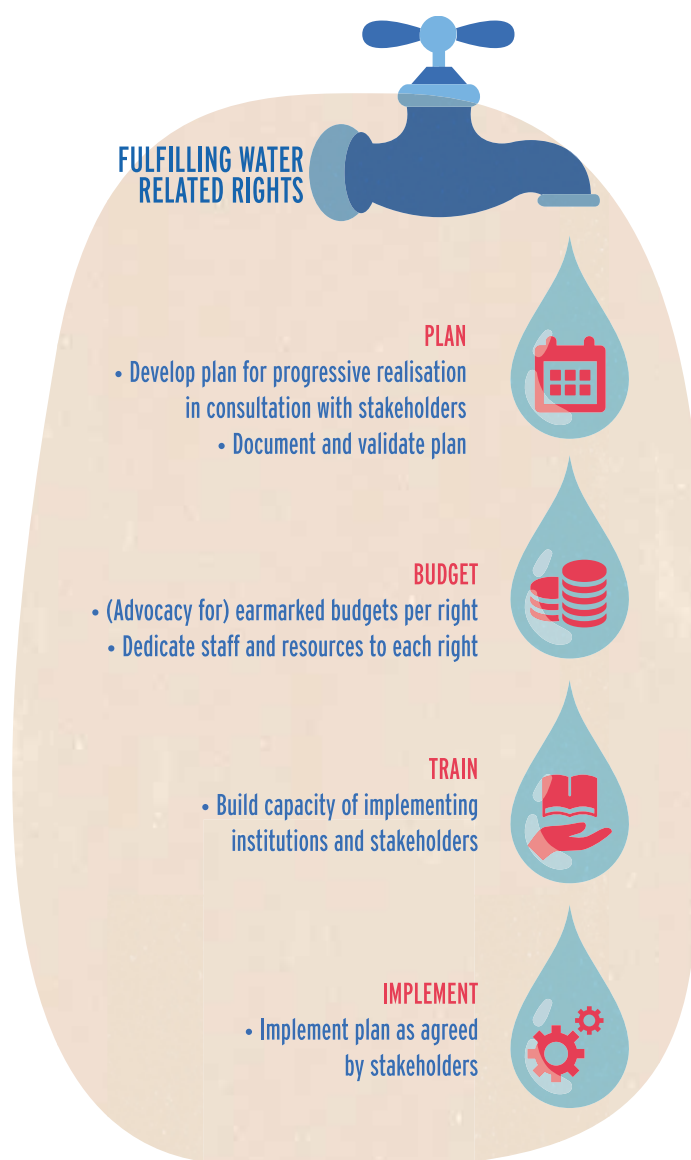
At the end of this third step, the following additional documents should have been produced:

1. An inventory listing the existing and potential threats to the enjoyment of water-related human rights;
2. A package of tools for demand management, waste reduction and wastewater treatment; and
3. A list of regulations with regard to impact reduction, including sanctions for non-compliance.

8.2.4 Step four: fulfil

Lastly, states have the obligation to fulfil water-related human rights by taking active measures to ensure the progressive enjoyment of these rights.

Figure 8.13: Fulfilling Water-Related Rights



This requires participatory planning, budgeting, training and implementing catchment-management plans.

Developing water resources infrastructure in the public interest has two key dimensions. First, it consists of the progressive realization of water-related human rights, focusing on the obligation to ensure that a minimum package of rights is enjoyed by all. Second, it consists of the allocation of water rights over and above human rights, and

guarantees the interests of sustainable economic, social and cultural development. Both aspects require intensive public consultation in order to absorb citizens' water-related aspirations into the overall catchment-management plan. The main difference between the two is that the first dimension is non-negotiable and requires priority action, whereas the second dimension is negotiable and has a second-order priority within the overall catchment-management plan.

The main difference between an HRBA to IWRM and the standard approach to IWRM is that in an HRBA to IWRM, a quantity of water is reserved for the realization of human rights before standard water licensing proceeds. It is a two-tier process in which minimum protection levels for all are offered before planning for the satisfaction of longer-term ambitions.

Stakeholders, in consultation with the state and the river basin organization, may negotiate around different scenarios for the development of water resources infrastructure, which will bring economic and other kinds of benefits to the catchment and satisfy different kinds of needs. Technical experts may be called in to calculate the water needs and infrastructure costs of each alternative development scenario. These can be presented to stakeholders as part of planning and negotiation processes. However, a commonality among all of these development scenarios is that the priority—in terms of the financial and staffing resources the state devotes towards infrastructure development and maintenance—is on clear and time-bound targets for the realization of minimum rights for all. Note also that this includes the rights of future generations; care must be taken to ensure that development scenarios do not negatively affect freshwater regeneration or the ability of future generations to enjoy similar rights.

At the end of this step, the following additional documents should have been prepared and validated:

1. A time-bound plan for the progressive realization of water-related human rights in the catchment;
2. A negotiated and publicly validated time-bound scenario for additional water resource development over and above minimum human rights standards;
3. A budget, including the allocation of staff resources towards the implementation a catchment-management plan; and
4. An implementation plan.

8.2.5 Step five: monitor

Monitoring is the fifth step in the HRBA to IWRM cycle. It is crucial that step one's baseline was created and that indicators and benchmarks were identified to measure the progress of water-related rights implementation. Monitoring provides a basis for regular evaluation of progress on state commitments and of the joint stakeholder agreements on the mutually beneficial utilization of catchment waters. Monitoring also provides inputs for the next planning cycle by enabling the identification of gaps or shortfalls between policy and implementation. These gaps need to be addressed in the next round of planning so as to better align resources towards activities and outputs that will result in the intended outcomes.

8.3 CONCLUSION

This chapter has argued that an HRBA to IWRM should be based on a road map for the realization of human rights. This road map starts with the recognition of human rights in international law, followed by the specification of rights and obligations in national law, the creation of a baseline of the current state of implementation of these rights, the development of a basin-level plan of action for the realization of water-related human rights, the training of and support to implementing institutions and the building of national institutions for monitoring, complaints and redress.

The then chapter presented a five-stage implementation cycle for an HRBA to IWRM, which follows the road map in broad outlines. The cycle pays specific attention to the respect for and protection and fulfilment of human rights in the river basin context.

In terms of documented outputs, the chapter explained that the production of the following documents is central to an HRBA to IWRM:

- A publicly validated baseline document for stakeholders to use as the basis for planning;
- A registry of individual and group water use rights for the various categories of inalienable rights;
- An overview of where and for what water should be allocated to secure the progressive realization of these rights;
- An inventory listing the existing and potential threats to the enjoyment of water-related human rights;
- A package of tools for demand management, waste reduction and wastewater treatment;
- A list of regulations with regard to impact reduction, including sanctions for non-compliance;
- A time-bound plan for the progressive realization of water-related human rights in the catchment or basin;
- A negotiated and publicly validated time-bound scenario for additional development of water resources over and above the minimum human rights standards;
- A budget that includes staff resource allocations for implementing the catchment management plan; and
- An implementation plan.

9. FACILITATOR'S GUIDE: TECHNIQUES, TOOLS AND EVALUATION

9.1 INTRODUCTION

The fundamental purpose of developing this manual was to facilitate achieving the objectives of, and optimizing available resources for, an HRBA to IWRM. This chapter seeks to facilitate the efforts of those who will plan and/or carry out the training course/workshop (including capacity development activities and sessions).

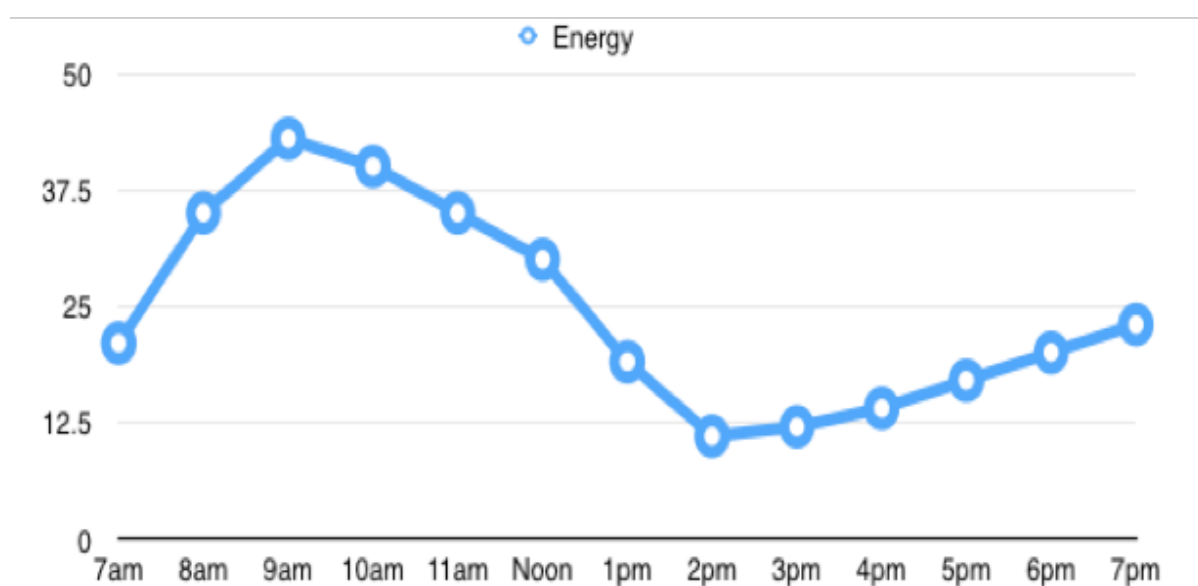
We strongly believe that a manual should respond to the needs of the practitioners for whom it was developed. It should consider specific goals and planning processes and should enable target groups to be well prepared. This manual attempts to document the processes required to perform a set of activities that will fulfil the proposed objectives.

In this Facilitators' Guide, we identify and develop tools that will increase participant inclusion, promote knowledge dissemination and provide useful experiences that will enable both the individuals undergoing training and the workshop facilitators to fulfil the proposed objectives.

It is important to begin by sensitizing the participants towards the HRBA. The use of engaging resources, such as video and posters, will be very helpful in this regard.

This Facilitators' Guide is divided into five sections: Planning a Course or Workshop; Techniques; Tools; HRBA and IWRM Activities; and Evaluation. This Guide provides holistic support for those carrying out capacity development activities. The Techniques section presents knowledge sharing techniques; the Tools section includes ice-breakers and energizers;

Figure 9.1: Representation of Energy Levels of Participants during the Day



the Activities section introduces theme-related activities. The Evaluation section is devoted to highlighting the importance of ongoing evaluation during the training course.

9.2 PLANNING A COURSE OR WORKSHOP

There are two main priorities to focus on while planning a workshop: your target group and your desired outcomes. The capacity development activity should answer to both the priorities and, by following the advice here, the sessions will be pertinent, useful and successful in transmitting the appropriate knowledge. Planning a workshop entails thinking about the progress of the theme, ways to present new information and anticipating the different needs of the participants.

Considering gender

For Cap-Net and associates, it is very important to incorporate the gender equity component at the start of workshop planning. In some places, women's participation in water resource training

activities could be a challenge for the organizers, which should be proactively addressed. Specific actions that organizers may want to plan for include sending special invitations; requesting gender balance from invited institutions; and identifying communities, local groups working in the field and local female leaders. It is a great sign when the organization itself considers gender equity from the very beginning, and a great way of doing so is to gather a gender-balanced team of experts and facilitators.

Energy levels

Participants who arrive from different time zones may suffer from jet-lag problems. In addition, the time of day should factor into scheduling, because there is an energy level cycle that must be considered in order to match the appropriate dynamics to the sessions. Participants will have the highest level of energy at the beginning of the day, which means that it is the best time to have them listen to a presentation on a complicated topic or a concept that may be new to them. Energy levels and the ability to concentrate for longer periods of time go hand in

hand. Their energy will drop slowly as the morning progresses and will hit the lowest point after lunch. This translates into a need to move and interact in the afternoon. This information on scheduling must be considered while planning and scheduling a workshop in order to avoid losing participants' attention. Figure 9.1 presents a graph of what energy levels may look like during the day.

The venue

It is important to take into consideration participants' needs and to try to foresee possible situations that may arise (e.g. venue access for physically challenged people). The venue should therefore fulfil all those particular needs. The venue must allow the facilitating team to be as creative as they want to be in terms of space and outdoor areas. The venue will naturally determine whether there are transportation needs that have to be addressed. If meals are provided, it is important to take into consideration participants' allergies and dietary restrictions while negotiating the menu for the event.

Building a programme

When preparing the course, it is important to make use of themes or threads across activities in order to provide participants with a logical progression of information and to make sure that the contents and sessions are being properly received by the audience.

Day 1	Day 2	Day 3	Day 4
Theme 1	Theme 2	Theme 3	Theme 4

One way of doing this is by defining a driving theme for each day that leads up to the implementation of the acquired knowledge in different contexts. Every session for each day would pertain to the theme selected for the day.

Sample course programme



ToT on HRBA to Sustainable Water Management Studio Hotel, 06 to 10 October 2014, Santa Ana, Costa Rica

Day	Monday 06/10	Tuesday 07/10	Wednesday 08/10	Thursday 09/10	Friday 10/10
Theme	INTRODUCTION AND CONCEPTS	PRINCIPLES AND CONTENTS	NATIONAL WATER LEGISLATION AND HRBA	HRBA TO IWRM	IMPLEMENTATION
8:30-8:45		Brief Report	Brief Report	Brief Report	Brief Report
8:45-9:00	Registration	Changes of Paradigms of Water Management: IWRM – LA Ch.1	Links Between IWRM and HR – LA Ch.1	IWRM to HRBA Topi – TS Ch.6	Techniques and Evaluation Methods – LV Ch.8
9:00-9:30	Opening				
9:30-9:45	Coffee break	Tea Break	Coffee break	Tea Break	Tea Break
9:45-10:45	Welcome and presentations – LV Ch.8	Basic principles of IWRM – RO Ch.1	Managing Water Resources and Human Rights Under Legal Pluralism – JG Ch.4	Lecture Ch.2	Storytelling Activity – LV Ch.8
10:45 – 12:00	Human Rights-Based Approach – LA Ch.1	Break the Link! Ch.8		Panel Analysis Ch.2	Dream Basin Activity – LV Ch.8
12:00 – 13:00	Basics of Human Rights –Right to Water and Water Rights – TS Ch.3	IWRM Planning – IP Ch.1	Water and Sanitation Indicators – ER Ch.5	Role Play Activity – JDC Ch.5	Plenary Evaluation Session – IP
13:00 – 14:00	Lunch	Lunch	Lunch	Lunch	Lunch
14:00 – 15:00	Basics of Water Governance – JG Ch.4	Sustainable Sanitation – ER Ch.5	HRBA in IWRM planning Cycle – IP Ch.1	Role Playing Follow-up – JG/JDC Ch.6	Group Presentations
15:00 – 16:00	1, 2, Clap! Ch.6		Who is Behind? Priority Population – LV Ch.2	What is Missing? Activity – LA Ch.3	
16:00-16:15	Tea break	Coffee Break	Tea Break	Coffee Break	Tea Break
16:00 – 17:00	IWRM for the realization of Human Rights – TS Ch.3	Evaluation – LV	Evaluation – LV	Evaluation – LV	Closing
		Costa Rican Experience	Planning Session	Video and debrief	
		Cocktail 7pm			

Day 1	Day 2	Day 3	Day 4
Topic A	Topic B	Topic A	Topic C
Topic C	Topic A	Topic C	Topic B
Topic B	Topic B	Topic C	Topic A
All topics	Topic C	Topic B	All Topics

A different approach might be useful when a series of different topics come together at the end of the course. In such a case, using colour coding can enable the different topics to work as threads. Sessions are shown in the programme as a part of a thread to be developed in various moments throughout the course.

9.3 TECHNIQUES

Participatory techniques can aid course organizers without being restrictive. Capacity development is as much about the skills and knowledge being implemented as it is about the participants receiving the training. Ultimately, the techniques will be defined by the purpose of the training and should match the objectives.

Facilitation

This technique refers to the task of conducting a group discussion on one specific topic or set of topics. The objectives of a facilitator are to involve all participants, maintain the tempo and manage inputs. A good facilitator refrains from sharing and imposing personal opinions in order to avoid influencing the ideas of the participants.

Facilitation is different from moderating a conference, in that the person in control does not hold a magisterial position on a specific topic. A facilitator instead manages the activity in order to convey valuable information from the participants and help them share ideas and experiences with each other.

It is important for a facilitator to keep track of who wants to speak in the group. One may use a speaking list that everyone can see and even ask for assistance from someone else on the facilitating team to keep adding to it. Another system to keep track of the speaking-queue is the number

system (See CISV customary facilitation practice, www.cisv.org). In the number system, participants raise their hands and depending on the order they raised it relative to those around him or her, they hold up a number with their finger. This way, you will have participants raising one, two, three or more fingers and will know who to call on to speak next.

Figure 9.2: DOs and DON'Ts of Facilitation

DO	DON'T
Prepare discussion questions.	Interrupt participants.
Make sure participant inputs are in line with the topic at hand. Ask follow-up questions when clarification is needed.	Let one participant monopolize the conversation.
Keep track of repeated statements and make links between what is being said by participants.	Miss track of time. Facilitator is the one person who should not get lost in the discussion.
Ask for the input of participants who do not generally speak up. Everyone has something valuable to say.	Belittle opinions or correct participants.
Summarize what is discussed. Feel free to take notes.	Be disrespectful or allow disrespectful comments from participants.
Rescue the main agreements and controversies that arise from the discussion.	

Panel discussion

This is a useful technique to get a variety of perspectives from experts on a subject or case. The use of a discussion panel formed by presenters or professionals in the subject area helps provide an **all-around** view on an issue. The composition of the board of speakers will be crucial to the success of the activity. In the most common dynamic, panel members intervene after a presentation or two, whether it was given by one of them or a third party.

One member of the panel should function as the conductor. The conductor ensures that all panellists get a chance to express their position and manages the interactions between panel members and the audience.

Conferences

Not to be confused with facilitation, this technique should be implemented when the information shared is coming from one specific source and not from a group discussion. The presenter is someone who is capable of communicating with the audience from previously prepared presentation materials. Presentations should be of relevance to the main course theme and provide new information to the participants. It is prudent to plan for a question-and-answer session at the end of each of the presentations. This will provide the audience with an opportunity to raise thoughts and questions after the presentation.

Group work and case studies

Sometimes, the most effective technique is to split the participants into smaller working groups rather than trying to work with all of them at the same time. This technique tends to work well when dealing with large groups because it affords each participant more direct contact with the topics being developed. Active participation always supports the internalization of new knowledge.

One common structure used for working groups is to give each smaller team a task to solve or a problem related to the theme. For example, the groups could discuss a hypothetical situation with regards to water access or equal opportunities, and then present their solutions to the rest of the participants. A suitable amount of time should be allocated to the discussion of the teams' responses. Because each topic is discussed in a smaller group, the time period designated for such exercises can be short.

Case studies are a very useful and popular technique. With case studies, participants work on realistic scenarios that require them to apply both the information received during the training course as well as their professional skills, experiences and backgrounds. Case studies can be derived from real situations, or organizers can adapt and modify existing cases to be applicable to the training course.

In both group work and case studies, it is crucial to provide groups with clear and complete instructions on what should be done and what outcomes are expected.

Tip: If there is enough time, ask the groups to prepare a visual aid to present their solutions or results.

9.4 TOOLS

9.4.1 Ice-breakers and name games

Capacity development courses are group activities. Therefore, they are enriched by interactions among individuals. Participants need to feel comfortable in order to share their opinions and experiences, ask questions and get rid of doubts. When working with adults, you also deal with social boundaries and egos that might get in the way of the progress that was intended to be achieved.

Incorporating informal dynamics at the beginning of the course is a great way to release the group from awkward first interactions. Activities that are used to bring the group together are commonly referred to as 'ice-breakers'. They can also play an important role in the presentation or introduction of both participants and facilitators. Here are some examples to choose from:

Stand alike

Ask participants to stand and say their name and their favourite food or drink so that everyone can hear them. Then everyone else in the group who also likes the food mentioned stands up. Everyone sits back down and the next person does the same. Each person should have the chance to introduce him or herself. This activity can be a lot of fun but, it is recommended for a small- or medium-size group because it can be very tiring to repeatedly stand and sit for too many rounds.

Recommended time: 10 minutes
No materials needed.

Toss the ball, name your friend

Participants and facilitators stand in a circle and take turns tossing a small ball by naming someone in the circle. The person who gets the ball must name someone else in the group and toss it their way. The person named will then name another person in the circle and toss them the ball. Remind participants that everyone should be included. It might be a good idea to have everyone repeat their names before the activity begins.

Recommended time: 10 minutes

Materials needed: small ball

Names against time

This game can be an ongoing activity for the first couple of days. Ask everyone to participate in a round of names and then present the group with a challenge—repeating the round of names in the least amount of time possible. This activity can be timed. In between sessions or before going to lunch, bring out the stopwatch and ask the participants to improve their time!

Recommended time: under 5 minutes

Materials needed: a stopwatch (such as in a smart phone)

Yarn spiderweb

Participants and facilitators stand in a circle, with one person holding the end of a ball of yarn in one hand and the ball itself in the other. He or she will say their name and where they are from and then throw the ball of yarn to someone else in the group without letting go of the end of the string. The person who catches the ball of yarn will also introduce him or herself, then hold on to a piece of the yarn and throw the rest of the ball of yarn to someone else, who will then do the same. The process will be repeated until everyone in the group has introduced themselves and is holding a piece of the yarn. The last person to receive the yarn will then be holding the ball of yarn. This is when the challenge begins; the participants will now have to retrace the yarn's journey by throwing it back

by calling the previous person's name. Participants will retrace the steps until all of the yarn has been rolled back up.

Recommended time: 15 minutes

Materials needed: a large ball of yarn

Tip: Make sure you have plenty of yarn, it is best to have extra than to run short!

Break the line

Break the Line must be played in a roomy area with enough space for participants to move. The facilitator will first instruct participants not to speak during the activity, and then deliver the instructions. Players are supposed to order themselves in a line from highest to lowest (or the other way around) according to their numerical response to questions asked by the facilitator. The challenge is for participants to communicate without words. After each formation, the facilitator says "Break the line!" and participants should scatter.

Tip: Draw a plus sign (+) and a minus sign (-) and set them on the ground when dealing with larger groups of participants.

Recommended time: 15 minutes

Recommended questions for facilitators

- Who is oldest in the room?
- How many glasses of water do you drink per day?
- How many years have you worked with water?

Spot the differences

Ask participants to pair up and have each person stand in front of their partner. Participants will be instructed to take a good look at each other, after which one of the partners will turn around for 1 minute while the other changes three things about the way he or she looks. After the minute has passed, the participant who had turned around will have a chance to try and identify what changed about their partner. Participants will take turns guessing and changing something about themselves.

Recommended time: 10-15 minutes for instructions and playing

No materials needed.

9.4.2 HRBA and IWRM Activities

Several tools have been modified and designed specifically for this module. Adapting these tools to the specific subject within the theme, particular group characteristics or context will enrich the exercise. Facilitators are encouraged to own the tools and make them speak their needs. Personalized tools and dynamics truly communicate that the facilitating team has taken the time to prepare for the training course. The use of coloured paper, boards and tangible resources is advised if the more theoretical sessions make use of a video beam and/or PowerPoint slideshows.

How does it look?

This is an individual activity. Participants are instructed to be as creative as they want. They will each receive a piece of paper and be asked to illustrate how they imagine that an HRBA to IWRM looks. This is an activity for the first or second day of the course, since it may spark conversation or be used for further discussions. If used as an activity to get to know each other, the participants should be asked to pair up and discuss their illustrations with a partner.

Tip: The drawings make great wall decorations and are efficient conversation starters during breaks. Encourage participants to go view the illustrations in between sessions and make a point of the differences and/or similarities between them.

Recommended time: handing out materials and instructions: 5 minutes; Illustrations: 10 minutes; pairing up and discussing: 7 minutes; collecting drawings: 3 minutes (total time: 23 minutes)

Materials needed: a piece of paper for each participant; coloured markers and/or pencils.

Role playing

Participants will each play a role in a real-life simulation related to water access. The situation presented to them is the one set out in Box 9.1, or must be written or adapted in advance, printed and distributed to every group. Props necessary for participants to play a specific role must also be ready. During the role play, participants should stay in

character. This activity is useful for sensitizing the participants about varied points of view on one particular subject.

Flipping answers

This activity will cement the knowledge that the participants have acquired about human rights. Divide participants into smaller groups around tables and give each a set of cards. Ask them to place the cards face down on the table and shuffle them. Facilitators will then read out loud a question and the groups will flip the cards until they find the correct answer. The first group to raise the correct card and answer wins a point. Cards are then again placed downwards, shuffled and the next question is asked.

Recommended time: 25 minutes

Materials needed: five questions prepared; sets of cards with the answers to the five questions

Example questions and answers

- Question: “Where can you find the principles upon which a state is based and how and by whom laws are made?” Answer on card: “**CONSTITUTION**”
- Question: “There are right-holders and...” Answer on card: “**DUTY-BEARERS**”
- Question: “This is the UN body in charge of investigating Human Rights violations, while acting as a subsidiary body to the General Assembly.” Answer on card: “**HUMAN RIGHTS COUNCIL**”
- Question: “Not only are states involved in the vigilance and protection of human rights, concerned citizens have been increasingly participating through...” Answer on card: “**NON-GOVERNMENTAL ORGANIZATIONS AND INDEPENDENT ACTIVISM.**”

HRBA Bingo

Bingo cards should be prepared for each participant, with each cell of the card containing concepts that will later on be called by the facilitators. The concepts will be introduced with their definition. Participants will cross off the concepts called that are on their cards. The first participant to completely cross off his or her card's cells wins (and shouts “Bingo!”).

Recommended time: handing out cards and instructing: 2 minutes; playing: 15 minutes

Materials needed: bingo cards, marker pens

Box 9.1: Role Playing Activity Guide: Human Rights to Drinking Water and Sanitation

Objective: Analyzing case studies in working groups will allow knowledge fixation and key concept clarification.

Procedure

1. Participants are divided into working groups; each group will have a role-play scenario.
2. In this scenario they will play the role of a unique stakeholder. Each stakeholder receives a character cue card with characteristics, interests and objectives.
3. Each participant will attempt to reach his or her character's outlined interests and objectives.
4. After a conclusion is reached, each group will present their outcomes.

Scenario

Tropico is a small town located in a valley in the northern region of the Agua Republic, a tropical country with mild temperatures throughout the year. Most of its workforce is dedicated to industrial pineapple farming and small-scale organic agriculture.

The community is serviced by a public utility that administers the aquifer. The Ministry of Environment has undertaken studies to measure the aquifer's recharge capacity and has recommended a maximum extraction quota of 100 liters per second (l/s). Nevertheless, the public utility has paid for a private assessment, which recommends a quota of 130 l/s. This criterion supports an energy company's application to exploit natural gas deposits in the area with a resource intensive technique. The local government welcomes this new industry, since most jobs currently available in the area are within the agricultural sector.

Tropico's aquifer is currently being exploited at a rate of 105 l/s. Poor planning, inadequate water treatment infrastructure, changes in rainfall patterns, and an increase in resource consumption have forced the local utility to ration water for residential use. Therefore, Tropico's inhabitants are currently experiencing supply interruptions of up to 48 hours, accompanied by an increase in waterborne diseases.

Public pressure is amounting at the city council to apply the Ministry's recommendation for water usage, and many inhabitants are demanding public and private investments in water treatment infrastructure. Each industry has vowed to increase their water treatment towards a regional goal, but will not jeopardize their operations for it.

CHARACTER 1: Minister of Environment

The newly elected Minister from the Green Party ran on a platform that included the implementation of a pilot project for IWRM in the Tropico aquifer.

Objective: A majority of stakeholders must reach their objectives; water resource usage must stay at or below 100 l/s to avoid depleting the aquifer.

CHARACTER 2: President, Local Public Water Utility

Utility is 51% owned by the local and national government and 49% owned by local private investors.

Objective: Maintain water resource usage below 130 l/s to allow for continued service. Global water treatment must be a minimum of 55 l/s.

CHARACTER 3: President, Tropico Pineapple Co.

One of the first companies to settle in the area, Tropico Pineapple Co. employs nearly half of the local workforce. Pineapple production requires heavy agrochemical use.

Objective: Procure at least 40 l/s for pineapple production. Maximum treatment capacity: 20 l/s.

CHARACTER 4: Majority Stockholder, Atlas Gas Inc.

Newcomer to the area. Wishes to obtain permits to exploit natural gas deposits within the shale rock formations underneath the local aquifer using a water intensive extraction technique called hydraulic fracturing. Will create 50 percent new jobs in the area.

Objective: Procure at least 30 l/s to begin operations. Maximum treatment capacity: 25 l/s.

CHARACTER 5: President, City Council

Long-time local politician, belongs to the Blue Party. Presides over the City Council, which approves permits for new industries in the area. Must ensure continued drinking water supply for the local populace.

Objective: Procure 25 l/s for citywide human consumption; increase jobs available by attracting new labour sources.

CHARACTER 6: President, Smallholder Association

Represents small-scale agriculture in the area. International cooperation has allowed a production shift to certified organic. 35 l/s are treated and reused. Associates employ nearly half of the local workforce.

Objective: Procure at least 40 l/s for local produce demand. Global water treatment must be a minimum of 60 l/s.

Problem tree

The problem tree is a tool used to identify the causes of unfulfilled human rights. Think of an unfulfilled right as the fruit of a tree, then the twig it hangs from is the immediate cause, the branch and trunk of the tree represent the underlying causes and the roots are, well, the root causes.

Figure 9.3 Problem Tree



The problem tree can also be taken a step further by finding specific solutions or objectives for each cause. Each objective should represent improved conditions in regards to the current status of the problem. With this it is easier for participants to collectively agree on specific actions towards a positive impact.

HRBA Jeopardy

This activity requires a bit of advanced preparation. It is based on the popular game that it is named after. Facilitators must define categories and think of four questions under each one. A reward is assigned to each question depending on the level of difficulty.

Participants will play as teams in order to gain as many rewards as possible. They will win the rewards if they answer each question correctly..

Recommended time: 40 minutes

Tip: Feel free to be as creative as you can be when defining the rewards; since we are focusing on IWRM, we opted for gallons of water as rewards.

Tip: Remember to explain to the participants that they should change their number as they move ahead in the speaking-cue.

Materials needed: Paper for the categories and the questions, candy for the winners. If conditions allow it and the facilitators consider it convenient, you can use an online tool instead of paper to play this game (a free version is www.jeopardylabs.com)

In the media

Participants work in groups of five during this activity. Each group is given a different scientific or academic article related to water management and human rights. Their task will be to turn the information they receive into a headline in the news as well as making sure the main information on their article comes across. The group is free to pick any method of media coverage for their article be it radio, television, newspaper or even tweets!

Recommended time: grouping and assigning stories: 5 minutes; brainstorming and planning: 10 minutes, presenting: 15 minutes (total time: 30 minutes)

Recommended discussion questions for facilitators

- Was defining the headline easy for your team?
- How did you decide what information was shared and what wasn't?
- How do you think Human Rights and Water management can be positively affected by the media?

Materials needed: academic or scientific articles

Guess the principle

Participants will form groups of four and be handed a set of four cards, each with one of the main human right principles (Universal, Indivisible, Interrelated and Interdependent). Each participant will take one card without showing its content to the other players. The participants will take turns describing

which principle they have without naming it. The group will guess which principle is being described until all the cards have been guessed.

Recommended time: grouping and handing out cards: 5 minutes, playing: 10-15 minutes Total time: 20 minutes

Materials needed: cards with human rights principles and their brief descriptions

Category referee

An activity inspired by the rules of Cards Against Humanity. The participants will play in groups of four. Each group receives a deck of cards with categories such as “Vulnerable Population” on them. In each round, one of the four players will take turns to be Category Referee. The referee will pick a card from the deck and read the category out loud and the quickest player to say a correct example of that category will get the card. The player with the most cards wins the game.

Recommended time: grouping and handing out cards: 5 minutes; playing: 15-20 minutes (total time: 25 minutes)

Materials needed: a deck of cards with HRBA categories on them

Recommended categories: Vulnerable Population, Human Right, Water-borne Disease, Customary Law example, International Convention, Dublin Principle, Human Rights Characteristic

Storytelling

Form groups of four people and hand each group four images. The team’s assignment is to come up with a story using the images. Once they have created the story, they must appoint a group member to present their story to the rest of the participants. Each group will present their story followed by a brief discussion.

Recommended time: delivering instructions and forming groups: 5 minutes; building the story: 10 minutes; presenting the stories: 10 minutes; discussion: 10 minutes

Recommended discussion questions for facilitators

- What do the stories tell you?
- What role did Human Rights/Water play on your story?

Dream basin

This activity involves four stages; participants will be grouped into three teams.

Stage 1: Each group is given materials to draw and build their “perfect river basin” as well as written instructions stating the objective. This stage of the activity requires the most amount of time. Allow participants to discuss and create.

Stage 2: Have teams move clockwise one spot and face a new basin. Hand each team the second set of instructions, asking them to search for and find possible problems with the basin. Participants should also use the materials in this stage.

Stage 3: Ask the teams to switch clockwise one last time to the third basin and hand them the last set of instructions. Participants will now discuss what concrete actions could help the damaged basin, and upon consensus, do their best to fix it.

Stage 4: Acknowledgement of the perfect river basin and debriefing.

Recommended time: Stage 1: 30 minutes; Stage 2: 15 minutes; Stage 3: 15 minutes; Stage 4: 5 minutes and 20 minutes

Instructions

Stage 1: Build/Create the PERFECT basin.

Stage 2: Identify possible problems that might arise or affect this basin. Make them happen!

Stage 3: Discuss solutions and try to fix (through realistic actions) the damage done to the basin.

Stage 4: Acknowledge the state of their perfect basin now and then join us for a short debriefing.

Recommended discussion questions for facilitators

- What were the best traits of the basin you created? (Take 3 answers)
- Were you on the same page as to what made the basin “perfect”? (take 2 answers)
- Once you got to the second team’s basin, was it hard to find possible problems? (Take 1 answer)
- What was the most evident threat to the basin you damaged? (Take 2 answers)
- Was it hard finding solutions in the third basin? (Take 1 answer)
- Did any of you use your real-life experiences when proposing solutions? (Take 2 answers)
- Which stage was the hardest? (Take 1 answer)

Yes/No/Maybe

The room is divided into three areas. Signs name each area as ‘YES’, ‘NO’ and ‘Maybe’. Yes and no are on two extremes and maybe is in the middle. The participants are then asked to move to each area, depending on what their position is regarding the statements shared by the facilitator. Facilitators can ask one or two people to share their point of view for each statement. This activity can be used as an ice-breaker or as a trigger to more substantial discussion depending on the statements chosen by the facilitator.

Recommended time: delivering instructions and designating areas: 5 minutes; statements and comments: 10-20 minutes (total time: 25 minutes)

Colour blocks

The colour block activity uses a scorecard tool to create an overview of the status of vulnerable and marginalized populations with regards to access to

water and sanitation within their region. It is also an effective tool to determine priorities. This activity is rather time consuming and should be granted enough time. Participants will receive a handout with a prepared grid with populations on the y-axis and statements on the x-axis. They will then colour the cells according to the situation that applies in their region. The tool is useful in determining the existence of problematic situations and public policies. The results from the colour blocks can be used later on to identify measures that should be prioritized.

It is of crucial importance for facilitators, when preparing to use this tool, that a proper assessment of the social, economical and political context takes place. This assessment should be done as it might be of special interest to include or exclude certain populations from the chart (e.g. because for a particular location they do or do not play an important role). An example of this is the religious factor,

Figure 9.4: Example Colour Blocks Handout

POPULATION	Absence of public policy addressing their needs	Lack or partial access to services	Lack of special tariffs	Dangerous conditions	Discrimination	Suffer from inequitable water allocation	Lack of effective options against corruption	Lack of opportunities for meaningful participation	Missing treaty ratification
Children									
Developmental or physical limitations									
Women									
Indigenous									
Black									
Youth									
Elder									
Prisoners									
Refugees/ Returnees									
Poor									
Nomadic and traveler communities									
Natural disaster victims									
People living in arid or semi-arid regions									
Rural populations									

which we opted to leave out of the example chart because it wasn't a defining factor for discrimination or privilege where we prepared the tool.

9.5 EVALUATION

The course will benefit from repeatedly asking for feedback. Planning and executing different kinds of evaluations play a crucial part in capacity development; they must be considered major components of the training process in order to achieve high success rates. An exchange between facilitators and participants during the training course will ensure information is being received and incorporated. Evaluation provides the facilitating team the opportunity to adapt and make necessary changes during the course and thereby have better outcomes among the participants (e.g. to further explain concepts or include further activities). It is recommended that diverse evaluation methods are implemented, depending on what information you are trying to obtain from participants. There are evaluation methods appropriate for a single activity, for an entire day or for the whole training course.

Show of fingers

This is a great method to quickly evaluate an activity because the feedback obtained is merely referring to how many participants liked it or found it useful. Participants lift their hand and by showing a number of fingers evaluate how useful the session or activity was to them; 5 being the highest grade and 0 the poorest. Facilitators count the total number of raised fingers and compare it to the maximum possible grade (if all participants held up five fingers). It is possible to ask a couple of participants with different number of fingers raised for their personal input.

Recommended time: 5 minutes

No materials needed.

Bullseye

One method to evaluate a full day is by providing participants with a figure of a bullseye (see Figure 9.5) and asking them to use a marker to make a dot on the ring where they consider themselves to be at the end of the day.

Recommended time: 10 minutes

Materials needed: target, markers

Figure 9.5: Bullseye



Tip: It is a good idea to turn the Bullseye away from facilitators so as to give participants the opportunity to evaluate freely. Once they are finished drawing their dot facilitators may ask about certain dots without asking the person who drew it. For example, Why do you think there might be a dot here? or What did the person who drew this dot might have been thinking?

Smiley axis

In order to evaluate all of a day's activities, a grid is made with the activities of the day on the y-axis and with three different smiley faces on the top of the x-axis. Participants are asked to draw a stick on each row depending on which smiley applied to how they felt about the activity. The sticks are then tallied to know which sessions were better received by participants.

Figure 9.6: Grid with Activities and Smiley Faces

Activity	:)	:	:(
Session 1			
Session 2			
Session 3			

Evaluation forms

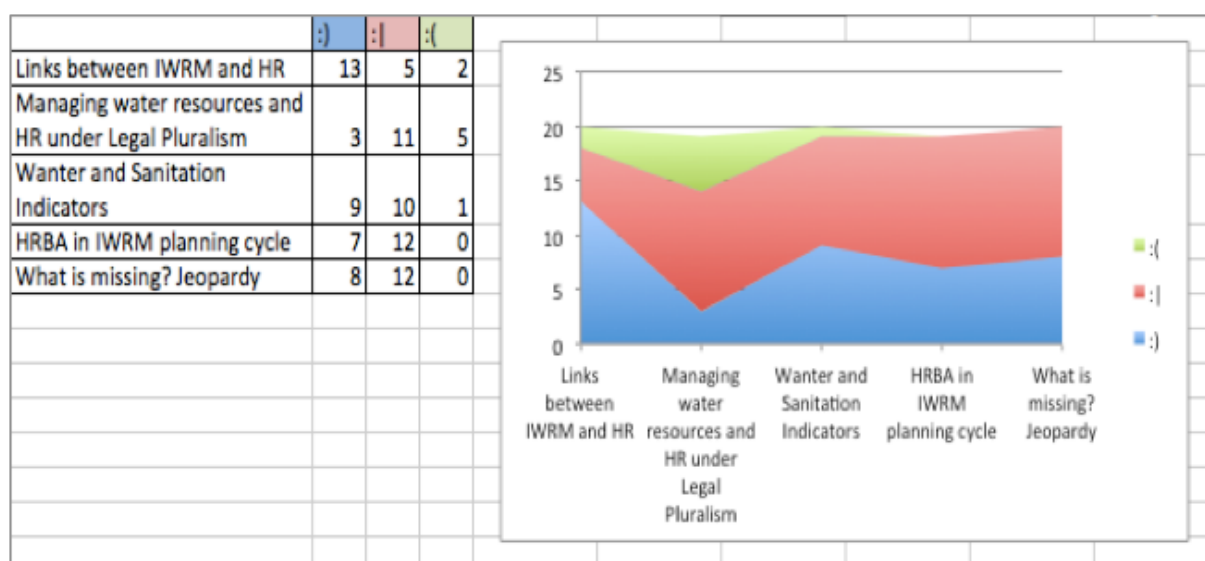
Depending on the population you are working with, you might want to stay away from written evaluations. However, if you are working with professionals you can take advantage of it and prepare a form in order to receive feedback from your

participants. Evaluations forms should be used to evaluate the entire capacity development course—everything from the facilitation to the time given for each topic and the food and venue.

Forms can come in different styles and mediums. Giving your participants options to choose from can be highly effective, and people are in a greater disposition to complete evaluation forms when they tick options than when they are expected to write paragraphs for each question. Make sure to keep the form balanced and provide space for personalized input.

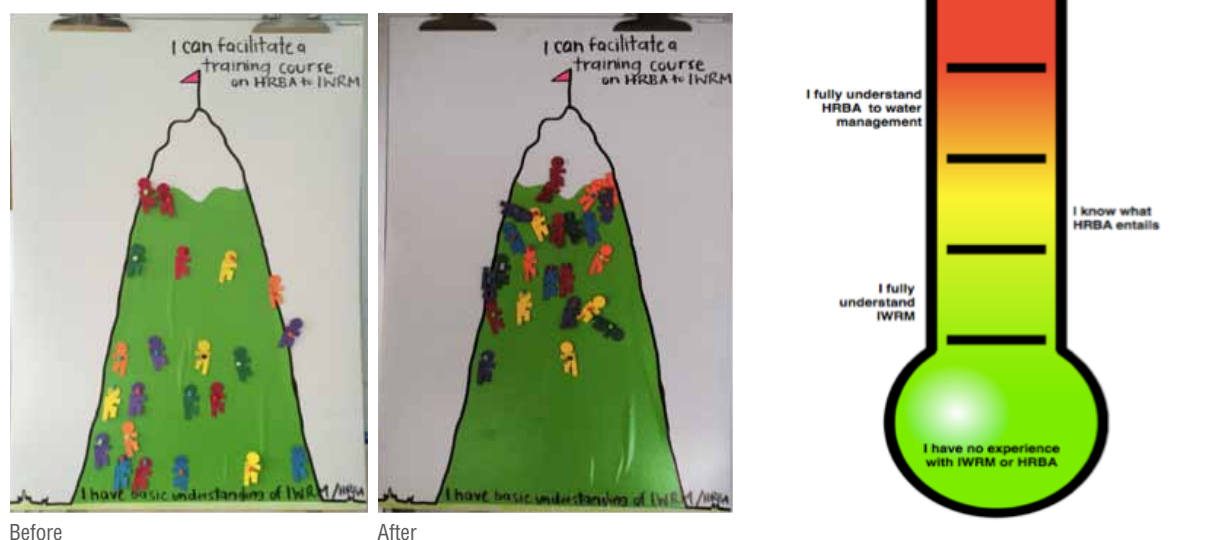
Tip: There are amazing online platforms for evaluations and forms you can try for free if it is fitting with your participants. Check out [surveymonkey.com](https://www.surveymonkey.com), [formget.com](https://www.formget.com) and google forms!

Figure 9.7: Evaluation Form Using the Smiley Axis



This is what the evaluation tool might look like after completion. The results obtained should be internalized through exchange with the participants.

Figure 9.8: Two Different Progress-ometers



Progress-ometer

Create a background image, be it a high mountain or a thermometer, and label each area of the image as a state with regards to the level of skills and/or knowledge participants might have. Hand each participant a small piece of paper or figure (see Figure 9.8) and ask them to write their name on it and tape it to the image at the level they consider themselves to be. At the end of each day or near the end of the training course, have them go back to their name and reassess its position.

Figure 9.8 is an example of a progress-ometer implemented using the analogy of a steep mountain and hikers. Participants were asked to continuously reassess themselves as the capacity development activity progressed. This is an example of how the progress-meter can be adapted to another object, in this case a thermometer and how it may reflect participants' progress.

Recommended time: 10 minutes

Materials needed: previously prepared image with degrees of expertise, paper, markers and tape

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