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User's Guide on

ASSESSING WATER GOVERNANCE

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Acknowledgements

The Stockholm International Water Institute (SIWI), the Water Integrity Network (WIN) and the United Nations Development Programme (UNDP) acknowledge with great appreciation the valuable comments received from the following experts and colleagues making up the readers group for this publication: Natalia Alexeeva (UNDP), Murray Biedler (European Commission), Frédéric Boehm (Universidad del Norte, Colombia), Roger Calow (Overseas Development Institute), Binayak Das (Water Integrity Network), Mame Diop (UNDP), Ben Elers (Transparency International), Themba Gumbo (Cap-Net), Mish Hamid (IW-Learn), Joakim Harlin (UNDP), Alisher Karimov (UNDP), Jose Padilla (UNDP), Jacques Rey Consultant, Simon Thuo (Global Water Partnership-Eastern Africa), Jeroen Vos (Wageningen University).

The *Source Guide*, which is part of this publication, has also benefited from substantive contributions from Andrea van der Kerk.

Notable contributions towards finalizing this Guide were also made by Marius Walter, Gert Danielsen and Javier Fabra from the Oslo Governance Centre.

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UNDP WATER GOVERNANCE FACILITY

The UNDP Water Governance Facility (WGF) at the Stockholm International Water Institute (SIWI) is an initiative that was launched by the United Nations Development Programme (UNDP) and the Swedish Agency for International Development Cooperation (Sida). The programme is a mechanism to implement parts of the UNDP Water Governance Programme. The UNDP Water Governance Facility supports developing countries on a demand basis to strengthen water governance and reduce poverty through policy support and advisory services in multiple thematic areas, including: integrated water resources management, transboundary water, water supply and sanitation, climate change adaptation, South-South collaboration, experience and best practices exchange, gender, and capacity building.

WATER INTEGRITY NETWORK (WIN)

The Water Integrity Network (WIN) was formed in 2006 to respond to increasing concerns among water and anti-corruption stakeholders over corruption in the water sector. It combines global advocacy, regional networks and local action, to promote increased transparency and integrity, bringing together partners and members from the public and private sectors, civil society and academia, to drive change that will improve the lives of people who need it most. WIN's vision is a world with equitable and sustained access to water and a clean environment, which is no longer threatened by corruption, greed, dishonesty and wilful malpractice.

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UNDP Global Programme on Anti-Corruption for Development Effectiveness (PACDE) has become an important vehicle for providing advisory services to UNDP Country Offices and programming countries; raising global awareness and advocacy on anti-corruption; building synergies with the initiatives of relevant partners; synchronizing global and regional activities with emerging demands from the countries involved; producing knowledge products on anti-corruption to assist anti-corruption programming at the country level. Through enhanced partnership and coordination, PACDE provides support to strengthen national capacities, institutions and systems to better implement anti-corruption initiatives. PACDE takes into account the demand from UNDP country offices and programming countries, the expectations of donors and other partners, recommendations from community of practice meetings, the norms and standards from UNCAC, and the areas of collaboration with relevant partners including UNODC, WHO, GTZ, OECD, WBI and TI.

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- Conducting systematic analysis and reviews of UNDPs governance work around the globe aimed at learning from experiences in the field;
- Based on the analysis and reviews, contributing to UNDP's programming and policy advisory services at the national, regional and global levels;
- Supporting countries to conduct nationally owned and driven democratic governance assessments that serve to strengthen democratic governance at the country level.
- Addressing new and emerging areas of democratic governance and building the capacity of UNDP's front-line staff to address these new challenges.

Foreword

Water governance has emerged as one of the most critical areas to improve the sustainable development of water resources and services and in order to respond to a global water crisis – a crisis which is not about having too little water to satisfy our needs, but rather a crisis of managing water and making it accessible to all. Regional water scarcity is often caused by droughts and desertification, a direct consequence of climate change, and leads to increased migration as water scarcity seems to be reaching new levels in many regions across the globe. Tensions among different users may intensify, both at the national and international levels, and the absence of strong institutions and agreements can lead to local, regional and trans-boundary conflict. Water governance, therefore, highlights the link between sustainable development and peace.

Sound governance is fundamental for reaching the Millennium Development Goals (MDGs) and will be a critical element in the new development framework beyond the expiration of the MDGs in 2015. Establishing water governance assessment mechanisms will thus be an important aspect of any current or future development framework and can help us better recognize if countries are on the right reform track in developing their water resources and services for the greater good of society.

Nevertheless, data collection and assessment and monitoring systems in relation to water governance reform are areas that are grossly neglected or severely underdeveloped by most water decision-makers. Current interest in water governance and integrated approaches place further demands on monitoring and assessment tools, particularly since they involve a shift from mainly monitoring hydrological data to data related to water use and policy processes and implementation.

Different methodologies for assessing and monitoring water governance and management have emerged. This User's Guide proposes a framework that can be applied as a starting point for any water governance assessment. As a part of water governance, the guide specifies approaches for assessments around water integrity and anti-corruption in the water sector. It also describes the usefulness of other assessment methodologies and presents relevant cases of how assessments can be applied.

The User's Guide meets a strong demand from many water stakeholders, ranging from international bi- and multilateral donors and lending agencies, to national governments and local organizations such as water user associations and consumer groups.

Many countries around the world are currently undergoing comprehensive water reform and it is crucial that countries take the proper reform path relative to cultural, social and political contexts as well as with regard to the access to financing and human capacities. Water governance assessments are an inexpensive way to monitor progress and to make sure reform is designed and implemented in effective and efficient ways. In other words, assessments should be used to investigate: Are we doing the right things (effectiveness) and are they done in the right way (efficiency)?

It is hoped that the User's Guide will be widely used by water sector stakeholders as a means to improve water governance. The User's Guide will be particularly useful to assess ongoing water reform and set governance priorities to close the implementation gap. The User's Guide puts strong emphasis on: seeking a comprehensive approach; thinking outside the 'water box'; going beyond formal institutions and stakeholders; considering the role of politics and power relations; optimizing stakeholder participation and ownership throughout the entire assessment process; and seizing the moment.

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Acronyms & abbreviations

AWGI	Asia Water Governance Index
AWIS	Annotated Water Integrity Scan
BRIC	Brazil, Russia, India and China
DFID	Department for International Development (United Kingdom)
GWP	Global Water Partnership
IBNET	International Benchmarking Network for Water
IWRM	Integrated water resources management
MENA	Middle East and North Africa
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
ODI	Overseas Development Institute (United Kingdom)
RBO	River basin organization
ReWaB	Regional Water Governance Benchmarking Project
RWIR	Regional Water Intelligence Report
SIWI	Stockholm International Water Institute
TAP	Transparency, accountability, participation
UNDP	United Nations Development Programme
UNDP PAPP	UNDP Programme of Assistance to the Palestinian People
WGF	UNDP Water Governance Facility at SIWI
WIN	Water Integrity Network
WMTI	Water Management Transparency Index
WSGC	Water and Sanitation Governance Index

Introduction

Why this guide is needed

During recent years, the international water community has focused on governance as the most important challenge to improve water management and service provision. Most developing countries have developed new water laws and policies, but many face significant challenges in implementing them. Many of the water policies adopted contain similar features and goals, such as decentralization, an increased role for the private sector, basin-wide management planning, better coordination of decision-making (both horizontal and vertical) and multi-stakeholder participation. But while sound policies have been created on paper, many encounter problems that prevent the formation and proper functioning of governance structures. Furthermore, insufficient attention has been paid to ensure that the sector adheres to principles of good governance, including transparency, accountability, and participation and the types of incentives and disincentives that drive behaviour.

Comprehensive assessments of the governance of water resources can guide the design of effective policy interventions by helping to identify where changes are needed and what actions can make them happen. This guide is a resource for stakeholders to conduct water governance assessments more effectively within their own local or national context. It provides practical advice on what to consider when designing and implementing an assessment. It also offers guidance on a number of concrete topics, such as which governance aspects are important to look at, the choice of indicators, data collection, how to manage multi-stakeholder processes and how to use the findings to influence policy.

Specifically, this guide enables users to:

- Understand how assessments can inform policy-making.
- Select, adapt and develop appropriate assessment frameworks and indicators for governance assessments in the water sector.
- Design multi-stakeholders approaches that further dialogue and consensus-building around water sector reform, and strengthen accountability by offering an official track record of government performance and a platform for public scrutiny by a wide range of actors.
- Implement water governance assessments to drive reform.

How to use this guide

This guide is structured around three overarching questions: *why, what* and *how* to assess water governance. It is divided into six main chapters and also includes a *Source Guide*. The *Source Guide* presents an overview of selected tools and cases of water governance assessments in different regions, each of which has different objectives, information requirements and target groups.

Chapter 1 WHY conduct water governance assessments?
Chapter 2 WHAT to assess: Introducing a water governance assessment framework
Chapter 3 HOW to conduct an assessment: An 8-step process
Chapter 4 HOW to assess institutions and stakeholders
Chapter 5 HOW to assess governance principles: Transparency, accountability and participation
Chapter 6 HOW to assess performance: Effectiveness, efficiency and function
Source Guide Overview of selected tools and cases of water governance assessments

Methodology

The content of this *User's Guide* is informed by an extensive mapping and evaluation of existing tools and cases to assess water governance, which are presented in the *Source Guide*. The selection of tools and cases in the *Source Guide* is the result of desk research and an analysis of responses to queries sent to organizations working in the water sector and on governance assessments. The authors recognize, however, that further efforts are required to comprehensively identify and assess all available tools; thus, not all areas related to water governance could be covered. To further enrich the content, semi-structured interviews were carried out with experts who had either developed or implemented tools and cases in the *Source Guide*. The interviews provided an opportunity to tap into the contextual knowledge of the interviewees and capture valuable lessons learned. The *User's Guide* contains selected quotes from the experts interviewed, listed inside the cover. An overview of selected water governance assessment initiatives and the various components or areas they cover can be found in Annex 1, which complements the *Source Guide*.

WHY?

Chapter 1

WHY conduct water governance assessments?

Chapter highlights

In this guide, water governance is understood as the systems that determine who gets what water, when and how, and who has the right to water and related services. The way water is governed profoundly affects whether these systems are able to deliver intended development outcomes. Water governance assessments can inform water sector reform and contribute to the achievement of development outcomes.

Background

Increasing water scarcity is one of the major global challenges today. As local demand for water from agriculture, industry, households and the environment rises above available supply in many regions, the *governance* of available water resources becomes the key issue to achieve water security at the local, regional, and global level.[1] Poor resource management, corruption, lack of appropriate institutions, bureaucratic inertia, insufficient capacity and a shortage of new investments undermine the effective governance of water in many places around the world.[2]

How and for whom societies choose to govern their water resources has a profound impact on the economy, the environment and on people's livelihoods. When river flows, ecosystems and groundwater tables are altered and polluted they affect people living both up- and downstream. In reality, the way water is allocated leads to greater benefits for some groups or individuals while others lose out. Water tends to be unevenly distributed among different income groups, and the poor tend to have the least access to water, which affects their livelihood opportunities and ability to live a decent, healthy life. Today, 780 million people still lack sustainable access to safe drinking water and another 2.5 billion lack basic sanitation.[3] For many people, fair access to water can be a matter of daily survival.

The allocation of water is often determined by factors and actors outside the traditional 'water sector'. Agriculture, trade, energy, environmental and industrialization policies and changing consumer preferences all have a major impact on the demand for and allocation of water resources. Yet none of them are within the scope and control of those working strictly on water issues. In most places, decisions affecting water are carried out within a fragmented institutional setting in which responsibilities are sometimes unclear and interests conflicting.

As economies develop and populations grow, demand for water increases rapidly. Growing prosperity in the BRIC countries (Brazil, Russia, India and China) is changing consumer habits and leading to dramatic increases in global demand for water and energy resources. Many countries face real challenges of scarcity, where much of the water has been committed for particular uses and new competing demands for resources continue to grow. The impact of climate change will compound water problems since it will most likely lead to increased variability in water supplies as well as more floods and droughts in many countries. At the same time, competition

1 Allan, T., 2001, *The Middle East Water Question: Hydropolitics and the global economy*, I. B. Tauris, London and New York.
2 Rogers, P., and A. W. Hall, 2003, *Effective Water Governance*, vol. 7, Global Water Partnership, Stockholm, Sweden.
3 United Nations Children's Fund and the World Health Organization, 2012, *Progress on Drinking Water and Sanitation: 2012 update*, UNICEF, New York, <http://www.unicef.org/media/files/JMPreport2012.pdf>, accessed 10 July 2013.

for water resources among a wider set of stakeholders will increase. Conflicts among users will arise, and some groups will be more powerful than others in lobbying for their interests. As a consequence, water governance systems will need to be more effective to cope with the challenges and to wisely and fairly allocate water resources and settle related disputes.

What is water governance?

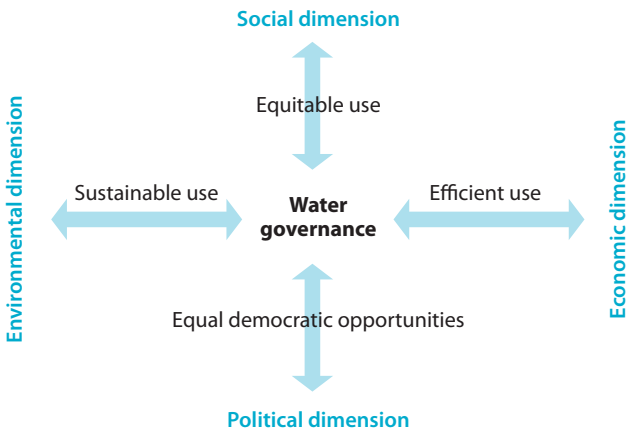
The most commonly used definition of water governance is a "range of political, social, economic and administrative systems that are in place to develop and manage water resources and the delivery of water services, at different levels of society."[4] Essentially, governance systems determine who gets what water, when and how, and who has the right to water and related services and their benefits.[5] The representation of various interests in water-related decision-making and the role of power and politics are important components to consider when analysing governance dynamics.

These dynamics are complex. It can be helpful to review the four fundamental dimensions of water governance when performing assessments (see Figure 1.1):

1. **Social dimension**, which focuses on equity of access to and use of water resources. This includes issues such as the equitable distribution of water resources and services among various social and economic groups and its effects on society.
2. **Economic dimension**, which highlights efficiency in water allocation and use.
3. **Political dimension**, which focuses on providing stakeholders with equal rights and opportunities to take part in various decision-making processes.
4. **Environmental dimension**, which emphasizes sustainable use of water and related ecosystem services.

Water governance is sometimes confused with water management. However, "water governance and water management are interdependent issues in the sense that effective governance systems are meant to enable practical management tools."[6] The term 'water governance' is sometimes also used interchangeably with integrated water resources management (IWRM), a process that promotes the coordinated development and management of water, land and related resources to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems and the environment. Although important links can be found between them, they are not synonymous. According to the Global Water Partnership, governance should be seen as providing the context within which IWRM can be implemented.

FIGURE 1.1 THE FOUR DIMENSIONS OF WATER GOVERNANCE



Source: Tropp, H., 'Water Governance Challenges', in World Water Assessment Programme, 2006, *The United Nations World Water Development Report 2: Water, a shared responsibility,* United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris.

If you take a narrow view on governance without looking at effective implementation and politics (both high level and local), then you could actually do more harm than good, because you lose time and destroy institutions rather than building them up effectively.

– One of the experts interviewed for this User's Guide

4 Rogers and Hall 2003.
5 Allan 2001.
6 Tortajada, Cecilia, 2010, 'Water Governance: Some critical issues', *International Journal of Water Resources Development*, vol. 26, no. 2, pp. 297-307.

Trends in water governance reform

Water governance reforms often contain similar elements, such as: decentralization, integrated and coordinated decision-making, stakeholder participation, river basin management and increased roles for the private sector through public-private partnerships. These changes represent major shifts. Many countries are moving from state-centric to more pluralistic forms of governance that take place at multiple levels and involve a diverse set of stakeholders. As reforms change how decisions are made over water, many additional facets of governance come into greater focus, such as negotiation, dialogue, partnership, network governance, and power diffusion among different government, private and social stakeholders.

Another trend in water sector reform is the recognition of water as a human right. In 2002, the United Nations Committee on Economic, Social and Cultural Rights adopted General Comment No. 15 on the right to water. In 2010, the United Nations General Assembly adopted water and sanitation as a human right that is essential "for the full enjoyment by all human beings"[7] (see Box 1.1). Countries such as South Africa and Uruguay had already acknowledged water as a human right in their constitutions well before 2010. But for many other countries, the more urgent issue is how to implement this right in combination with ongoing water sector reform.

Box 1.1 The human right to water

In 2002, the UN Committee on Economic, Social and Cultural Rights adopted General Comment No. 15 on the right to water. The Committee emphasized the government's legal responsibility to fulfil that right and defined water as a social, cultural and economic good. It identified a number of normative and cross-cutting criteria that are identified as key principles that need to be met to realize the right to water, such as availability, quality/safety and accessibility (more specifically, physical and economic accessibility, non-discrimination in accessing water and the right to obtain relevant information. It also set out obligations of the state to *respect, protect and fulfil* water as a human right.

General Comment No. 15 has been criticized for not being specific enough. However, it is still the most elaborate interpretation of what water as a human right means in terms of obligations for duty-bearers (the state) and the rights that can be claimed by rights-holders (citizens and consumers). The right to water not only includes the right to a service, but a bundle of other rights, including participation, justice and access to information.

The right to water applies primarily to water of acceptable quality and quantity "for personal and domestic uses"—in effect, emphasizing 'affordable' water supply and sanitation. The need for access to water for farming and other productive uses is acknowledged, but while "water is required for a range of different purposes" (for example, to secure economic production and livelihoods), "priority in the allocation of water must be given to the right to water for personal and domestic uses." The General Comment provides for 'progressive realization' of the right. In 2010, the UN General Assembly adopted water and sanitation as a human right that is essential for the full enjoyment by all human beings.[8]

7 United Nations General Assembly, 28 July 2010, Resolution 64/292, UN document A/RES 64/292, United Nations, New York.

8 United Nations General Assembly 2010.

Recent years have also seen a growing interest in **anti-corruption** and 'good' governance. A number of factors make the water sector vulnerable to corruption. For example, decision-making authority for water is often dispersed across political and administrative boundaries and agencies, which creates many loopholes to exploit. In many places, a monopoly on water services exists that involves a large flow of public funds and adds to the risk of corrupt practices. Large water projects are also capital-intensive and complex, which makes procurement lucrative, manipulation difficult to detect, and corruption more likely to occur.

Corrupt practices are common in water investments and operations, including those involving bore-well site location, water transfers and irrigation schemes, tendering and procurement processes, and billing of water services, such as rigged water meters. Although the detrimental effects of corruption are well known, in most places there is a lack of political will to openly discuss the problem in both the public and private sectors and at all levels. This is slowly changing among some governments and donors internationally, and new actors, such as the Water Integrity Network, have emerged to raise awareness and promote corruption-risk diagnosis and anti-corruption measures.

Recognition is growing that **accountability** must be part of the relationship among policy makers, service providers and clients. As a result, increased emphasis has been placed on strengthening the ability of citizens, civil society organizations and other non-state actors to hold local governments accountable for their commitments to improve service delivery and make them more responsive to citizens' needs. It is crucial to build capacity in local governments to not only deliver services effectively but to also enhance their ability to engage citizens by fostering dialogue and participation.

Water governance is not only the water sector; it depends on the whole country. Accountability, integrity and participation are needed at all levels of the political and public process. If these aspects are lacking, it becomes very difficult for policy experts to implement policy documents.

– One of the experts interviewed for this User's Guide

Despite ongoing reforms, many countries are struggling to implement policies on the ground. In some places, reforms have been too ambitious for governments that lack the necessary financial resources and institutional capacity to successfully carry them out. Many other factors can undermine reforms and their implementation. Local ownership of the reform process and content is critical, but sometimes the agenda for reforms is dominated by the specific interests of donors. Clientelism is a common issue that can make decision-making discretionary and allow personal motivations of individual politicians to dominate. Low levels of organization within civil society are another common cause of weak stakeholder engagement in the reform process. Politics can also slow, skew or stall these processes, as government departments and individuals try to prevent or impede actions that are seen to threaten their own power and authority.

Why assess water governance?

Current interest in water governance and approaches such as integrated water resources management place further demands on monitoring and assessment tools since they involve a shift from only monitoring hydrological data to monitoring data related to policy processes. Yet data collection and assessment and monitoring systems are areas that are neglected or underdeveloped by many governments. To meet these demands, different methodologies for assessing and monitoring water governance and management have emerged. A number of questions need to be considered in an evaluation, such as: Have policy changes and applied management instruments improved management of water resources? Do more people have access to sustainable water services? Do women and other marginalized groups have a voice in water decision-making? A good example of this type of monitoring initiative is the 2012 *Status Report on the Application of Integrated Water Resources Management*, a UN publication that was based on a global survey sent to all UN member countries to determine progress on sustainable management of water resources using integrated approaches.

From the practitioner's point of view, assessment is a first step to trigger changes that are needed to improve sector performance by showing where interventions would have the most impact. How an assessment can contribute to making change happen will differ depending on the specific objective and design of the assessment.

Assessments often have multiple objectives, including:

- **Comparing** the state of water governance in different countries by making use of cross-country data to raise awareness at the regional and global level and facilitate peer-to-peer learning.
- **Benchmarking** the performance of lower-level entities—such as municipalities or water utilities—and comparing one against another.
- **Diagnosing an existing problem** and its scope. Examples include water integrity assessments, which have been carried out in a number of countries to assess levels of water-related corruption.
- **Informing programming** for resource allocation, programme design, and assessing needs and opportunities, including **risk assessments** at the project or programme level.
- **Reviewing and identifying trends and potential gaps** in policy-reform implementation in order to fine-tune or change a chosen reform path.
- **Monitoring** water sector performance and change over time (if repeated).
- **Bridging the supply and the demand side of governance** by providing entry points for civic engagement and empowering citizens to demand better delivery of services and accountability by decision makers.

Benchmarking water governance

Benchmarking is done to compare performance at different levels of government and among countries, municipalities, utilities and other entities. Benchmarking has several advantages. For one, comparing and rating the performance of similar units can serve as a 'carrot and stick' exercise that rewards good performance and sanctions poor performance. It can also be used to identify good practices, detect trends and measure changes over time.

However, benchmarking water governance, especially at the country level (but also among river basins), also poses methodological challenges. These include correlation errors and sample bias, which leads to problems of comparability among countries and over time.[9] Since all country contexts differ with regard to both physical aspects such as climate, geology, topography as well as in their governance set-ups, comparison is difficult. The comparability of findings can also weaken over time since the purpose of assessment may change as policy and decisions progress.

While publishing benchmarks comparing countries' governance rankings creates debate and raises awareness on important issues, it may also alienate the 'low scorers' instead of inspiring them to act to improve the situation. The development of national-level governance indicators can be challenging enough without having to compare them with those of other countries.

Furthermore, it should be noted that since conditions and goals differ widely among utilities, differences in performance indicators do not automatically indicate malfunction. Specific local circumstances often provide the explanations for this, but also 'goals' and 'costs' are not neutral, and may be different for different stakeholders. Thus, diversity, local circumstances and equity-concerns should be included in any tool that uses benchmarking of performance.

Questions for reflection

- Why assess water governance? What is the purpose of conducting a water governance assessment in a particular context?
- How do water governance and water management differ?
- What are the political considerations that can frustrate or promote water sector reform in your area?
- What are the advantages and disadvantages of benchmarking assessments?

9 Arndt, C., and C. Oman, 2006, *Uses and Abuses of Governance Indicators*, OECD Development Centre, Paris.

WHAT?

Chapter 2

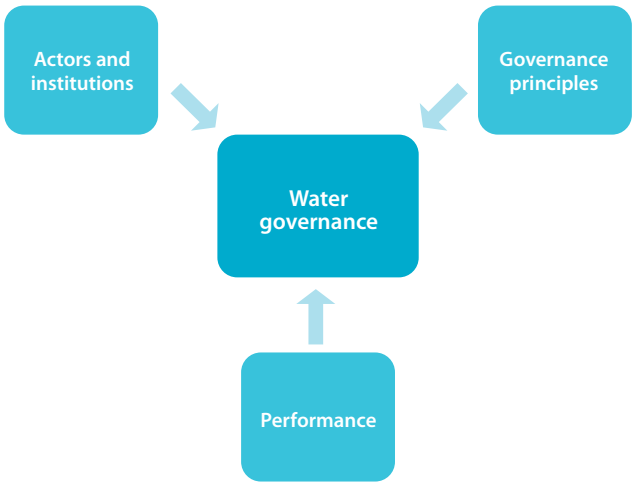
WHAT to assess: Introducing a water governance assessment framework

Chapter highlights

This chapter provides a conceptual framework to help identify important questions and key elements that should be considered within a water governance assessment. The proposed framework can be applied in different contexts and can be used as a conceptual starting point when selecting or developing an assessment framework.

The framework is built around three main components (see Figure 2.1). These include: 1) power, as analysed from the perspective of stakeholders, institutions and interests (see Chapter 4), 2) principles, in particular transparency, accountability and participation (see Chapter 5), and 3) governance performance, including efficiency and effectiveness of government in delivering and achieving its goals (see Chapter 6).

FIGURE 2.1 THE THREE COMPONENTS OF A GOVERNANCE ASSESSMENT



Source: United Nations Development Program, Oslo Governance Centre

Towards a water governance assessment framework

Unfortunately, no 'blueprints' for water governance exist and no easy answers can be found on what constitutes the best governance model. Every country has its own set of governance systems, stakeholder dynamics and institutional structures, and therefore faces different problems and priorities. Hence, it would be a mistake to propose a one-size-fits-all governance model. There are no perfect solutions—only ones that work in particular contexts. One should "look for the best fit, not the best practice."[10]

Consequently, this guide does not propose prescriptive water governance measures. Instead, it provides the reader with tools that can assist in identifying water governance challenges, priorities and measures in different contexts.

Three key components that make up a water governance assessment framework have been identified and included in this guide (see Figure 2.2). These components offer a simple but applicable analytical framework that can be used to design and contextualize assessments in the water sector. They include:

10 Baieti, Aldo, W. Kingdom and M. Ginneken, 2006, 'Characteristics of Well Performing Public Water Utilities', Water Supply and Sanitation Working Note No. 9, World Bank, Washington, D.C.

- ***Institutions and stakeholders***. This component provides a framework with which to assess and analyse particular water institutions and stakeholders, including their specific interests, capacities and the power dynamics between them. Such an analysis helps build an understanding of how water governance fits within the wider context of governance and the political economy (see Chapter 4 to see how this component can be assessed).
- ***Governance principles***. This component focuses on transparency, accountability and participation (TAP) and can be used to analyse institutional performance as well as how stakeholders behave and relate to each other (see Chapter 5 to see how this component can be assessed).
- ***Performance* assessment**. Institutions, stakeholders and TAP analyses provide input into the assessment of the performance and impact of particular water-related functions, such as allocation, service delivery, planning and capacity development. This provides the basis for developing assessment indicators on water sector performance and impacts (see Chapter 6 for how this component can be assessed).

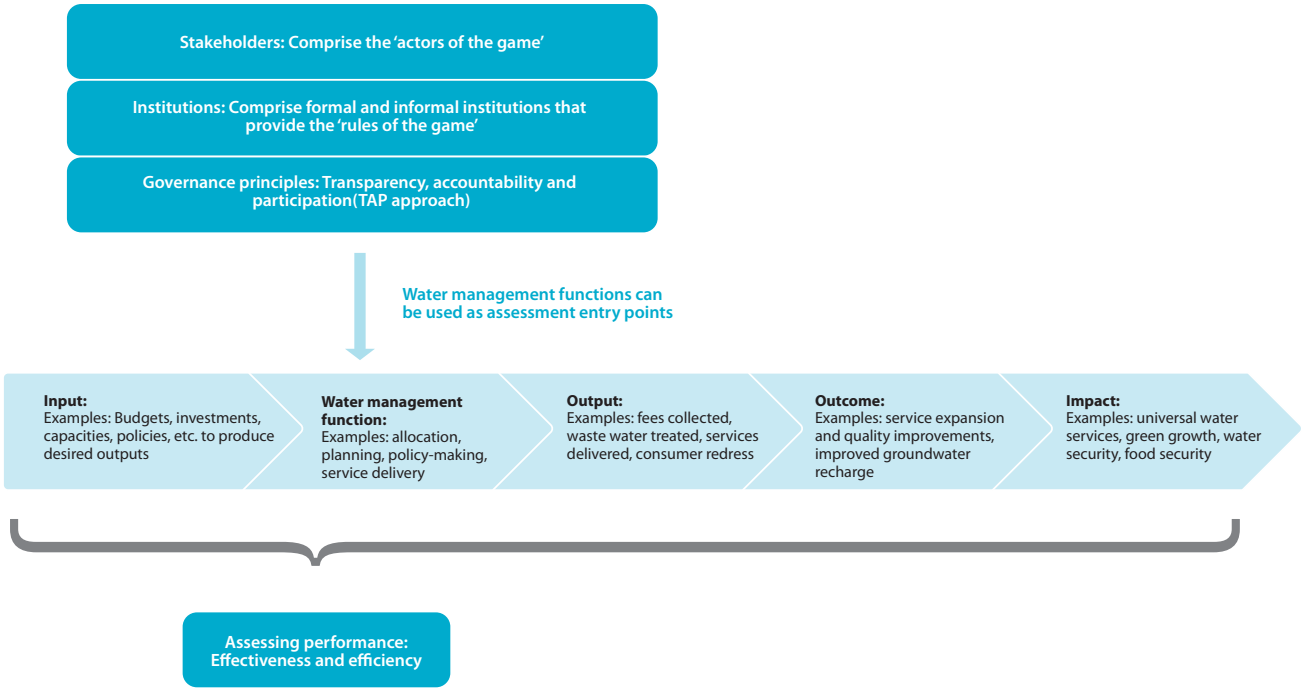
Institutions and stakeholders

Institutions, both formal and informal, provide the 'rules of the game' that determine how water is governed. It is important to understand how institutions work because they define the ways in which a public sector is organized, the policies and laws that are in place, and how they are implemented.

Formal institutions

While formal and informal water institutions are both part of the overall institutional architecture, they affect social, economic and political life in different ways. Formal, or statutory, institutions exist at many different levels and can have a direct and indirect impact on water. A clear example of a formal institution is a national constitution, which provides the framework for all other legislation and rules and regulations in a given country. In South Africa, for example, the right to water was enacted in the constitution to redress past racial discrimination.

FIGURE 2.2 WATER GOVERNANCE ASSESSMENT FRAMEWORK



Source: Håkan Tropp, UNDP Water Governance Facility

Formal institutions within the water sector are usually placed inside government bureaucracies and are generally created through policy, laws, rules and regulations. Usually they have the resources and authority to coordinate large numbers of users and areas[11] and are involved in the processes of extracting, distributing and using water. Such institutions are under the purview of and can be held to account by parliament, government ministries, courts, human rights commissions, anti-corruption commissions, districts and municipalities. Specialized agencies are set in place to perform water management *functions* such as water resources management, water services delivery, regulatory monitoring and water quality protection. Non-governmental organizations (NGOs) such as water user associations and private water service providers are increasingly becoming part of the formal institutional set-up as well.

There is a lot of institutional engineering going on. If you change the water laws you also expect to change the water practice, but there is really a big gap between the law and practice. We know that in the back of our minds, but often do not take it into account when advising a country on what to do with its natural resources legislation. You really have to also check what happens on the ground and not just what the rules should be.

– One of the experts interviewed for this User's Guide

At the international level, countries are also affected by bilaterally or multilaterally negotiated international institutions. One example are transboundary water agreements with neighbouring countries that may include provisions on how to regulate the sharing of water, the setting of water quality standards and information-sharing between upstream and downstream countries. These collaborations sometimes result in the creation of commissions, such as the Mekong River Commission. The Convention set out certain obligations or principles, such as equitable and reasonable utilization and participation; the obligation not to cause significant harm; regular exchange of data and information; and notification concerning planned measures with possible adverse effects. An example of an international water treaty is the United Nations 1997 Convention on the Law of the Non-navigational Uses of International Watercourses, which has not yet been ratified by a sufficient number of countries. Other international institutional frameworks are the recently adopted UN framework on water as a human right, and the UN Millennium Development Goals (MDGs).

Informal institutions

Informal water institutions refer to traditional and contemporary social rules and norms that decide on water management, use and allocation. These can be defined by different types of community-based organizations, the local private sector and religious associations, among other groups. Informal water-related institutions are usually equated with norms and traditions of how to allocate, distribute and use water resources.

Large shares of countries' water resources are allocated on the basis of customary water rights. Small-scale farming is still a main occupation in many developing countries, and a large share of the water resources being used in irrigation is largely outside the regulatory control of the government. This does not necessarily mean that water resources are unregulated, since farmers may agree among themselves on what rights and obligations should apply for water use and management. Nor does it mean that informal water rights systems are 'archaic'. On the contrary, they can comprise a dynamic mix of principles and organizational forms of different origins. In effect, local water rights exist under legal pluralism.[12]

Informal water institutions are also common in urban settlements. In many cities, large portions of the population, slum dwellers in particular, get their water from informal water markets. This private water market falls outside the domain of any regulation of service quality, resulting in high prices and considerable health risks for consumers.

The dynamics of formal and informal institutions

Formal and informal institutions may form a compatible overall governance system that can effectively steer management of resources in the water sector. They may also compete with one another. In the latter case, formal institutions are often undermined by informal institutions such as clientelism and corruption. Such discretionary practices distort

11 Pahl-Wostl, C., 2009, 'A Conceptual Framework for Analysing Adaptive Capacity and Multi-level Learning Processes in Resource Governance Regimes', *Global Environmental Change*, vol. 19, no. 3, pp. 354-365.

12 Boelens, Rutgerd, 2008, *The Rules of the Game and the Game of the Rules: Normalization and resistance in Andean water control*, Wageningen University, The Netherlands.

legitimate institutions, resulting in unpredictable and ineffective decision-making processes and outcomes in allocation of water resources and services between sectors and groups.[13] In the wake of independence, the two Central Asian countries of Kyrgyzstan and Tajikistan decided on similar water governance reforms: transfer of local irrigation management to water user associations, introduction of pricing mechanisms and establishment of river basin management principles. However, implementation has proved challenging for both countries. One reason why is a patchwork of governance systems based on customary water management, Soviet-style top-down planning and the recent introduction of IWRM elements such as decentralization, pricing mechanisms and increased stakeholder influence. As a result, rules and organizations established formally by the government, and often supported by international donors, were undermined by informal institutions.[14]

Since informal institutions can support, disrupt and replace formal institutions and therefore affect sector reform, it is important that they are incorporated into the institutional analysis of the water sector in a given context (see Box 2.1 and Chapter 4).

Stakeholders

If institutions constitute the 'rules of the game', stakeholders are the actors. They respond to institutions but can also *change the rules*. The water sector is made up of a myriad of stakeholders. Determining which stakeholders should be included in the assessment will depend on the focus and level of the assessment. At the local level, many entities are involved in water decision-making: irrigation, environmental and health departments, urban development and planning agencies, regulatory bodies, public water utilities, water user associations, consumer groups and other types of NGOs, religious groups, farmers organizations and unions, municipalities, community leaders and local entrepreneurs, among many others. An organized farmers' lobby group, for example, can have strong influence over decisions on irrigation.

13 Stålgren, P., 2006, *Corruption in the Water Sector: Causes, consequences and potential reform*. Swedish Water House Policy Brief No. 4, Stockholm International Water Institute, Stockholm; Plummer, J. (editor), 2007, *Diagnosing Corruption in Ethiopia: Perceptions, realities and the way forward for key sectors*, World Bank, Washington, D.C.

14 Sehring, J., 2009, 'Path Dependencies and Institutional Bricolage in Post-Soviet Water Governance', *Water Alternatives*, vol. 2, 61-81.

Box 2.1 Customary water resources management: An ignored dimension in water reform analysis

Across many developing countries, decision-making on day-to-day water use and management issues is in the hands of local communities. For instance, local individuals and communities develop small irrigation systems, springs and wells for domestic water supply and small dams for livestock. These water systems are mainly governed by locally developed customary water rights and management systems.

Current water reforms in many African countries put strong emphasis on the use of statutory legal systems (formal institutions) to regulate the use of water resources. In reality, these countries have pluralistic legal systems. Land and water resources are regulated by a patchwork of legislation and institutions, including statutory law, customary laws of different communities, ethnic groups, and Islamic law. Especially in poor rural areas, diverse customary laws are often more important than statutory law and are relied upon in developing access to land and water resources and resolving management conflicts. Neglect of customary laws may cause implementation of water reform to fail, or will have negative consequences for individuals and groups who were better served by systems based on local customs.

Source: National Resources Institute, 2005, *Building upon Customary Practices in Implementing IWRM in Africa: Good practice guidelines for water managers*, Information brief.

At the national level, parliaments, governments and their ministries, consumer groups, research institutes, NGOs and other interest groups, trade unions and private businesses, among others, all play critical roles in decision-making over water. At the regional level, river basin commissions are another important set of stakeholders.

External stakeholders, such as donors, multinational water companies, foreign policy actors, international lending institutions or foreign investors can also influence negotiations over policy reform, transboundary water management and water governance outcomes at large. In cases where water is of high security interest, the military and intelligence services are other types of stakeholders that need to be analysed.

Since many different actors are involved in, and affect, governance and policy, it is important to understand how different stakeholders interact, the power dynamics between them, and how they influence policy towards a certain outcome. For any assessment of water governance, it is useful to map out relevant actors and explore their mandates, capacities, interests and powers, including relationships and incentive structures. Chapter 4 provides further practical guidance on how institutional and stakeholders can be mapped and analysed.

Pressing issues in the water sector are the challenges of collective action that individuals with interests in the water sector face in organizing themselves as an interest group. An important task in looking at stakeholder engagement is to understand how existing interest groups are able to organize themselves and exert influence as a group. It is also important to understand why some interest groups, such as users who are poor, fail to organize effectively.

Governance principles: Transparency, accountability and participation

This guide has identified the above principles, known as TAP, as useful entry points from which to analyse institutions and stakeholder relations within a water governance assessment. The way in which TAP mechanisms are structured within a governance system creates incentives that influence how stakeholders behave and work together.

- ***Transparency*** can be understood as the level of openness of governance processes and access to information. It also refers to the extent that public decision-making processes and outcomes are open to scrutiny by citizens, the media, and others.
- ***Accountability*** refers to sets of controls, counterweights and modes of supervision that make officials and institutions in the public and private sector answerable for their actions and ensures that sanctions are applied against poor performance, illegal acts and abuses of power.[15] In the water sector, well-functioning accountability mechanisms can help clarify the commitments of actors involved in water governance, lead to efficient management of fiscal resources, protect water resources and increase control over the actions of public and private stakeholders, and ensure minimum quality standards.
- ***Participation*** refers to the possibility for citizens to provide informed, timely and meaningful input and to influence decisions at various levels. Participation in decision-making processes in the water sector is a precondition for social accountability.[16] Different mechanisms exist for public participation—that is, different means can be found through which citizens can be encouraged to express themselves and influence decisions and processes in the political, economic and social spheres. Attending town hall meetings and being heard, actively contributing to and shaping advisory committees, voting, protesting or carrying out a referendum are examples of participation mechanisms in political processes, decision-making and planning.

These three governance principles are closely interrelated. Transparency is a precondition for participation and accountability. If people lack access to information regarding the activities of government agencies, they will not be able to raise their voices to demand accountability or participate in decision-making or monitoring processes. Similarly, transparency without accountability can lead to disillusionment and distrust of institutions, since citizens have information about services they are entitled to but do not have any mechanisms to hold those in power to account if they do not receive such services. Guidance on how transparency, accountability and participation can be assessed is found in Chapter 5.

15 United Nations Development Programme, 2012, *Impact of Accountability in Water Governance and Management: Regional analysis of four case studies in Latin America*, Discussion paper, Universidad de los Andes and UNDP Virtual School (draft).

16 Social accountability refers to a form of accountability that emerges through actions by citizens and civil society organizations aimed at holding the state to account, as well as efforts by government and other actors (media, private sector, donors) to support these actions.

Assessing water governance performance

Institutions, stakeholders and governance principles are important components in the water governance assessment framework. To be meaningful, however, their assessment needs to be applied to particular water-related issues and problems.

In this section we look at examples of water management functions and introduce the concept of value chains, which are helpful in disaggregating which water issues and problems should be assessed. Analysis of the value-creation chain can be particularly useful in evaluating the cost-effectiveness of measures and the return on investment of existing and potential reform.[17]

Water management functions

Water management functions refer to a range of standard activities that need to be performed by sector institutions and provide useful entry points for governance assessments. Examples of such functions include planning, allocation, service delivery and conflict mediation, among many others. Particular water reform elements, such as decentralization, for example, can also be used as assessment entry points. But ultimately they must be disaggregated to more manageable water management functions to make sense. Decentralization may not be interesting as such; the more interesting point is how decentralization affects relevant management functions and the added value they create in terms of outputs, outcomes and impacts.

Management functions can be organized in multiple ways. For example, the regulatory function can be seen as a function in its own right, but it can also be a subset of other functions, such as water resources allocation (see Box 2.2).

The type of governance system in place will strongly influence which functions are considered important and how they are organized. The purpose as well as the priorities of an assessment will differ from case to case. For example, at the ministerial level, there is often a particular ministry that deals only with water resources. In other cases, ministries combine water with areas such as forestry, energy, agriculture and environment. For water services, different divisions of labour can also be found through ministries of public works, planning, water, etc. For water pollution and drinking water quality issues, it is common that ministries and public agencies linked to the environment and health may be more heavily involved.

Regulatory functions ensure the enforcement of laws and policies that in practice imply government controls and restrictions on water use, allocation and management. Public organizations are tasked with regulating many activities, including the quantity of water that can be extracted; they also issue water permits, control pollution and perform other functions. Regulators play a role in collecting and protecting government revenue. The power of regulators can grant significant benefits to, or impose restrictions or penalties on, water users.

How regulatory functions are organized within countries differ. In Rwanda, for example, one finds a joint regulator of public utilities related to water, telecommunications, electricity, removal of waste products from residential or business premises, extraction and distribution of gas, and the transport of goods and people. Uganda has no independent regulator, but such functions are performed by the Ugandan Ministry of Water and Environment. In Kenya, the Ministry of Water and Irrigation has split the regulatory functions of water resources and water services between the Water Resources Management Authority and the Water Services Regulatory Board. At the subnational level, new entities—Catchment Areas Advisory Committees and Water Services Boards—were created as the extended regulatory arm that oversees and monitors water user associations and water services providers with regard to water use, allocation and the quality of water services delivery. Irrespective of context, regulatory functions and the organizations performing them is one important entry point for assessing governance and performance.

Regulation can also be led by informal institutions, where community systems and organizations perform similar types of functions as government regulators. In many developing countries, the bulk of water resources and a significant share of water services are not allocated and delivered by formal water permits and water utilities. Instead, they are handled through customary water rights or situations of 'open access' and through unlicensed private water vendors. For example, local water user associations can decide on water allocation,

17 Fritz, V., K. Kaiser and B. Levy, 2009, *Problem Driven Governance and Political Economy Analysis: Good practice framework*, World Bank, Washington, D.C.

Box 2.2 Functions related to water governance: Some examples

Policy-making and law-making and their implementation

- Developing a long-term framework for water resources and services
- Setting a strategy and priorities
- Budgeting and fiscal transfer

Regulating water resources and services

- Monitoring public and private service providers, such as issuing and monitoring concessions, service contracts and other types of agreements with water services providers
- Economic regulation (setting water fees)
- Monitoring water permits and their implementation
- Protecting ecosystems
- Monitoring and enforcing water services standards
- Applying incentives and sanctions

Organizing and building capacity in water

- Building awareness of water issues and priorities
- Developing and utilizing skilled water professionals
- Tendering and procurement
- Facilitating coordinated decision-making within and among different levels and sectors

Planning

- Collecting, managing, storing, sharing and utilizing water-relevant data
- Projecting future supply and demand for water
- Designing strategies for long-term planning of water resources and services development, including infrastructure investments
- Developing planning and management tools to support decision-making
- Facilitating stakeholder participation

Allocation of water resources

- Issuing water permits and licenses
- Implementing established water rights systems
- Settling disputes
- Assessing and managing third-party impacts of water-rights transactions

Developing and managing water resources and delivering services

- Constructing public infrastructure and authorizing private sector infrastructure development for multiple purposes (agriculture, industry, hydropower, domestic, etc.)
- Operating and maintaining infrastructure
- Forecasting and managing the effects of floods and droughts
- Tendering and procurement
- Organizing water services delivery, such as water supply and sanitation and irrigation
- Organizing stakeholder participation
- Treating wastewater
- Monitoring and evaluation.

Source: Adapted from: United States Agency for International Development/ International Resources Group, 2009, MENA Regional Water Governance Benchmarking Project: Concept and approach framework, USAID, Washington, D.C.

management and uses based on local agreements, such as customary water rights. In such informal settings, social control and sanctions are used to make water users comply with the rules. It is thus important to include an analysis of how key informal water stakeholders are performing water-related functions during the early stages of an assessment.

Policy-making and legislation form the basis of institutional jurisdictions, water rights, regulation and conflict resolution. Water governance assessment should include an evaluation of the state of legislation and the degree to which it supports policy and provides for clear separation of stakeholder roles and responsibilities and provides the mandates to exercise

power. Such functions are normally performed by relevant ministries, executive government and parliament, but different stakeholder groups can exert influence on this process. This analysis should review the implementation of these policies, laws, rules and regulations and what their results have been to date. It should also include a review of the extent to which governance principles, such as TAP, have been incorporated in policy and legal frameworks. Further review of the processes that have led to the development and acceptance of policies across sector stakeholders is useful to determine the chances for successful implementation in practice.

Developing value-creation chains

Water governance methodologies that make use of value-creation chains help to identify the types of indicators required and the level at which they should be assessed.[18] The value-creation chain is a disaggregation of assessment aspects comprised of water management functions, inputs, outputs, outcomes and impacts. The water governance framework is then applied along the value-creation chain. The use of input is unusual in many assessments, but can be useful in comparing outputs and outcomes with inputs, such as budgets, number of staff and their capacities, and physical infrastructure. Value-for-money studies and public expenditure tracking surveys currently use this tool. The following figure provides examples of value-creation chains that can be adapted to particular contexts depending on the purpose and desired level of comprehensive analysis in the assessment.

The value-creation chain, shown in Figure 2.3, contains water decentralization as one typical water management policy response. It also contains a number of functions that water sector organizations are mandated to perform. Depending on the purpose, such functions can also provide the starting point in the value-creation chain. A range of possible functions can be placed here. How they are framed will depend on the purpose of the assessment and the parts of the value chain that are being assessed.

A sectoral value-chain approach was used by a World Bank report to diagnose corruption in water services and other sectors in Ethiopia.[19] In service delivery, for example, the value-chain approach takes into consideration corrupt behaviour in policy-making, regulation, budgeting, procurement, service delivery and payments by consumers. The analysis of the value chain shown in Figure 2.4 can thus identify where corruption risks are most prevalent and how they affect financial sustainability, the quality of services, equity and so on. Here it is suggested that such an analysis look at results that are linked to the impact on the financial sustainability of water utilities and how this can affect water service quality. But additional or other results—linked to the chain of outputs, outcomes and impacts—can also be added. These can include economic efficiency and social equity in water services delivery and the long-term impact on reaching the MDGs on water supply and sanitation, improved health and poverty reduction.

The analysis can also highlight the factors and incentives that determine the degree of risk for corruption in different areas. This can help guide the development of targeted policy changes or the application of particular measures to reduce corruption risks.

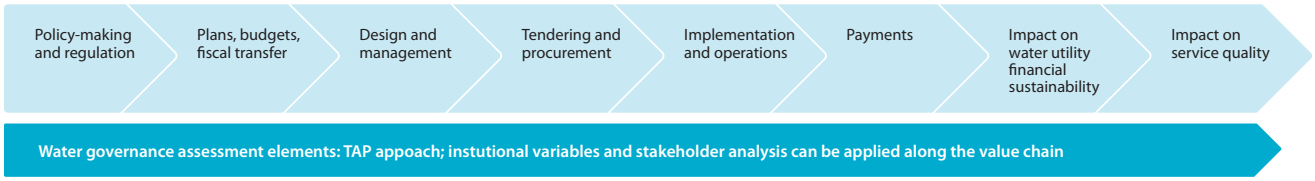
18 Fritz et al. 2009.

19 Plummer 2007.

FIGURE 2.3 ANALYSING THE DECENTRALIZATION OF WATER SERVICES USING A VALUE CHAIN

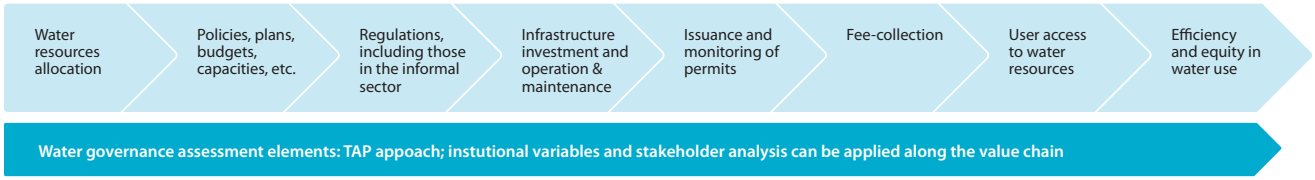
Source: Håkan Tropp, UNDP Water Governance Facility

FIGURE 2.4 ANALYSING CORRUPTION USING A VALUE CHAIN



Source: Håkan Tropp, UNDP Water Governance Facility

FIGURE 2.5 ANALYSING WATER RESOURCES ALLOCATION USING A VALUE CHAIN



Source: Håkan Tropp, UNDP Water Governance Facility

Another example depicts water resources allocation. Here the value chain can assist in analysing the content of policies and plans as well as regulatory functions, such as issuing water permits and monitoring their implementation. This should also take into account informal means of water resources allocation, how such systems work and how they relate to the formal system. To do this, an additional value chain can be developed for informal allocation, management and uses. Such a value chain can take a similar approach to the one depicted in Figure 2.5 and look at locally developed infrastructure. Questions to consider include: How is the infrastructure managed? Who are responsible for operations and maintenance? Are users paying for management services and, if so, who collects such fees? Are the 'books' open for scrutiny by community members and others? Moreover, what are the local effects in terms of access to water? Is water allocated and distributed efficiently and on a basis most community members would consider fair?

In this example, water allocation is seen from a national perspective, which makes it possible to analyse and compare allocation to different water uses and user groups. But similar value chains can also be developed for particular uses, such as irrigation, industrial hydropower and households.

Questions for reflection

- How are stakeholders with much at stake but little voice in decision-making included in the assessment framework? Such stakeholders could include, for example, women, indigenous groups and poor segments of society who often are marginalized. How can their concerns be analysed and understood when developing an assessment framework?
- How important are informal institutions in the context of the assessment? How do informal and formal institutions and stakeholders interact? Are they mutually supportive or prone to conflict?
- The law may vest particular stakeholders with formal authority, but where does the real power lie? Can formal institutions exercise their mandated power or does power lie elsewhere?

HOW?

Chapter 3

HOW to conduct an assessment: An 8-step process

Chapter highlights

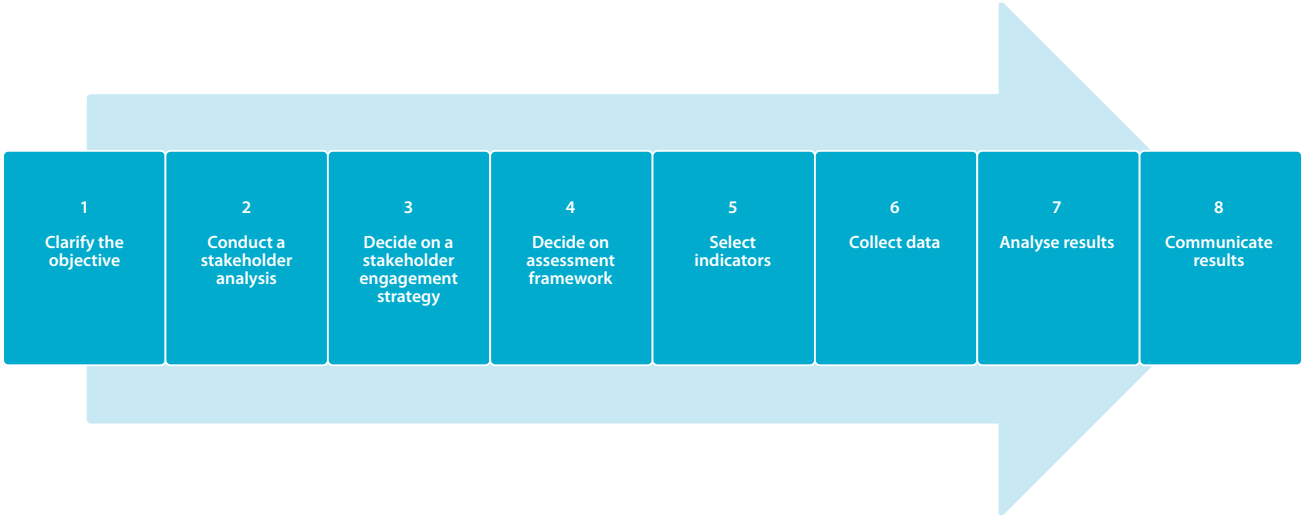
Improving governance is a slow and complex process that requires changes in norms and attitudes that are often rooted in politics and power relations. To make a difference, reforms at the legal and institutional level must be accompanied by behaviour change by organizations and stakeholders. Water governance assessments cannot by themselves instantly influence or improve water governance. However, assessments that are well planned can form an important stepping stone in this long-term process as a tool for dialogue and priority-setting.

While each assessment process is different, most assessments have some steps in common. These steps usually include: clarifying an objective, deciding on an assessment framework, selecting indicators, collecting data and analysing results. In addition, this guide recommends three additional steps that may be less common but are good practices from which most assessments would benefit. These steps include: conducting a stakeholder analysis, deciding on a stakeholder engagement strategy and communicating results (see Figure 3.1).

Step 1: Clarify the objective

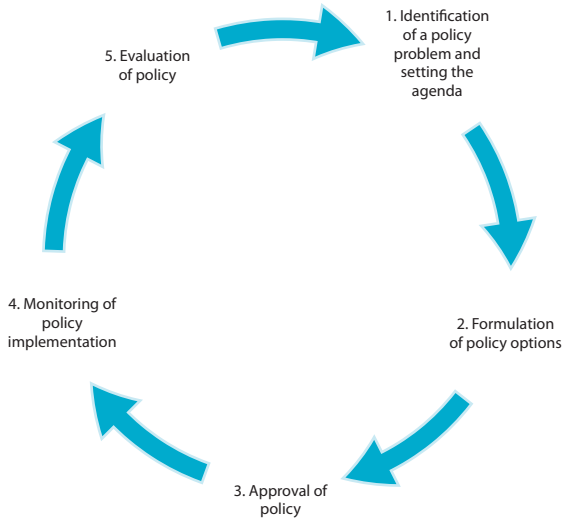
A clear objective is necessary for developing a strategy on how to conduct the assessment, and for making good decisions in all of the steps that follow throughout the assessment process. As an example, a common objective of water governance

FIGURE 3.1 EIGHT STEPS TO CONDUCT A WATER GOVERNANCE ASSESSMENT



Source: United Nations Development Programme, Oslo Governance Centre

FIGURE 3.2 THE POLICY-MAKING PROCESS



Source: United Nations Development Programme, Oslo Governance Centre

assessments is to inform water governance reform. An assessment may achieve this objective in several ways. In addition to providing information on trends, performance and diagnostics, assessments can support a platform for dialogue on priorities, consensus-building and the mobilization of political will. Assessments of water governance can also unlock implementation difficulties and make reforms more realistic. They can start the process of changing incentive structures and the behaviour of stakeholders, which is at the core of governance reform.

For an assessment to successfully inform reform in the water sector, it must be aligned with the policy-making process. Entry points in that process may come at the point when a policy problem is identified and an agenda set, when policy options are being formulated, when monitoring ongoing implementation activities, or at the point of evaluation (see Figure 3.2). Deciding on a strategy to achieve this particular objective will therefore require careful consideration of timing and of changing opportunities provided by the policy-making process.

To effectively influence water sector reform, it is also important to reflect on the way countries are governed. In countries with strong central governments, policy is usually shaped at the national level. In federal states on the other hand, such as the Australia, India and the United States, water resources are essentially governed at the state level. Hence, policies and management responses are developed and implemented by particular institutions and stakeholders within the state.

Box 3.1 describes how the Water Integrity Assessment of the Palestinian water sector was integrated into larger sector reform.

Box 3.1 Aligning the assessment with ongoing reform in the Palestinian water sector

The Palestinian water sector faces a number of governance challenges, including high levels of unaccounted-for water, illegal connections and unlicensed wells, and conflicting and overlapping mandates of sector institutions. These problems are exacerbated by poor human resource capacity and low levels of transparency and accountability. To address these challenges, the Palestinian Water Authority, the governmental institution responsible for water management, is leading a process of reforming the water sector. The reform is composed of three main elements: an institutional review of the water sector, revision of the existing water law, and implementation of a programme of organizational reform and capacity-building for key institutions in the water sector. The sector reform aims to establish strong and sustainable institutions within a legal framework that clearly defines the roles, responsibilities and relationships among them.

In 2012, as an integral part of this reform, the Palestinian Water Authority, in partnership with UNDP, conducted a water integrity assessment to complement the institutional review by identifying priorities and needs specifically related to water integrity. The assessment is a first step towards developing a long-term water integrity programme that will include capacity development and the implementation of tools to strengthen integrity and accountability.

Step 2: Identify stakeholders

An assessment process is commonly embedded within particular policy processes. This can serve multiple purposes, including influencing policy, strengthening advocacy and accountability, and providing information needed to make sound financial allocations. To achieve these objectives, *how* the assessment is conducted is just as important—if not more important—than the actual findings. To ensure a good process, it is imperative to know who the stakeholders are as well as their interests and their relative power and sphere of influence. This information may form the basis for designing a stakeholder engagement strategy.

Step 3: Engage stakeholders

Stakeholder engagement must be secured at every step of the assessment, from deciding on what should be assessed and how to assess it to what the results mean and how they are to be used. If stakeholders are involved in identifying problems and finding solutions, it is more likely that they will make use of the results.

While many assessment initiatives consider stakeholders in one way or another, few do so in a systematic manner, and even fewer have a clear strategy for how to engage them. A common result is an initiative that reaches out to the 'usual suspects'—partners that already think along the same lines. A proper stakeholder analysis and an informed engagement strategy often lead to more strategic partnerships that target stakeholders not ordinarily engaged, but who may have considerable influence. Or, they target stakeholders that do not necessarily have the same interests at the outset, or partners that have the same interests but tend to be forgotten.

It is important to involve stakeholders at an early stage of the project, communicating clearly and extensively with them to ensure that they understand the concepts, indicators and objectives.

– One of the experts interviewed for this User's Guide

Step 4: Decide on an assessment framework and scope

There are three main assessment framework options: 1) Use a framework that has already been developed and applied in other countries, 2) adapt an existing water governance assessment framework to reflect specific issues within a country, or 3) develop a new governance assessment framework tailor-made for a country.

Selecting an existing framework instead of creating a new one from scratch may provide a good starting point since it has already been tested. However, the authors of this guide prefer options 2) or 3), since frameworks should not be applied indiscriminately without adapting them to a particular country context and circumstances. In the pursuit of quick solutions, national specifics may receive low priority. The result can be disengaged stakeholders and assessment findings that are too generic to be useful for designing reforms.

Developing a nationally owned water governance assessment framework requires attention to process as well as to substance. Reaching consensus and agreement on an assessment methodology and a common understanding of water governance requires broad-based stakeholder involvement. Undertaking a consultative process to agree on a methodology from the very beginning will have the added advantage of facilitating the legitimacy and political relevance of assessment results. Box 3.2 illustrates how a multi stakeholder process was used to assess governance gaps in Mexico's water sector.

If one chooses to use a pre-designed framework of indicators, the key is to contextualize this framework to capture citizens' aspirations, critical policy issues, various institutional arrangements and, in particular, poverty and gender concerns. The framework needs to be sufficiently specific for developing concrete policy recommendations and guiding water sector reform. Sometimes there will be no existing framework that corresponds with assessment needs, and it may be necessary to start from scratch.

When deciding on the scope of the assessment, the fact that water often transcends political and administrative borders must be taken into account. Water is not only shared within a country; major water sources such as international rivers, groundwater aquifers and lakes are also shared among nations. A watercourse can also traverse multiple administrative units at the local level. Consequently, a water governance assessment can use multiple geographic levels as entry points, as shown in Figure 3.3.

Box 3.2 The OECD multi-level water governance framework

In 2011, the Organisation for Economic Co-operation and Development (OECD) developed a Multi-level Water Governance Framework as a tool for policy makers. The approach defines seven categories of governance deficiencies. The aim of the tool is to identify what is needed to close those gaps, which are related to territorial and institutional fragmentation of the sector, weak capacity, poor accountability and integrity, information asymmetry, 'silo' approaches across ministries and public agencies, mismatches between hydrological and administrative boundaries, and divergent objectives among water stakeholders. In 2012, the OECD worked with Mexico to provide evidence-based assessment, analytical guidance and customized policy recommendations in support of the implementation of Mexico's 2030 Water Agenda. The process was based on the Multi-level Water Governance Framework and involved high-level peer reviewers and experts from Australia, Brazil, Italy and the United Kingdom. The policy dialogue focused on four key areas identified as essential drivers for change to fill all seven governance gaps: multi-level and river-basin level, economic efficiency and financial sustainability of water policies, and regulatory frameworks for service provision. The policy dialogue consisted of a multi-stakeholder process and created a consensus across ministries, public agencies and levels of government on the:

- institutional mapping of who does what in Mexico's water policy design, regulation, financing and river basin management
- achievements and remaining institutional and capacity challenges of river basin institutions and service providers
- areas for improvement based on innovative experiences that proved successful on the ground.

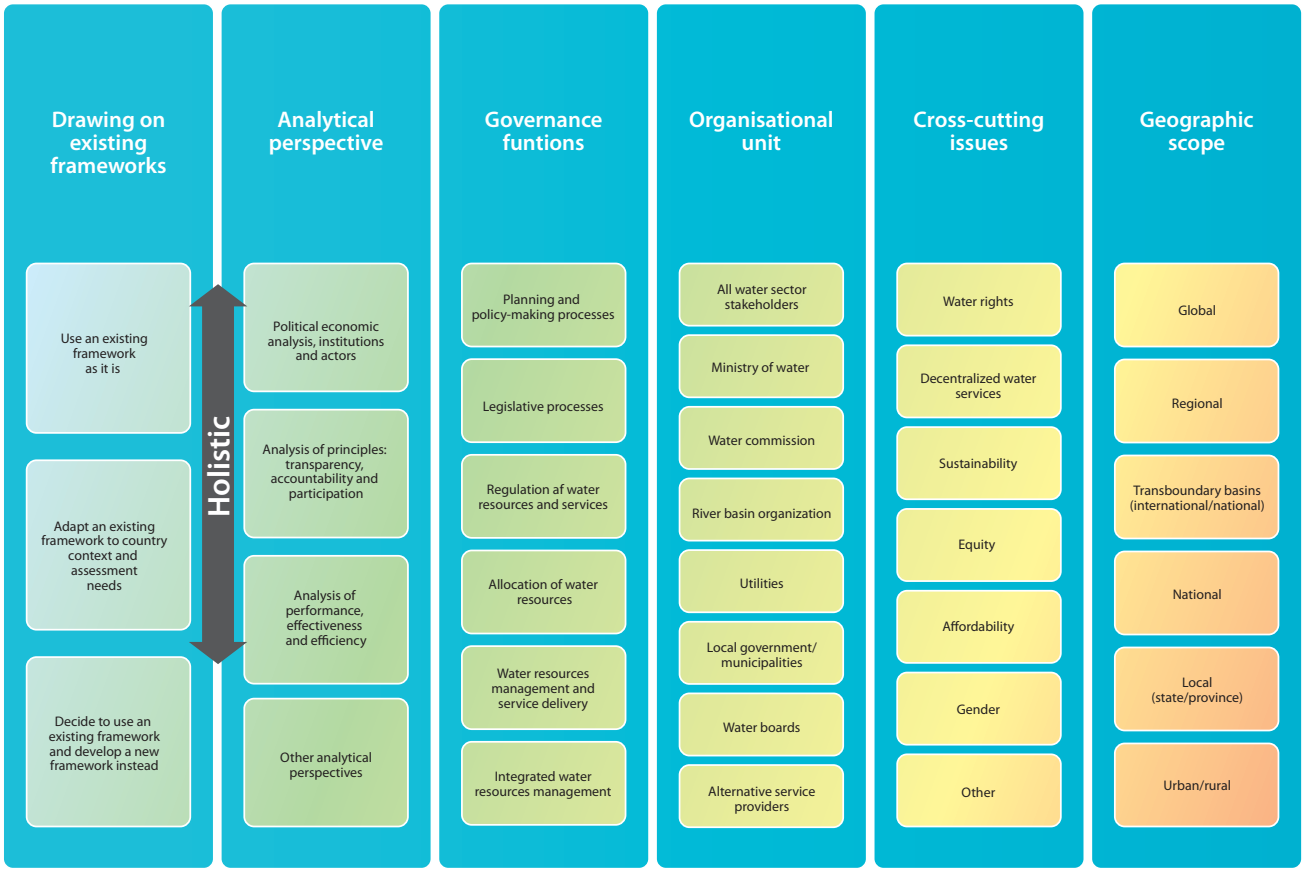
Recommendations from the OECD to improve multi-level governance in Mexico's water sector focused on coherence across policy areas (especially to remove harmful subsidies on energy that clearly work against water policy objectives), the adoption of mechanisms and incentives to make the most of the current decentralization framework while matching responsibilities with capacities, needs and specificities at the territorial level; better information-sharing and disclosure; the need for more channels for public participation; and greater planning, regulatory and financial autonomy of river basin organizations and councils for truly integrated water resources management.

Source: Organisation for Economic Co-operation and Development, 2013, *Making Water Reform Happen in Mexico*, OECD Publishing, Paris.

It is also important to consider the particular aspects of governance on which the analysis should focus. Like other sectors, water governance is embedded in the wider governance and political economy of a society. For example, high levels of corruption or weak public administration are likely to negatively affect the performance of the water sector. It may therefore be useful to focus the assessment around a particular governance issue that goes beyond but affects the water sector. Some examples include: corruption, gender, decentralization and regulatory capacities. By taking a sectoral perspective on broader governance issues, tailor-made solutions can be developed for complex problems.

Figure 3.3 offers a menu of options when deciding on an assessment framework, ranging from which analytical perspective one wants to use (a holistic approach considering multiple perspectives or a more narrow approach), which issues one would like to address, as well as geographic scope. At least one option should be selected from each column.

FIGURE 3.3 OPTIONS FOR DESIGNING A WATER GOVERNANCE ASSESSMENT



Source: United Nations Development Programme, Oslo Governance Centre

Step 5: Select indicators

A water governance indicator is a measure of one particular aspect of water governance in a country. Generally, an indicator focuses on a small, manageable and tangible piece of a system to provide a sense of the bigger picture and conforms to specific criteria as described in Box 3.3. An indicator is different from a statistic in that it provides descriptive or analytical information on conditions or trends.

The following list of criteria may be useful for selecting indicators:

- **Simplicity**. Indicators should not describe the whole situation—they merely provide a simplified description of specific aspects of the change to be measured.
- **Measurement of change**. Indicators should be designed to measure change and to be sensitive enough to capture the shifts that are taking place.
- **Direction**. Indicators are useful for pointing out the direction of change, whether positive or negative.
- **Time element**. Indicators measure change over time.
- **Comparability to a baseline or norm**. Indicators usually convey information that is compared to a baseline or to a norm. For example, gender-sensitive indicators usually compare the situation of women to that of men.
- **Participation**. Indicators can boost participation when stakeholders are involved in their selection, data collection and analysis.

A participatory, consultative approach to defining and selecting governance indicators requires the involvement of key institutions in a series of workshops, using the agreed governance assessment framework as a basis for selecting indicators. The creation of partnerships, especially among water sector stakeholders, national statistical agencies, NGOs, academic institutions and government is critical for selecting indicators that are technically sound, operationally feasible and politically acceptable.

Box 3.3 SMART criteria for indicator selection

The process of selecting indicators is made easier by using 'SMART' criteria. That is, one should ask whether the indicator is **S**pecific, **M**easurable, **A**chievable, **R**elevant and **T**ime-bound. A number of questions can be asked to arrive at a conclusion. For example: Is it clear what aspect of a business or organization is being measured? Is the desired change measurable? Is it realistic and achievable? Is it relevant to the success of an institution/organization? Is it trackable over time?

Cross-cutting aspects of indicator selection

A single indicator is rarely sufficient to measure a trend. Rather, various indicators are usually required to get a clearer picture of what is going on. For example, if the percentage of people with access to water at the national level is increasing, this may appear to be a positive development. However, national averages may hide the fact that urban and rural disparities are increasing, or that particular provinces are stagnating while others are racing ahead. In order to check these underlying trends, one needs to dig deeper and disaggregate the data.

Indicators that capture these aspects include:

- ***De jure* and *de facto* indicators**. Stakeholders are often concerned with assessing what is happening both in practice (*de facto*) and in law (*de jure*). This is because in some countries, water governance regulations, policies and legislation look good on paper, but may not be implemented in the way they were intended. *De facto* indicators aim to capture what happens in practice. These can be measured by use of objective data or perception-based data. An example is asking citizens to what extent they pay bribes to obtain residential water connections. *De jure* indicators are concerned with the existence and quality of formal rules in documents, legislation, policies and regulations. They rely on objective indicators for checking their existence. Expert opinions for policy reviews may be used to assess quality.
- **Supply-side and demand-side indicators**. Supply-side indicators aim to capture mechanisms provided by government to ensure its accountability to citizens. Objective indicators can be used to ascertain the presence of particular mechanisms, such as horizontal independent accountability institutions (such as water commissions), parliament, hearings and audits. More qualitative data is often needed to analyse the quality of these mechanisms. Demand-side indicators, on the other hand, are concerned with the force of citizens' demands, whether citizens have opportunities to raise their concerns, are able to create new spaces for their voices, and are able to make use of existing accountability mechanisms. Perception and incidence surveys may provide information on people's awareness, ability and opportunity to participate, as well as satisfaction in terms of accountability.
- **Gender-sensitive and pro-poor indicators**. Indicators need to capture and reflect the potentially varied impacts that water governance mechanisms and processes may have on different social groups. This requires going beyond simple disaggregation of data by socio-economic group or by sex and striving to select indicators that are sensitive to possible differences at the outset. Boxes 3.4 and 3.5 illustrate four ways in which a governance indicator might be considered poverty- and gender-sensitive.

Box 3.4 Pro-poor water governance indicators

A indicator may be considered pro-poor in four ways:

Specific to the poor. The indicator measures a practice specifically targeted at the poor, such as subsidizing the price of water.

Implicitly pro-poor. The indicator makes no explicit reference to the poor; however, if it is interpreted within a wider economic, social and political context, it is clear that it is particularly relevant to low-income groups, such as access to water in rural areas.

Chosen by the poor. The integration of participatory techniques into survey methods provides an opportunity for low-income groups to identify governance indicators considered of particular interest to the poor and to undertake measurements. This could include, for example, additional information on rights and services provided by the central government.

Disaggregated by poverty status. Disaggregation is important because it allows the value of an indicator for the poor to be compared to the value of the same indicator for those who are not considered poor. One example is the ratio of access to safe drinking water among the population living in the poorest households to that of the population living in the richest households.

Source: Adapted from United Nations Development Programme, 2006, 'Measuring Democratic Governance: A framework for selecting pro-poor and gender-sensitive indicators', UNDP, New York.

Box 3.5 Gender-sensitive water governance indicators

Gender-specific. This group of indicators measures governance practices specifically targeted to women or men. In practice, it is likely to be made up largely of the inputs, outputs and outcomes of policies designed to increase women's access to water, with unfortunately less emphasis on women's empowerment and opportunity to influence water policies; indicators may include the existence and implementation of gender mainstreaming of the national water policy.

Implicitly gendered. In this case, the indicator makes no explicit reference to gender. However, if it is interpreted within a broader context, it is clear that the indicator is of particular relevance to women or men. This may include distance to water pumps.

Chosen separately by men and women. These indicators need not refer to gender at all—they may simply reflect differences in men's and women's preferences and priorities regarding different areas of governance.

Disaggregated by sex. The value of the indicator is calculated separately for men and women and allows for comparisons to be made between the two groups; an example might be the ratio of households with access to safe drinking water among female-headed households versus households headed by males.

Source: Adapted from UNDP 2006, 'Measuring Democratic Governance'.

Step 6: Collect data

Once indicators have been selected, it is necessary to collect data. Usually a mix of data sources will be required to obtain a balanced perspective and to be able to validate findings from different data sources. Table 3.1 shows what kinds of data may be needed, depending on what is being measured. There are basically two types of data: **qualitative** and **quantitative**. Simply put, qualitative data are usually a descriptive text and quantitative data contain numbers.

- **Administrative data** are used in many assessments. These include narrative reports as well as monitoring data routinely collected by ministries, regulating authorities, river basin organizations, utilities and others, such as the quantity of water produced or lab results on water safety. A data mapping exercise can be very useful in listing and assessing data available from various sources, such as the ability to collect monitoring data.
- **Survey data** come in many forms. Data from surveys can be qualitative, quantitative or a combination of both. Surveys are used primarily to determine the *de facto* governance situation. However, in some circumstances, researchers use surveys to test the knowledge of respondents concerning *de jure* governance. Survey data can provide information on incidence (the number of times that a respondent has experienced something) and on perception.
- **Perception data** are defined as people's judgements and perceptions on a subject, opinions or levels of satisfaction. They can include changes in opinion, sensitivity, satisfaction, influence, awareness, understanding, attitudes, quality, perception, dialogue or other factors. Quantitative perception data often come in the format of opinion polls or household survey data. Perception data may also appear in the form of expert surveys.

Data collection needs to be done by an independent person who is able to consult with and meet people from different ministries and at different levels and is able to aggregate the data. The reason why many previous approaches have failed in this is that they don't take the business of gathering reliable, convincing data seriously enough. It is generally delegated to a junior person within one ministry.

– One of the experts interviewed for this User's Guide

Step 7: Analyse results

Once the data are collected, they need to be analysed in light of the questions that the assessment set out to answer. Based on a draft, recommendations are developed for uptake in policy circles. Ideally, multiple stakeholders should be involved in critically reviewing and validating preliminary and final results. Recurrent review meetings with stakeholders can also be useful for generating new ideas and providing new perspectives that can further develop the assessment tool. This requires a flexible assessment team that can accommodate stakeholder input.

Once the assessment is finalized, a broader set of stakeholders needs to be given the opportunity to validate the findings, which is often treated as a separate step on its own. The purpose of the **validation process** is to provide concerned stakeholders with an opportunity to react to the findings related to their institutions. One way of doing this is to organize a workshop to serve three main objectives:

1. Present the findings to a targeted audience (this also serves as a way to validate the findings)
2. Develop an action plan with monitoring indicators
3. Secure a commitment from concerned institutions to implement the agreed-upon action plan.

The workshop participants should represent a broad range of stakeholders, Box 3.6 provides an example how this was conducted in Uganda

Importantly, these stakeholder representatives could also be asked to publicly select a number of recommendations that they found to be most relevant and to agree to address them. By publicly committing themselves to implementing certain recommendations, accountability is ensured. However, the dissemination workshop should be just one component of a broader communication strategy that defines how the findings should be used to contribute to the assessment objectives. While some assessments target the larger public to raise awareness about a certain issue, other assessments with more sensitive information (on corruption, for instance) may want to limit dissemination to an internal audience.

TABLE 3.1 COMMON DATA SOURCES FOR DIFFERENT KINDS OF ASSESSMENTS

Scope of the assessment	Data collection methods
Stakeholder analysis	· Desk review of laws, legal guidelines, official gazettes · Review of case studies and research papers · Focus group discussion (including with civil society organizations, academia) · Face-to-face interviews
Institutional context (including the accountability relationship among institutions)	· Desk review of laws and legal framework · Review of official communication (such as requests for information from audit office, human rights institutions, meeting minutes) · Face-to-face interviews · Focus group discussions
Efficiency	· Administrative data monitoring input and outputs · Surveys of incidence and perception relating to outputs · Revenue collection data (bills and payments) · Data on infrastructure development (against payments made) from official gazettes · Review of financial audit reports on gaps between revenue collection and water provision · Survey of water users on revenue collection, infrastructure development and water provision · Citizen report cards on user satisfaction
Effectiveness	· Administrative data monitoring input and outcomes · Surveys of incidence and perception relating to outcomes · Desk review of laws, legal guidelines, official gazettes · Review of case studies and research papers on the water sector, including on environmental impact of current levels of usage · Review of financial and performance audits · Reports and communications of regulatory bodies · Official decisions and meeting minutes between identified water sector bodies · Focus group discussions and interviews
Transparency and integrity	· Perception data using experts and stakeholders with access to privileged information · Large surveys of water users that collect data on perception and incidence · Surveys of key subpopulations, such as members of water boards · Official data on water sources · Review of case studies and research papers on the water sector, including on the environmental impact of current levels of usage
Access to information and participation	· Desk review of legal provisions for access to information and participation at various levels of water governance (local level, subnational level and national level) · Desk review and physical verification of existence of mechanisms for access to (up-to-date) information and participation · Desk review of rules governing participation · Interviews and focus group discussions with representatives and civil society groups
Accountability	· Desk review of provisions for internal control · Review of financial and performance audit reports and by other oversight institutions · Official complaints to oversight institutions and public service commission · Minutes of town hall meetings with users and civil society and documents on actions taken based on recommendations · Public perception survey on accountability of the water sector.

Source: United Nations Development Programme, Oslo Governance Centre

Box 3.6 Improving water integrity through a multi-stakeholder approach in Uganda

In 2006, the Ministry of Water and Environment in Uganda established a multi-stakeholder Good Governance Working Group with the overall objective to improve the integrity of the water sector. The group was tasked with identifying and recommending measures to promote and monitor transparency, accountability and good governance in the sector.

In 2008, the group initiated two water integrity studies that were to serve as the basis for updating the sector's anti-corruption action plan. The studies were carried out with support from WSP (Water and Sanitation Program) Africa, in partnership with the Water Integrity Network. The first study undertaken was a *Risk and Opportunity Mapping Study* designed to understand accountability processes in the water sector and to review recent sector progress reports. The second was a nationwide quantitative baseline survey that examined how citizens, contractors, private operators, local government officials and utility staff experience integrity in the provision of water in both rural and urban areas.

The studies were launched and validated during a National Water Integrity Workshop in which over 100 sector stakeholders renewed their pledge to promote accountability and combat corruption in the Uganda water sector. The delegates drafted an umbrella rallying statement supported by a 10-point action plan to guide enhanced accountability in the sector over the following three years.

The participation of high-level officials ensured ownership of follow-up actions at all levels of the water services sector. During the annual Joint Sector Review, the action plan was approved by the Water & Sanitation Sector Working Group, the highest decision-making body in the sector. As a result, all subsectors are now required to report on progress on a quarterly basis.

Source: Jacobson, Mutono, Nielsen, Leary, Donal O', Rosemary,2010, *Promoting transparency, integrity and accountability in the water and sanitation sector in Uganda*, The Worldbank, Washington D.C.

Step 8: Communicate the results

Thinking about communication at the end of an assessment is often too late. Instead, communication should be an integrated activity throughout the process. Communication is key in terms of explaining not only the results, but the objective, approach, methodology, concepts and indicators of the assessment to stakeholders.

It may be useful to anchor the assessment within a **multi-stakeholder platform**. If natural platforms for stakeholder involvement during the assessment process do not already exist, such platforms may need to be set up specifically for the assessment. Box 3.7 provides an example of how such platforms, in this case called 'city level consortiums', were set up during the citizen report card process in Kenya.

Multi-stakeholder platforms serve several important roles: to confer legitimacy and ownership to the assessment process and to ensure its quality, and to supervise the assessment process and the implementation of the action plan that results. To be able to fulfil this role, the composition of the platform is crucial and should be informed by the engagement strategy. The platform does not need to be very large, but should be composed of key stakeholders that will be affected by the study— both in terms of available data and in implementing action points arising from the findings. As far as possible, it is important that platform membership is as inclusive as possible and composed of a broad cross-section of stakeholders. In water supply service provision, for example, these key stakeholders generally include the government ministry responsible for water, the utility(ies) or other major service providers, civil society, the private sector and, where applicable, development partners.

Box 3.7 Using multi-stakeholder platforms to strengthen ownership: Citizen report cards in Kenya

In 2006 a 'Citizen's Report Card' on water, sanitation and solid waste (rubbish) services was undertaken in Kenya's three largest cities—Nairobi, Mombasa and Kisumu. The report card is a social accountability tool that gauges both citizens' access to and satisfaction with services. Its purpose is to strengthen ties between citizens and service providers, to bring the concerns of citizens, especially the poor and marginalized, to the attention of decision makers and to make them a priority for action.

To achieve these objectives, the assessment team quickly realized that strong local ownership was required. Stakeholder coalitions of partners were established as 'city-level consortiums' made up of the local authority, local service providers and civil society organizations, and the regulatory agency, led by a civil society organization. In addition, the media were invited into the consortium so that everyone knew from the very beginning what the objectives were.

The role of the consortium was to foster dialogue between consumer representatives and providers, which grounded the tool and ensured wide stakeholder understanding of the process. The consortiums developed a focus group discussion checklist, verified the survey instrument, reviewed the top line findings and prepared service improvement action plans in preparation for the launch. After the launch, the consortiums reported their progress against their action plans every six months.

Undertaking water governance assessments: 6 key messages

1. **Seek a comprehensive approach.** Develop an assessment framework that combines different approaches to understanding current water governance realities and measure the performance of current governance systems in relation to the desired future. Start from where the water sector stands today by analysing what the current water governance situation is and why it is so. This pragmatic approach provides the basis from which to develop a better picture of governance principles, institutional incentives and stakeholder performance in order to identify what stakeholders can do to improve water governance.
2. **Think outside the 'water box'.** Water governance is dependent on broader governance in society. It is thus critical to assess and analyse water in a broad stakeholder, institutional and context analysis.
3. **Go beyond formal institutions and stakeholders.** To understand how the water sector functions and performs, go beyond formal institutions and stakeholders since decisions on water may be made elsewhere. Assess and analyse formal and informal institutions and stakeholders and how they interact.
4. **Include the role of politics and power relations.** Governance is at its core a political—and not a technical—process. It is about controlling decision-making that results in who gets what water, when and how. When undertaking assessments and policy reform, be sensitive to other political events, such as elections, public sector reform and reform in other sectors such as environment, agriculture and energy.
5. **Optimize stakeholder participation and ownership throughout the entire assessment process.** Developing a solid water governance framework and methodology is key, but it is equally important to make sure that the assessment is firmly anchored in relevant policy processes. Secure support and commitment from key stakeholders and engage them early on when formulating the assessment framework and methodology to gain their input, buy-in and commitment.
6. **Seize the moment.** The timing of assessments can be important. For example, perceived or real crises due to floods and droughts can be opportune times to convince key stakeholders on the need to conduct assessments to prepare for water governance changes.

Questions for reflection

- What kinds of mechanisms can be established to encourage a participatory and inclusive approach in selecting an assessment framework and indicators?
- What factors should be considered when initiating an assessment process that will give the assessment more relevance and traction?
- What are the kinds of indicators that should be combined in an assessment to make it more balanced?

Chapter 4

HOW to assess institutions and stakeholders

Chapter highlights

This chapter provides practical guidance on how stakeholders and institutions can be analysed in the context of a water governance assessment. Inspired by political economy analysis and particularly the institutional and context analysis developed by UNDP, it includes some suggested research questions and a methodology for analysing and engaging with stakeholders. An overview of the linkages between water governance considerations and the broader political economy context can be found in Annex 2.

How to conduct an institutional and context analysis

Like other types of water governance assessments, an institutional and context analysis can be applied at different levels (for example, at the transboundary, national and project levels), either as part of a larger exercise to assess a sector or to inform the assessment process itself. Box 4.1 provides an example of such as assessment at the transboundary level.

Irrespective of the geographic level, the methodology is similar and is based on three steps: a stakeholder mapping, a stakeholder analysis, and a stakeholder engagement strategy. These steps are described in detail below. In reality, however, they are not always clear cut, and it is ultimately up to the user to decide on both the content and the design of the assessment. Some sample questions to frame an institutional and context analysis for the water sector are listed in Box 4.2.

Step 1: Map stakeholders

In order to assess how water is governed in a certain context, it is crucial to understand how the sector is organized. What

Box 4.1 Political economy analysis at the transboundary level: Regional Water Intelligence Reports

A useful example of a political economy analysis of the water sector is the Regional Water Intelligence Report (RWIR) developed by the Stockholm International Water Institute. Acknowledging the need for such analysis at the regional level, a RWIR provides regular updates on the political economy of transboundary water resources issues, management and development. It focuses on the socio-economic aspects of water management and highlights the links between water, energy, food and human security from a regional perspective.

Regional Water Intelligence Reports offer a unique yet flexible methodology to assess the role of water from a regional perspective. They apply a combination of 'soft' (political economy analysis) and 'hard' (indicators on water coverage) data to the analysis. The reports have a regional perspective but also include commentary on local, national and global influences such as markets, trade and climate change. The RWIR is primarily meant to inform multilateral and bilateral financing institutes on pre-investment and to support clients in the processes important for investments. To date, the tool has been applied in three regions: the Nile Basin and South Sudan, Central Asia and the Middle East.

Box 4.2 Sample questions for an institutional and context analysis on water

- **How politically important is water in a particular national context?** For example: Does the country have ample water resources or is water considered scarce? Is the country dependent on water coming from neighbouring countries (high water dependency)?
- **What is the ownership structure in the sector?** For example: Who owns and is responsible for the maintenance of physical water infrastructure? What is the private and public sector division related to water services? Who owns informal water services companies (private water vendors)? Who controls/owns water wells?
- **How are roles and responsibilities distributed between the national and subnational levels and is this distribution clear?** Are there groups at the national level that oppose decentralized decision-making (that is, the surrender of some powers)? For example: Does decentralization of power come with transfers of funding and capacities? Are water basin organizations mandated with the power to carry out their functions?
- **How are water roles and responsibilities distributed at the national level among different ministries and government agencies?** Is this distribution clear? For example: Are coordination mechanisms in place? Are some ministries more powerful than others?
- **How is the sector regulated?** For example: Is there an independent regulator of water services and water resources? On what basis are water permits and licenses distributed? Who monitors and regulates water quality and pollution? Does existing regulation—including informal/*de facto* rules—provide integrity? What interests drive/maintain the current regulatory system (including its weaknesses or gaps)?
- **How are the sector and its components being funded?** This could include, for example, user fees, taxes/general budget, earmarked taxes and informal revenue generation.
- **What is the pricing structure for consumers?** Which groups benefit (for example, from subsidies)? Are groups that receive benefits politically salient/powerful? Which consumer groups have a voice?
- **Is there significant petty corruption and/or grand corruption in the sector?** If so, why does corruption persist and what are the main effects?
- **What opportunities for rent-seeking and patronage are related to the sector?** Who appears to benefit from these rents, and how is the patronage being used?
- **What are the legacies of the sector?** What reforms have been attempted and/or undertaken in the past? What were the results? And how does this experience appear to shape the current expectations of stakeholders?
- **What are the relevant policy processes linked to past or proposed reforms?**
- **Are there particular social or ethnic factors that are relevant for sector dynamics?**
- **What is public opinion of sector performance and/or proposed sector reforms** (including issues of trust/expectations that a reform would bring improvements)? Is water sector reform known by the public?
- **What stakeholders are (officially and unofficially) involved in discussions over sector reforms and what are their interests?** What veto points exist in the decision-making and implementation process?
- **What stake do the government/top executive/key political factions have in reform, if any?**
- **How would proposed reforms affect the existing set of interests and incentives?**
- **What risks exist in terms of reform failure and/or of negative unintended consequences of proposed reforms?**

Source: Adapted from Fritz et al. 2009.

is the latitude and degree of involvement of different types of stakeholders (government, private sector, NGOs, etc.)? Which informal actors influence the water sector (these often tend to be overlooked). Conducting a stakeholder mapping that identifies who the main actors are and what role they play is a useful initial step in a governance assessment. Such mapping also brings attention to interaction with and the impacts of stakeholders in other sectors that influence the water sector, including the role of international donors in shaping and influencing water policy.

A [assessment] tool cannot capture everything, but you should not have a tool that only looks at institutional behaviour. You should not think that institutional processes can exist without local politics. If you really want to work on governance you have to look at the politics. You cannot easily capture power games in tools, but you should be aware of the importance of them.

– One of the experts interviewed for this User's Guide

Table 4.1 lists examples of stakeholders in the water sector. A mapping can focus on several aspects, including the type of actor (public, private, civil society, external) or the geographic/ administrative level in which the actor is engaged (nation, region, province, and municipality).

A stakeholder mapping can also help clarify the different roles and functions various actors perform in the sector. This can be useful in identifying overlapping roles and mandates, thereby highlighting gaps and redundancies in the institutional framework with effects on cross-sectoral coordination and sector performance. Box 4.3 illustrates how this was accomplished using methodology developed through the Middle East and North Africa Regional Water Governance Project.

At a more detailed level, a stakeholder mapping can be used to identify which processes different actors are involved with in the sector and to assess how effective these entities are in carrying out the responsibilities listed in their statutes and charters. Box 4.4 explains how such processes were analysed in a stakeholder mapping that was part of the Palestinian Water Integrity Assessment.

TABLE 4.1 EXAMPLES OF TYPES OF STAKEHOLDERS IN THE WATER SECTOR

Public sector	Private sector	Civil society	External
· Ministries (water, health, environment, agriculture, tourism, etc.) · Transboundary water institutions · Regulator · River basin organizations · Monitoring & evaluation unit(s) · National statistical office · Observatories · Ombudsman · Parliament · Courts · Local government/ councils · Commission(s) (for example, anti-corruption or human rights commissions) · Political parties	· Utilities · Water vendors · Corporations and businesses · Business associations (drillers, handpump mechanics) · Professional bodies/ associations (water operators, cesspool cleaners) · Financial institutions	· Water users · Water user associations · Media · Religious groups · Research institutions and think tanks · Universities · Social movements and advocacy groups · Trade unions · National NGOs · Community- based organizations · Traditional authorities	· Bilateral donors · International bodies (such as the United Nations, World Bank) · International NGOs

Source: Adapted from the Overseas Development Institute website: Research and Policy in Development, Stakeholder Analysis.

Box 4.3 Stakeholder mapping in the Middle East and North Africa Regional Water Governance Benchmarking Project

A useful example of a stakeholder mapping exercise in the water sector is the Middle East and North Africa (MENA) Regional Water Governance Benchmarking Project, known as ReWaB.[20] To get an idea of the number of actors involved in the various sector functions, and where the gaps exist, this project developed and used an 'organizations and functions matrix'. On its vertical axis the matrix has the name of water-relevant organizations in the countries (identified prior to the exercise with the local partner). On its horizontal axis are the names of the five standard functions in a water resource sector (that is, organization; organizing and building capacity in the water sector; planning and allocating water strategically; developing and managing water resources; and regulating water resources and services). During a rating workshop, sector stakeholders were tasked with assigning a value assessing the level of influence each organization had over decision-making related to each of these five standard functions. In this exercise, 'influence' means that the organization 'has an impact on the decisions that are made relative to this function', and it is the actual level of influence and not the nominal or 'on paper' degree of influence that should be rated.

Box 4.4. Stakeholder mapping and analysis in the Palestinian Water Integrity Assessment

In undertaking a Water Integrity Assessment in the occupied Palestinian territories, it soon became clear that to achieve the objective of assessment, it was very important to have a clear understanding of the potential roles and contributions of the various stakeholders in processes taking place within the sector. One of the first steps of the assessment was a stakeholder mapping and analysis, which was conducted to analyse gaps in policy, legislation and institutional setup. This was done to identify the corruption risks in the water sector and to understand each stakeholder's source of legitimacy, roles, responsibilities and potential contribution to combating corruption. The stakeholder mapping exercise consisted of the following steps:

- **Identification of stakeholders**. Water sector stakeholders in Gaza and the West Bank were identified and defined in relation to their involvement in the water sector.
- **Listing of stakeholders**. A comprehensive list of stakeholders who have a stake in the sector, and who can significantly contribute to combating corruption, was prepared, discussed and approved by the two assessment teams.
- **Process analysis**. Water governance structures and processes taking place and the role stakeholders play in the water sector were described.
- **Overall analysis**. The importance and influence of the main stakeholders involved in water governance were carefully detailed and analysed.
- **Identification of gaps and tasks**. For the main institutions involved in the water sector and initial analysis of the corruption risks, a clear and coherent assessment was created.

The findings of the stakeholder mapping were later used as a basis for the overall integrity assessment.

20 USAID/International Resources Group 2009.

Step 2: Analyse stakeholders

After the stakeholders have been mapped, the next step is to undertake a stakeholder analysis that identifies and analyses relations that are critical for governance system functions. Such an analysis is also important to gauge the potential for success of the planned reforms.

The focus should be on analysing the interest in, incentives and power/resources to influence water sector reform, often with a focus on the political dynamics affecting the sector. In this context, *power* refers to the capacity of a stakeholder to positively or negatively affect decision-making in the sector. A stakeholder analysis can also be undertaken for the stakeholders involved in the assessment process itself. In this case, *power* refers to how a stakeholder can affect the course of a governance assessment itself and the findings it produces. The stakeholder's relative power is determined by a series of variables, such as: formal authority; informal authority (of a traditional nature, for example); and access (to other stakeholders and resources—financial, informational or of another kind). *Interest* is determined by the maximization of benefits, and includes the interest that the stakeholder has in the issue at hand, ranging from low (status quo) to high (committed to reform). Interest may include expressed preferences, but also what can be analysed as strategic interests that actors may not yet be aware of. Some broad questions to guide the discussion on *interest* are the following:

- What are the main interests of the actors identified? This can include interests of a material or reputational nature, or those related to a specific agenda (for example, the interests of an informal water vendor will be different from those of regulators).
- What are the key linkages among stakeholders? Who is accountable to whom?
- Who gains from the status quo? Who stands to gain what from reforms? Who loses with a change in the state of affairs? What do they stand to lose? For those with the most to gain or lose from the project, what is their capacity to act on their incentives?
- If reforms in this area have failed in the past, what makes actors support them now? How and why have their interests changed?

It is also useful to draw a diagram to help visualize the types of stakeholders that may affect the project and the best way for the assessment team to engage with them, as shown in Figure 4.1. To do this, list all key stakeholders and answer these three questions:

1. How much formal or informal power does each stakeholder have (that is, to what extent can they influence the outcome of the project concerned), on a scale from 1 to 4?
2. How much interest does each stakeholder have in the success of the proposed project, on a scale from 1 to 4?
3. Based on the answers to the first two questions, how should the assessment team engage with different sets of stakeholders?

FIGURE 4.1 POWER AND INTEREST GRID FOR STAKEHOLDER ANALYSIS

Power	Significant influence (4)				
	Some influence (3)				
	Little influence (2)				
	No influence (1)				
		No interest in reform (1)	Little interest in reform (2)	Some interest (3)	Significant interest (4)
		Interest			

Source: Adapted from: United Nations Development Programme, 2012, *Institutional and Context Analysis Guidance Note,* Oslo Governance Centre, Oslo.

When assessing the power and potential influence of an actor, it is also important to look at the **networks** in which the actors are embedded. Actors should not be viewed in isolation, but as embedded in networks, in the formal and informal spaces where they operate. What are the formal reporting lines (see, for example, organograms within agencies)? What are the areas of formal or informal interaction? What is the nature and frequency of the exchanges?

Step 3: Develop a stakeholder engagement strategy

Once the stakeholders have been mapped and their interests analysed, the next step is to develop a strategy for engaging with the different stakeholders during the course of the assessment or the project. By now, potential allies in advancing project objectives and those that can block the project or in other ways affect it will already have been identified, along with the kind of engagement required. The specific engagement strategy for each particular actor depends on his or her position on the power/interest grid, especially those with high power-high interest (potential champions), low power-high interest (potential allies of champions) and high power-low interest (potential blockers).

- Which stakeholders would bring most traction to a positive change process? How can they be supported?
- How can remaining stakeholders be engaged, before and during project implementation?
- What kind of collective action by stakeholders or a coalition of stakeholders could enhance their influence and lead to or block change?
- Who should lead implementation of the project or the governance assessment initiative?
- Who should be represented on the advisory board/steering group?
- Who should be consulted? When and how?
- Who should be informed? When and how?

Types of engagements are also important to consider, such as:

- **Owner of initiative**. At this level, stakeholders 'own' initiatives for policy development and service delivery, and provide the necessary monitoring and evaluation as full owners of the process.
- **Partnerships**. At this level, consultation is turned into actual collaboration, where institutions, organizations and citizen forums take the initiative in policy development and implementation.
- **Representation**. At this level, stakeholder preferences are represented in the management of the project, through the advisory board and other means.
- **Consultation**. Consultation engages institutions, organizations, citizens and stakeholders in dialogue and networking, and involves stakeholder analyses and issue-mapping.
- **Information & awareness**. At this level, actual 'participation' is minimal and includes information-sharing, public awareness campaigns, educational initiatives and the training of staff.

When engaging with **informal actors**, it is important to consider:[21]

- **Internal governance**. Informal actors vary in their internal structure, and can be politically exclusive or internally democratic. Ask: Does the internal governance of the informal actor operate in consistency with the principle of promoting sustainable development for all? Is there a system of accountability of some sort?
- **Legitimacy and relationship to the state**. Does the population see the informal institution as legitimate? Does the local population trust the institution, or rely in its services? Are the institution/informal actor goals in conflict with the goals of the state? An example is customary water rights. Are the 'clients' of the informal actor satisfied with the quality of the services provided?
- **Norms and principles**. Are the principles and performance of the institutions in line with democratic governance principles (gender equality, social inclusion and public participation)?

21 United Nations Development Programme, 2011, *Informal Actors and Institutions in Governance. Know the rules, engage the actors*, Discussion paper (draft).

Questions for reflection

- What are the advantages of mapping stakeholders in an assessment process?
- What tools can one draw on to better understand the key stakeholder categories in water governance in your area and how the interests of these groups overlap or converge?
- What information is important in designing a stakeholder engagement strategy in an assessment?

Chapter 5

HOW to assess governance principles: Transparency, accountability and participation

Chapter highlights

Translating key governance principles[22] such as transparency, accountability and participation (TAP) into practice is considered essential for the efficient management and performance of water resources, and the efficient and equitable delivery of services (see Chapter 6 on performance). The internal and external mechanisms aimed at promoting TAP can help to identify and address governance bottlenecks in the management of water resources, including corruption risks—one of the major factors for resource leaks and poor performance in the water sector. [23]

The assessment of TAP within the water sector focuses on measuring: the effectiveness of existing systems and processes to make information open and public; the functioning of compliance and oversight mechanisms, both internal and external; and the level of participation of citizens/end-users in decision-making processes. This chapter looks at assessing the function of TAP mechanisms—along the value chain—on the institutional side as well as perceptions and experiences of stakeholders in accessing water services, particularly as they relate to corruption. The perceptions and experiences of stakeholders can serve as feedback mechanisms to the public sector. Evidence suggests that low levels of TAP contribute to corruption (see Box 5.1 on common corruption risks in the water sector), and identifying corruption risks can help in understanding gaps in TAP mechanisms. In addition, the findings of these assessments can enable stakeholders/rights-holders

Box 5.1 Summary of types of corruption in the drinking water and sanitation sector

- Collusion (kickbacks or bid-rigging) and extortion in procurement procedures for construction and maintenance works
- Collusion during the quality control of construction and rehabilitation of water infrastructure works
- Unwarranted contract variations and renegotiations
- Capture of profitable contracts and (re)negotiations by private companies for water concessions
- Embezzlement of government and foreign aid funds and assets
- Bribery of utility officials to evade water fee payments or allow illegal connections
- Political mismanagement of municipality utilities to win votes with low tariffs
- Nepotism and kickbacks in the appointment and promotion to lucrative positions
- Officials profiting from giving 'licenses' to informal water providers
- Central and/or local-level elite capture of water provision services and committees
- Bribery related to the awarding of licenses for wastewater discharges that pollute open water
- Corruption in sector water use rights (including groundwater).

Source: UNDP 2011, *Fighting Corruption in the Water Sector*.

22 Other governance principles include rule of law, responsiveness and a consensus-orientation. See <https://www.un.org/en/globalissues/governance/>, accessed 16 June 2013.

23 Stålgren 2006.

to demand greater accountability from duty-bearers.[24]
This chapter also highlights key tools that can help in evaluating TAP at different levels within the water sector (that is, at the point of service delivery or at the institutional level) and related elements that contribute to TAP, such as ethics infrastructure and established standards.

Assessing transparency

Transparency refers to openness of governance processes and free access to official information. Transparency is a prerequisite for improving accountability and lowering levels of corruption, but it is contingent on access to official information, and free and wide circulation of print and broadcast media to disseminate information. Measuring transparency is related to assessing the openness of various governance processes and the level of access to information related to those processes. For instance, measuring transparency could include evaluating:

- the availability of information about who, how and what decisions are made at the local, subnational, and national level related to water allocation and the management of the water sector (such as licensing and tariff-setting)
- information about access to water and sanitation
- availability of information on the quality of water
- how much revenue is generated against the volume of water provided
- information about repairs and new constructions/investment in water sector.

In measuring transparency, assessments should also take into consideration:

- **The relevance of available information**. Is the information available in a format and language that is easily understood by non-experts? Is the information accurate, up-to-date and timely (that is, was it available prior to key decision-making processes such as planning, a town-hall meeting or water licensing)?

- **Accessibility to information**. Is information easily available on websites or on public notice boards? How long does it take to get the information, if requested, from a particular water agency?

The case study presented in Box 5.2. illustrates the different kinds of indicators that can developed to assess the level of transparency in integrated water management.

Assessing accountability

Accountability refers to a set of controls, counterweights and supervision modes that make officials and institutions in the public and private sector answerable for their actions. It also sanctions against poor performance, illegal acts and abuses of power.[25]

There are several forms of accountability—*vertical*, *horizontal* and *social*. This chapter emphasizes horizontal and social accountability. Horizontal accountability refers to mechanisms of internal oversight and checks and balances within an institution (internal control) or oversight and checks and balances of public institutions. Examples of internal control mechanisms include monitoring and evaluation of services provided, and rules and regulations related to fiscal management. An independent body may exist to oversee internal control and provide support to state institutions to achieve compliance with established standards and norms. The state oversight institutions have the legitimacy and power to demand accountability on both fiscal management and performance of the sector (related to equitable provision of water and sanitation services, quality of services, and opportunities for participation). Table 5.1 lists different oversight institutions and explains their role in carrying out oversight in the water sector.

Measuring horizontal accountability involves looking at how these oversight institutions establish laws, rules and regulations that govern the accountability relationship between oversight institutions and sector institutions. Assessing accountability relations helps in assessing the independence of oversight institutions, and the institutional/administrative capacity to comply with the demands of oversight institutions. The case study methodology developed by UNDP in Latin America and the Caribbean is a good example of how different

24 UNDP 2011, *Fighting Corruption in the Water Sector: Methods, tools and good practices*, UNDP, New York.

25 See: United Nations Development Programme, 2012, *Impact of Accountability in Water Governance and Management*

Box 5.2 How transparent are water agencies in Spain?

Research suggests that corruption risks and lack of integrity are more pronounced when actors "with no history of interaction" engage with each other.[1] River basin organizations are often newly created institutions within the water sector and thus prone to integrity risks. Disclosure of information to the public on infrastructure projects, funding and planning procedures is an important step towards transparency that enables citizens to participate in water governance and in holding water agencies accountable.

To promote transparency in the water sector, Transparency International Spain has developed the Water Management Transparency Index (Indice de Transparencia en la Gestión del Agua, or INTRAG). This tool looks at the status of transparency among Spanish water agencies and assesses and compares the level of transparency of river basin organizations, based on information available on their websites. By publicly ranking the level of transparency of such organizations, they have an incentive to improve their scores.

Transparency International Spain has collected examples of indicators to assess overall transparency and the availability of information on the:

- procedures for contracting service providers
- organizational structure of the river basin/water agency
- procedures to submit information inquiries to river basin organizations
- schedule and programme of work for the development of hydrological plans for the district.

In total, 80 indicators are scored for each river basin organization and shared with the agencies. The water agencies then get a chance to improve their preliminary scores by uploading additional information. Comparing the 2011 index from that of 2010 shows that the scores of all water agencies, with one exception, reflected new information added to their websites.

Last year our water agency was rated very low in the Water Management Transparency Index. This low performance was a great argument to go to our director's office and advocate for more transparency.

– Officer in a Spanish water agency

WATER MANAGEMENT TRANSPARENCY INDEX FOR SPAIN, 2010

Source: Copyright © Transparency International Spain

1 Butterworth, J., 2008, 'Can Integrated Water Resources Management Prevent Corruption?', *Global Corruption Report 2008: Corruption in the water sector*, Cambridge University Press, Cambridge, U.K., p. 32.

TABLE 5.1 OVERSIGHT INSTITUTIONS AND THEIR ROLES

Oversight institutions	Role
State audit institutions	Conducts fiscal and performance audits (including audits related to quality of water services) of water sector institutions and recommends actions to be undertaken based on audit findings.
Oversight bodies (ombudsmen, anti-corruption agencies)	Monitors compliance with international norms (such as the right to water, UN convention against corruption), monitors and seeks action against malpractice, corrupt actions or abuse of power. Can also receive complaints from users and call on water sector institutions to respond to complaints.
Public prosecutor	Functions vary depending on the country context, but usually involve defense of public and collective interest and human rights, and monitoring of the public service.
Public services control bodies	Ensures quality of services, according to established standards.
Consumer protection agencies	Protects the rights of end users, can receive complaints and seeks redress from water sector institutions.
Access to information institutions	Ensures relevance of and accessibility to public information.
Water users organizations	Ensures that the interests and needs of its membership are met in decisions over the distribution of water.

Source: Adapted from United Nations Development Programme, 2012, *Impact of Accountability in Water Governance and Management*

accountability mechanisms in the water sector and their impact can be assessed. See the *Source Guide* for more details on the case-study methodology to assess accountability relations.

Several indicators can be used to assess the institutionalized relationship between those that are held accountable and those that demand accountability. The indicators aim to identify clear effects of the actions taken by the state and social stakeholders to seek accountability. It is important to note that the effectiveness of accountability is subject to contextual variables. Examples of indicators include:

- Public performance audits and their administrative, fiscal, disciplinary and criminal findings
- Official warnings and sanctions
- Compliance reports of water sector institutions responding to audit findings
- Commitments and resource delivery
- Sectoral studies that assess the quality and frequency of interaction between oversight institutions and water sector institutions
- Management of claims and complaints
- Requests for information, systematization and assessment of information provided by providers, and existence of information systems
- Support to use of public spaces and mechanisms encouraging participation
- Water quality.

In the water sector, well-functioning accountability mechanisms can help to clarify the commitments of actors involved in water governance and lead to efficient management of fiscal resources. They can also help protect water resources and increase control over the actions of public and private stakeholders, while ensuring minimum quality standards.

Social accountability refers to actions taken by people, the media and civil society organizations to hold states and decision makers to account. Social accountability mechanisms vary. They include: investigative journalism, public hearings, opinion polls, citizen report cards, participatory public policy-making, public expenditure tracking, citizens advisory boards, and information and communications technology platforms, among others.[26] It should be noted that some of the mechanisms foster greater empowerment of citizens than others. For example,

26 See United Nations Development Programme, 2010, 'Fostering Social Accountability: From principle to practice', UNDP Oslo Governance Centre, Oslo, Norway.

citizen report cards can be useful for providing information on water users' perceptions of the performance of a water utility. However, they may not always instil real empowerment among users in the management of the utility, since managers can decide to ignore this information. Alternatively, users committees and users representatives can participate at much higher management levels and participate in decision-making on issues including planning, investments, policies, service, budgets, fees and personnel.

Social accountability is particularly important in the context of public service provision, which often operates in a monopolistic market with little competition. Social accountability mechanisms can help strengthen the role of citizens and civil society in understanding their rights and entitlements; they can also engage them in benchmarking and monitoring service provision. In other words, they perform a watchdog role. If service providers realize that they need to be accountable towards a strong group of citizens, adherence to quality standards within the public service delivery sector can be increased. See Box 5.3 for an example of a social accountability tool known as citizen report cards. The methodology of the citizen report card is further explained in the *Source Guide*.

Assessing participation

Participation refers to the possibility for citizens to provide informed, timely and meaningful input and influence decisions at various levels. Participation in processes where decisions concerning the water sector are taken is a necessary condition for exerting social accountability. Participation refers to the mechanisms used by citizens to express themselves and to influence decisions and processes in the political, economic and social sphere. Attending town hall meetings and being heard, actively contributing to and shaping advisory committees, voting, protesting or carrying out a referendum are examples of participation mechanisms in political processes, decision-making and planning.

Public participation can occur at different stages of the policy cycle (see Chapter 3). In order to determine and analyse the nature of participation, the case-study methodology is useful. For instance, UNDP used case-study methodology to evaluate different accountability and participation mechanisms in Brazil. Interestingly, the study revealed that institutionalization

Box 5.3 Extract from a citizen report card for the clients of the Nepal Water Supply Corporation (Biratnagar branch)

1. Were you asked for extra money other than required for the connection? If Yes,
   How much?
   Whom did you pay?
   When did you pay?

2. If you paid willingly, whom did you pay?
   How much? Why?
   Have you got the receipt for the payment of the water charge?

3. If Yes, when do you pay the charge?
   If No, how do you pay the charge?
   When is the meter checked?
   - Monthly
   - Every two months
   - Every third month
   - Semi-annually
   - Annually
   - Other
   - Don't know

4. Do you think the bill amount you receive is correct, or not?

5. Rank the following reasons that aid corruption (1 – Very important, 2 – Fairly important, 3 – Important, 4 – Not important, 5 – I don't know)
   - It is our tradition
   - Low salary of the local staff
   - Lack of transparent and accountable political system.

of participation in a river basin committee in São Paulo led to the same civil society actors monopolizing participation in water sector decision-making bodies. The same stakeholder groups represented civil society for upwards of 20 years. At the same time, the committee is dominated by state representatives and civil society has only one-third representation on the committee, which also affects its ability to influence decisions. More dynamic and broader participation occurred at the local level, where citizens actively engaged in the decision-making processes in the water sector. Assessing the nature of participation will help determine ways and means to encourage more broad-based and meaningful participation.

Key questions for assessing participation:

- Do certain legal provisions guarantee participation?
- Which kinds of other mechanisms are in place to enable participation?
- Who participates (data should be disaggregated by gender and age)?
- Is the participation representative of the community?

Examples of water integrity assessments include:

- *Water Integrity Assessment in Uganda*, conducted by the Water Integrity Network and the Water and Sanitation Programme Africa, World Bank
- National integrity studies by Transparency International chapters: *Ghana's National Water Supply Integrity Study, National Water Integrity Study* (Kenya)
- *Integrity Assessment of the Water Sector in the Republic of Tajikistan*, carried out by UNDP and the Government of Tajikistan
- *Integrity Assessment of the Water Sector in the Occupied Palestinian Territories*, by the UNDP Programme of Assistance to the Palestinian People (PAPP), World Bank and the UNDP Water Governance Facility.

Using integrity assessments to measure transparency, accountability and participation

Integrity in governance refers to the entirety of all policies, systems, principles and procedures put in place within a sector to enable consistency in delivering results, to promote TAP, and to increase resistance to corruption and the leakage of resources. In order to promote TAP, rules and regulations need to be adopted, effectively implemented and monitored. Integrity assessments assist in defining and evaluating the different elements that together contribute to TAP, and identify steps to improve them.

The three assessment cases/methods showcased in Table 5.2 illustrate how to develop an assessment framework. The three cases are: The TAP Risk Map, developed by Transparency International; the Annotated Water Integrity Scan, made available by the Water Integrity Network; and the method used in the study, *Assessment of the Water Sector in the Occupied Palestinian Territories*, published in 2012 by the UNDP Water Governance Facility at the Stockholm International Water Institute. All examples are based on a similar approach that involves three methodological steps:

1. Defining the principles that form integrity
2. Providing a clear, measurable definition for the principles
3. Listing the area of assessment at a certain governance level.

Table 5.2 illustrates which principles have been selected for the three different assessments and how the principles have been defined. For instance, the study carried out in the occupied Palestinian territories uses participation as a principle of integrity defined as the "existence of participatory processes used by local governments to consult with and seek the views of the community that they serve." This description of participation was then applied to certain governance areas or processes (in this case, procurement, allocation and re-allocation of bulk water and billing and fees collection) to assess whether participation is applied as defined. Table 5.2 also explains which risk areas and processes were selected for the assessment using the principles. Box 5.4 provides more details on the methodology used to visualize transparency, accountability and participation risks while developing a TAP risk map in Kenya.

TABLE 5.2 COMPARISON OF DEFINITIONS AND PRINCIPLES USED BY SELECTED INTEGRITY ASSESSMENTS

	TAP Risk Map[1]	Annotated Water Integrity Scan[2]	Integrity Assessment of the Water Sector in the Occupied Palestinian Territories[3]
Level of focus of the integrity assessment	Formal and informal water service providers	Policy and legislation, regulation, investment projects and programmes, service provision, anti-corruption legislation	Legislation, policy, regulations, national planning, and budgeting Service provision and regulation
Principles			
Transparency	Existence of clear written rules and regulations defining relationships among actors	The existence of written procedures, agreements and contracts that explain the roles and responsibilities of actors	Possibility of reasonable public access to information concerning local government policies, budgets and activities that will strengthen accountability and responsiveness
Accountability	Availability and application of control mechanisms for holding actors responsible for their actions based on the rules and regulations	The application of written procedures and agreements and, where feasible, the potential compliance of actors (this is known as 'internal accountability')	Monitoring to guarantee accountability, which includes the existence of internal and external monitoring and checks on local state institutions to ensure accountability and probity
Participation	Accessibility of information to third parties with the possibility to influence rules and regulations	The ability of the public, and the users or their representatives (including marginalized and resource-poor groups) to access information, influence decision-making, file complaints effectively and be heard ('external accountability')	Existence of participatory processes used by local governments to consult with and seek the views of the community they serve
Ethics infrastructure	X	X	Presence of an ethical framework such as a code of ethics or a mission statement that acts as a guide regarding the behaviour of members, official policies and decisions. For the purpose of this study, issues such as equity, respect for social norms as well as pro-poor behaviours are considered part of the ethics infrastructure
Oversight	X	X	Monitoring to guarantee the accountability which includes the existence of internal and external monitoring and checks on local state institutions to ensure accountability and probity.
Standards	X	X	Rate of availability of integrity systems and regulations, including the presence of benchmarks (such as service integrity charter) for the delivery of, access to, or quality of essential public services, which enhances responsiveness and, over time, motivates improvements in the capabilities of local governments.

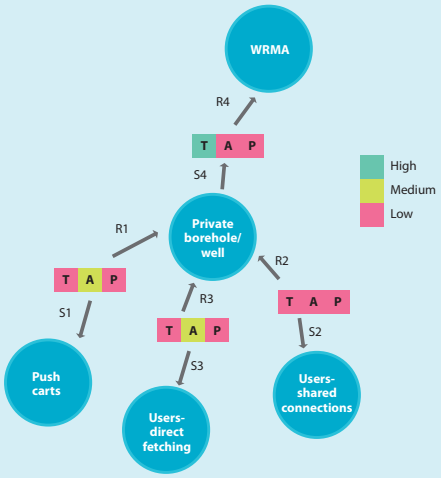
1 Transparency International Kenya, 2011 (see the National Water Integrity Study in Kenya in the Source Guide, p. 89).
2 Water Integrity Network (WIN) and the IRC International Water and Sanitation Centre, 2010 (see the Annotated Water Integrity Scan: A manual to help assess integrity levels of the water sector in the Source Guide, p. 63).
3 UNDP Water Governance Facility at SIWI and UNDP's Regional Water Governance Programme for the Arab States, 2012 (see the Integrity Assessment of the Water Sector in the Occupied Palestinian Territories in the Source Guide, p. 88).

Box 5.4 TAP risk map in Kenya

The informal water services sector in countries such as Kenya is highly non-transparent, and the interaction between actors such as service providers and consumers is not clearly stipulated in writing. As a result, informal service provision is often uncontrolled and prone to corruption risks.

The TAP risk map helps in visualizing which actors are involved in service provision processes. The method structures qualitative information on interaction among actors. Simple traffic light colouring highlights whether the risk level of transparency, accountability and participation in the interaction among different actors is high, medium or low. The interaction between private borehole or well owners and users of the water source is illustrated in a sample TAP risk map below. The map shows that levels of TAP are generally very low (indicated by the red colour). Transparency is perceived to be insufficient since tariffs for users are set verbally. Metering mechanisms are not in place to monitor abstraction by connected users who have paid flat rates for water, explaining the low level of accountability. Participation is also low since little information is available on abstraction.

TAP RISK MAP FOR PRIVATE BOREHOLE AND WELL OWNERS



	Well owners and pushart vendors (verbal agreement)
S1	Water provision for resell
R1	Payment of water on a pay-as-you-fetch basis
	Well owners and users shared connections (verbal agreement in the rent contract)
S2	Water provision for domestic use
R2	Payment of bills as fixed part of the rent
	Well owners and users direct fetching (verbal agreement)
S3	Water provision
R3	Pay as you fetch
S4	Quality and quantity control
R4	Annual payment for license and monthly payment of abstraction fee

Assessing corruption

Corruption assessments are the inverse of assessing transparency, accountability and participation. High levels of corruption weaken internal and external systems and processes that promote TAP.

Assessing corruption is often difficult since it thrives in a non-transparent—and monopolistic—environment. This means that data on corruption are not readily available or easily generated. People affected by or involved in corruption are often unwilling to talk about the topic, which makes it difficult to measure. Corruption in the water sector results in an increase in the cost of water service provision. The increase in cost affects the poor disproportionately since they have to pay more to access a fundamental need. Many factors contribute to corruption in the water sector, including 1) a weak legal and political environment, 2) low levels of accountability and transparency 3) weak technical and management capacity

within the water sector 4) political capture of water policies and projects, and 5) the international dimension of corruption, such as the role of multinational companies.[27]

In assessing corruption, proxy measures are especially important. It is often believed that corruption cannot be observed empirically. **Proxy indicators** therefore seek to assess corruption through indirect measures by aggregating many 'voices' and signals of corruption, or by measuring the opposite: anti-corruption, good governance and public accountability mechanisms.[28] Thus, the integrity assessments discussed in the previous section can help to identify potential corruption risks caused by weak internal and external TAP mechanisms.

This section highlights two types of assessments to measure corruption: 1) perception-based assessments and 2) experience/victimization studies.

The perceptions and experiences of stakeholders in accessing water services can help identify gaps in water governance. Specifically, corruption perceptions and experience studies can help to

- Analyse whether actors in the water sector comply with rules and regulations
- Understand the levels and forms of corruption.

Box 5.5 presents some key questions that can be posed in planning either a perception- or experience-based corruption assessment.

Using perception-based data to assess corruption

As previously noted, the secret nature of corruption makes it difficult to quantify, detect and assess. Despite this fact, most people have an idea of how corrupt their country, their institutions or leaders are even if they have not experienced corruption themselves. This is what is called the perception of corruption. By gathering data on the perception people have of corruption, it is possible to obtain an indication of what the actual level of corruption is. The question remains, however: How well do people's perceptions of corruption reflect actual

Box 5.5 Key questions when planning a corruption assessment

What does corruption in the water sector look like?

- What are the forms and scope of corruption in the water sector, and how do they vary across different segments of the sector and different systems of governance?
- How can precise empirical measurements of corruption in the water sector be developed to promote benchmarking and further policy development?

How does corruption affect the water sector?

- What is the impact of corruption on sustainable water development in terms of economic losses, social underdevelopment and environmental degradation?
- By what social, economic and political processes does corruption affect sustainable water use?

What are the solutions to reduce or stop corruption in the water sector?

- What types of agents best promote anti-corruption activities? How can these agents be identified and supported?
- What is the relative impact of different kinds of institutional reforms, and how should they be combined and sequenced to be most effective?
- How can anti-corruption activities in society at large be linked to the water sector and vice versa?
- Are there short-term negative effects of successful anti-corruption activities, and how do they vary across different socio-economic segments of society?

Source: Stålgren 2006.

27 UNDP 2011, *Fighting Corruption in the Water Sector*.
28 United Nations Development Programme and Global Integrity, 2008, *Users Guide to Measuring Corruption*, UNDP Oslo Governance Centre, Oslo.

levels of corruption? The way we perceive corruption depends on many factors, including our social and economic background, the political situation, the role of media in the country, our own experiences with corruption in the past and many other factors. Perception surveys can be conducted at the local and national level. Regional corruption barometers are other important sources of information about perceptions of stakeholders.

Using experience studies to assess corruption

Experience or victimization studies are useful in identifying the actual occurrence and frequency of corrupt acts. Box 5.6 presents one example of a corruption experience study conducted in the water sector in Tajikistan. The studies involve asking different stakeholders (end users, public officials, private sector providers and others) about their experiences—whether anyone knows about incidences where payments were made or accepted to fix leaky pipes or whether officials asked for extra money before providing services. While these studies can help determine the scope of corruption within the sector, they are also expensive and time-consuming. The sample size and its diversity can also raise questions about the credibility of the study. If a sample size is too small or is limited to a geographic or social group, the findings of the study can be called into question by other actors.

In addition to the above types of studies, levels and forms of corruption in the sector can also be determined through monitoring of services provided and management of infrastructure. Box 5.7. is an example of how monitoring techniques can be used to determine corrupt practices.

Some key factors to consider in conducting corruption assessments

- **No methodology can stand alone**. No single methodology can assess TAP and/or corruption. Given the complexity of measuring corruption, a mix of methodologies is required—depending on the local context—to identify gaps in internal systems and the level of experience of corruption within the sector. A mix of methodologies can offer a more complete picture on core issues contributing to the lack of TAP. Results from such assessments can inform reform processes within the sector and other broader governance reforms.

Box 5.6 Documenting corruption in Tajikistan's water sector

UNDP Tajikistan, along with its partners, conducted a study to identify corruption risks in the water sector. The study documented the experiences of end users. A total of 2,400 people were surveyed (700 in urban areas and 1,700 in rural areas). A mix of methodologies, including focus group discussions and questionnaires, were used to document urban residents' experience in the following areas:

- Public access to centralized water supply systems
- Maintenance of drinking water supply systems
- Transparency and accountability in drinking water supply (assessment of relationships with suppliers).

One quarter of the population reported making payments to repair their water supply line. Of these 25 percent, only 19.9 percent reported receiving receipts for repair work, and over 70 percent reported not receiving documentary confirmation of their costs. Furthermore, 82.7 percent of respondents paid their bill through the controllers rather than at the cashier's desk in the municipal office. At least 33 respondents reported that the controllers pocketed the money.

The findings from the study helped to identify key areas for reform in the water sector.

- **To effectively inform policy reform, assessments should be nationally owned and led**. Given the sensitivity around the issue of corruption, it may be important to build local ownership of the assessment processes—from defining the scope and identifying indicators to analysing the data and producing recommendations—by involving different stakeholders, including public officials, service providers and end-users. Local and national ownership would also ensure that the results of the assessments will be acted upon by local and national officials and will influence reform processes.

- **Ethical and moral repercussions of corruption assessments need to be taken into account**. Sharing information about corruption can put jobs, professional working relationships, businesses and even lives at risks. Ethical and moral considerations should therefore be integrated into any corruption research from the outset. The people involved in the research (informants, respondents, data collectors) must be made aware of the risks their participation may expose them to, and measures to protect their safety must be taken. Involving retired stakeholders from government or other organizations as informants can be one very useful source of information, since former employees may be more open to talking about corruption since they have less to lose.

  At the beginning of the assessment, it may not be clear what sensitive information will come out or what underlying power structures that fuel corruption will be revealed. That is why extra care needs to be taken at the outset. A first step when designing a corruption assessment is to ask yourself honest questions related to different political agendas, interests and purposes of the research, and whether the methods selected can be justified.

- **Ensure the quality of research**. Ensuring high-quality research on corruption and integrity is critical if organizations want to bring recommendations into the political decision-making process (see Chapter 3 for methodological guidance on how to ensure a high-quality assessment). One example of a possible trade-off may be between creating a manageable research process and incurring higher financial costs to select a larger and representative sample and conducting back-stopping. In this case, 'trading' a reduced sample size to cut costs is likely to affect the credibility and quality of the outcome. Another potential trade-off between quality assurance and anonymity could impact the research outcome. For instance, to randomly verify whether or not a citizen report card survey was conducted in a given location, interviewees must be willing to provide their names and addresses. However, people may not want to provide personal details and also talk about their experiences for fear of repercussions.

- **Use the 'c' word cautiously**. Many professionals working in the field of water have experienced a negative and defensive response when mentioning the word 'corruption'. Openly talking about corruption in an assessment may discourage or stop people from participating in the research as well as inhibit political endorsement of the recommendations and follow-up processes of a study. For instance, an interview question such as, Have you used bribes to get your water pipe fixed?, implies that the researcher assumes an engagement in corrupt or illegal practices. To avoid approaching the conversation in a confrontational manner, the question could be reformulated as, Have you heard of anyone who had to pay a bribe to get a pipe fixed? This approached was used in the *Ugandan Water Integrity Study* (see *Source Guide*), which, in addition to TAP, also focused on measuring experiences of end-users. The study used the expression 'gratification to win a procurement contract' to avoid the term 'bribes'.

  Furthermore, *where* and *by whom* these sensitive questions are asked are also important. This was evident in a study on integrity risks in water licensing in Chile and Kazakhstan (see the *Source Guide*), where international researchers had greater freedom to conduct their research. At the same time, however, their presence was also perceived as intrusive. On the other hand, the local researchers on the team feared they would lose their jobs for conducting research on a sensitive topic such as corruption. Forming a team of local and external researchers, devising a suitable interview and finding a safe location in which to conduct interviews can help reduce such risks.

Box 5.7 Short-drilling of boreholes: An indicator of corruption?

A micro-survey in Ethiopia carried out by the World Bank investigated corrupt practices in the construction and drilling of boreholes. Short-drilling of boreholes is a common practice whereby contractors drill boreholes to a shallower depth than the specifications in the contract require in order to cut costs. Another common practice to save money is to use low-quality material.

The study in Ethiopia compared the technical details from contracts between the government and contracting companies and the related invoices with the physical evidence from the actual boreholes. Closed-circuit television cameras were lowered into boreholes to measure the depth and analyse the construction material used. Although costly, the investigation showed that corruption was prevalent in a sample of boreholes, as indicated by apparent short-drilling practices. Based on the investigation, key recommendations were developed, including the strengthening of on-site supervision of drilling contractors by government bodies and communities. The role of regional drilling enterprises, in particular state-owned enterprises, have to also be restricted and clarified to reduce corruption risks in water service provision in Ethiopia.

Questions for reflection

- When assessing transparency, what are important considerations when examining the availability of information?
- What are some effective mechanisms for ensuring meaningful participation in water governance? How do issues of power and capacity affect stakeholders' abilities to participate in meaningful ways? What are some strategies to avoid monopolization of specific stakeholder groups to the detriment of other groups whose voices are not often heard?
- Why is the distinction between assessing the risk of corruption and measuring the occurrence of corruption important?

Chapter 6

HOW to assess performance: Effectiveness, efficiency and functions

Chapter highlights

This chapter discusses how to assess performance, which is an umbrella term referring to the capability of an initiative to be effective (achieve the desired result), to be efficient (produce the result with as little input as possible), and to comply with process criteria (conduct the right activities and steps in the process that are needed for achieving the desired result). Examples of desired results in the water sector may include improved access to clean drinking water, better management of groundwater and reduced water leakages. Examples of key processes and activities that are needed to achieve these results may include planning, budgeting, construction and billing. Scoring high on 'performance' is therefore an essential, and not simply a desirable, characteristic of any water governance system. The ultimate goal of strengthening water governance is to improve the system's ability to deliver. In this sense, water governance is a means towards an end.

Effectiveness describes the relationship between inputs on the one hand and results at the outcome and/or impact level on the other hand (for example, has the funding of this initiative been effective in increasing access to safe drinking water?). Efficiency is determined by the ratio of output to input (for example, how many boreholes can we construct for this amount of money using this particular method?). A simple way of distinguishing between efficiency and effectiveness is conveyed in the saying: Effectiveness is doing the right things, while efficiency is doing things right. The risk of measuring efficiency and effectiveness is that the terms are not neutral: The 'goals' and 'costs' are assessed differently by different stakeholders. Thus, it should be clear that different 'efficiencies' exist and that efficiency (and effectiveness) can be assessed from different points of view, taking into account the specific interests and values of specific stakeholders, such as those who are marginalized, poor or women.

Measuring effectiveness of performance

There are a range of water governance assessment tools that aim to measure effectiveness both directly and indirectly.

Direct measures of effectiveness

Direct measures of effectiveness focus on the degree to which results have actually been achieved. For example, at the time a national policy on water governance is evaluated, one may find that over a four-year period access to clean drinking water in rural areas has increased from 50 percent to 60 percent of the rural population. The effect is a 20 percent increase. To understand if this means that the policy has been effective, one has to compare the results with the stated goals of the policy. Simply put, if the goal was to increase access by 20 percent, the policy can be said to have been effective. However, if the goal was to achieve 100 percent access to clean drinking water the policy was not equally effective. Evaluation of effectiveness is always relative to the stated desired results. Moreover, deciding if a 20 increase is effective or not when a 30 percent increase is desired may require qualitative and subjective judgement.

It is also important to note that direct measures of effectiveness will only inform us about the degree to which a plan was effective, but not necessarily the reasons why. Without additional information it may be hard to judge if the effect can be attributed to the initiatives that were put in place or if it was

Box 6.1 Measuring effectiveness against the Millennium Development Goals

One hundred ninety-three countries have adopted the MDGs and agreed to achieve them by 2015 by implementing appropriate plans and measures. Each goal has a set of targets and indicators that help in determining whether the goal is achieved or not. For the water sector, *Goal 7: Ensure environmental sustainability* and *Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation* are of particular relevance.

In order to measure the effectiveness of plans adopted to achieve the specific target, it is necessary to establish a baseline, compare this with results obtained in 2015, and evaluate the degree to which the target has been achieved. The World Health Organization/United Nations Children's Fund (WHO/UNICEF) Joint Monitoring Programme for Water Supply and Sanitation has prepared a questionnaire on 'Core questions on drinking water and sanitation for household surveys' for use in comprehensive surveys that include questions on drinking water and sanitation. The questionnaire captures change at the impact level and may be a helpful survey tool for evaluating effectiveness.

In most cases it will be necessary to adapt the questionnaire to the specific country context and water sector ambitions.

GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

Millennium Development Goal 7

Goal 7: Ensure Environmental Sustainability

Target 10. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Indicators
30. Proportion of population with sustainable access to an improved water source, urban and rural
31. Proportion of population with access to improved sanitation, urban and rural

Source: WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation website, www.wssinfo.org, accessed 16 July 2013.

due to other factors.[29] Box 6.1 provides an example on measuring effectiveness of the Millennium Development Goals.

Indirect measures of effectiveness

Indirect measures of effectiveness include tools that focus on the range of factors that need to be in place to ensure that institutions, policies and programmes can operate as effectively as possible. These tools pick up the various constraints and opportunities that may hinder or further governance systems in achieving their stated intentions.

A plan, institution, programme or policy may look good on paper, but in reality many factors may frustrate its implementation. Such factors may include many different governance elements, such as the low capacity of institutions, poor legislative frameworks, overlapping mandates, perverted incentives, conflicts of interest and so on. Evaluations of effectiveness will often need to consider governance elements when discussing why a policy, programme or institution was effective or ineffective in achieving intended results.

Typically, from the perspective of effectiveness, governance weaknesses can be construed as 'governance bottlenecks'. The label 'bottlenecks' highlights processes in which the conditions for being effective are not in place and that typically delay and divert resources from the intention of the initiative. Many assessment tools therefore aim to identify such governance

29 See: World Bank, *NONIE Guidance on Impact Evaluation*, <http://siteresources.worldbank.org/EXTOED/Resources/nonie_guidance.pdf>, accessed 16 June 2013.

Box 6.2 Using the Water Governance Scorecard to assess effective water management

Developed by ODI, the Water Governance Scorecard measures factors that constitute good integrated water resource management. It stipulates that certain legislative and regulatory instruments need to be in place, and that a particular list of institutions, service providers and coordination mechanisms must exist and be functioning effectively.

Categories of the Water Governance Scorecard

Appropriate legislative frameworks, including:
1. Legislation for water allocation
2. Legislation for water quality
3. Existence of conflict-resolution mechanisms

Appropriate regulatory instruments, including:
4. Groundwater regulation
5. Land-use planning control
6. Nature protection

Functioning institutions, including:
7. Apex bodies
8. Basin organizations
9. Community resource management organizations
10. Regulatory bodies
11. Enforcement agencies
12. Awareness campaigns

Functioning water service providers that secure:
13. Urban water supply
14. Rural water supply
15. Water treatment
16. Irrigation and flood control

Functioning coordination mechanisms with:
17. Agricultural sector
18. Energy and forestry sector
19. Local governments.

bottlenecks. The Water Governance Scorecard developed by the Overseas Development Institute (ODI) offers a checklist of important governance functions and regulations where bottlenecks can occur (see Box 6.2).

Measuring efficiency of performance

Efficiency describes the extent to which time, effort or money is well used for the intended activity or output. While effectiveness is mainly concerned with the degree to which results have been achieved, efficiency is concerned with producing the outcome/impact with a minimum amount of waste, time, expense or unnecessary effort.

A number of tools have been developed to measure the efficiency of performance. These include the International Benchmarking Network for Water and Sanitation Utilities indicators, known as IBNET (see Box 6.3), the ISO quality standards relevant to water, and the work of the Food and Agriculture Organization of the United Nations (FAO) on irrigation schemes and industrial uses of water. Some other initiatives are more comprehensive and aim at integrated assessments, such as the System of Environmental-Economic Accounting for Water, known as SEEA-Water.[30]

30 For information on SEEA-Water, see: http://unstats.un.org/unsd/envaccounting/seeaw/, accessed 16 June 2013.

Box 6.3 Measuring efficiency using the IBNET indicators

The International Benchmarking Network for Water and Sanitation Utilities provides a set of indicators that allows such utilities to measure their performance against their own past performance and against the performance of similar utilities at the national, regional and global level.

Most of the indicators in the IBNET methodology are at the input and output levels of the utility's operations. The indicators are therefore very useful for evaluating efficiency. For example, the methodology includes indicators for unit operational costs (input) and the amount of water produced (output), allowing for efficiency estimates of how much the production of a cubic metre of water costs (the ratio of output to input). This information can also be used to compare the efficiency of one utility with another. For example, one utility may be able to produce water at a much lower unit cost. Its water production can therefore be considered to be more efficient.

Another example of efficiency indicators that IBNET also considers is the amount of waste. Most prominently it does this in terms of the indicators on non-revenue water. These indicators reflect the difference between water produced and water sold (that is, volume of water 'lost'). Non-revenue water is caused by: leaks (such as broken pipes in the distribution network); theft (such as pipes set up to bypass the meter or meter tampering); or legal usage for which no payment is made (donated water). Reducing the volume of non-revenue water will, by definition, increase efficiency.

In addition to measuring efficiency, the IBNET methodology also includes performance indicators that measure effectiveness as well as the performance of functions (process indicators). The IBNET methodology offers 12 categories of core performance indicators:

Core water and wastewater indicators categories

1. Service coverage
2. Water consumption and production
3. Non-revenue water
4. Metering practices
5. Pipe network performance
6. Cost and staffing
7. Quality of service
8. Billing and collections
9. Financial performance
10. Assets
11. Affordability of service
12. Process indicators

Measuring performance of governance functions

Measuring performance of governance functions requires conceptualizing functions as particular processes that need to be managed. These processes may then be described in terms of work flows, specific activities, steps that must be taken with the goal of providing a clear idea of how the process serves to transform inputs to outputs. Indicators that measure the performance of governance functions typically aim to capture characteristics that differentiate **processes** that are well managed from processes that are less well managed. These characteristics can be used to establish criteria for what constitutes a well-managed process. This may include actions and achievements with regards to specific requirements of pre-defined business processes or activities that are needed for achieving certain outputs. Moreover, performance measurements of governance functions can be essentially 'normative' in nature, or more of an 'audit'. The former focus on assessing conformity

Box 6.4 Measuring performance of governance functions using ReWaB methodology

The USAID-funded Middle East and North Africa (MENA) Regional Water Governance Benchmarking Project, known as ReWaB, aims to characterize water governance regimes in a number of Middle Eastern countries to allow comparisons both across countries and over time. To do this, it has developed a conceptual framework for assessing water governance that makes use of standards for water governance functions and subfunctions. These standards can be viewed as criteria for how certain water governance processes should be managed in order to qualify as being managed well. In some cases, the standards provided by the ReWaB methodology are specific requirements based on definitions of what qualifies as a good water governance process. For example, for the allocation of water to be optimally managed, the methodology argues that it is necessary to 'assess and manage third-party impacts of water'. For this particular water governance process to be qualified as well-managed, the criterion that 'third-party impacts are assessed and managed' must be met.

At other times, the ReWaB methodology outlines predefined sequential steps within a process. For example, for the process/function of 'planning strategically' to be optimally managed, the first step must include 'collecting, managing, storing and utilizing water-relevant data'. The second step must include 'projecting future supply and demand for water', based on the data that was obtained in step one. The third step must include 'designing strategies', based on the projections that were made in step two.

The ReWaB methodology offers process criteria indicators with regards to five key water governance processes/ functions:

1. Organizing and building capacity in the water sector
- Creating and modifying an organizational structure
- Assigning roles and responsibilities
- Setting national water policy
- Coordinating and integrating among subsectors, levels and national subregions
- Establishing linkages with neighbouring riparian countries
- Building public and political awareness of water sector issues
- Securing and allocating funding for the sector
- Developing and utilizing well-trained water sector professionals

2. Planning strategically
- Collecting, managing, storing and utilizing water-relevant data
- Projecting future supply and demand for water
- Designing strategies for matching expected long-term water supply and demand and dealing with shortfalls (including drought mitigation strategies)
- Developing planning and management tools to support decision-making

3. Allocating water
- Awarding and recording water rights and corollary responsibilities
- Establishing water and water rights transfer mechanisms
- Adjudicating disputes
- Assessing and managing third-party impacts of water

4. Developing and managing water resources
- Constructing public infrastructure and authorizing private infrastructure development
- Forecasting seasonal supply and demand and matching the two
- Operating and maintaining public infrastructure according to established plans and strategic priorities
- Applying incentives and sanctions to achieve long- and short-term supply/demand matching (including water pricing)
- Forecasting and managing floods and flood impacts

5. Regulating water resources and services
- Issuing and monitoring operating concessions to water service providers
- Enforcing withdrawal limits associated with water rights
- Regulating water quality in waterways, water bodies, and aquifers (including enforcement)
- Protecting aquatic ecosystems
- Monitoring and enforcing water service standards.

with normative criteria—what is 'good' allocation or 'good' regulation (see, for example, ReWaB, in Box 6.4. The latter, such as IBNET, attempts to assess the performance of the water sector viewed as a web of value-creation chains, examining the physical and economic flows within the water sector as a whole.

Questions that such measurements typically seek to answer often come in the form of: What needs to be done to achieve these outputs? For example, it may be considered essential that integrated water coordination committees hold regular meetings if they are to manage water resources effectively in an integrated manner. The outputs of such a process may be an integrated water resource strategy as well as actions required to follow up on this strategy. For these outputs to materialize, the integrated water coordination committee must meet regularly.

Efficiency, effectiveness and compliance with process criteria

Untangling what constitutes efficiency, effectiveness and compliance with process criteria can be difficult. The example below provides an illustration using a single service area, for a strategy that aims to improve access to safe drinking water. One can say that:

- The strategy is **efficient** if the resources that were invested were spent well—that is, provided maximum productivity with minimum waste/expense. For example, the strategy may include the construction and maintenance of water pipes. If estimates show that the construction was achieved at a relatively low cost, and that maintaining water pipes is reducing water and water leakages sufficiently to justify the cost of maintenance, then the strategy may be said to be efficient.
- The strategy is **effective** if the resources that were invested were sufficient to achieve the goals of the strategy. If the goal of the strategy is to provide access to safe drinking water for all by 2015, and the strategy achieves this, then it has been effective.
- The governance environment is **effective** (indirect effectiveness) if factors are in place for the strategy to be implemented as effectively as possible. For example, regulations and legislation on how public utilities should operate is clear, coordination among stakeholders is secured, and the capacity of the water ministry as well as that of public utilities is adequately resourced financially and in terms of human resources.
- Governance functions are performing well if the function processes comply with **process criteria**. For example, the strategy for securing access to safe drinking water may require that processes such as procurement of services and equipment are conducted successfully. Process criteria for procurement may include principles such as transparency for the purposes of reducing corruption and securing the best value for the money.

Selecting performance indicators

A performance indicator can be defined as a "…measurement of a piece of important and useful information about the performance of a program expressed as a percentage, index, rate or other comparison which is monitored at regular intervals and is compared to one or more criterion."[31]

Performance indicators can be used at the highest policy levels to measure progress towards an overarching purpose at the impact level of a policy or programme, such as providing 'safe drinking water for all'. Indicators are also commonly used to measure shorter-term or more intermediate results that are steps on the way to achieving an overall goal, often relating to various outcomes. Indicators can also be used to measure the quality and quantity of services produced (outputs), actions and achievements with regards to specific requirements of predefined processes (processes or activities), as well as resources that are used to produce these services (inputs). All of these different level indicators can be labelled performance indicators. Table 6.1 provides an overview of the different types of performance indicators at different levels.

Using measurements to strengthen performance

Measurements are not only tools for understanding how well the value-creation chain of a governance system is performing; they are also tools for strengthening performance. The key is how measurements are used by decision makers, managers

31 Office of Public Management, 1990, *Health Improvement/Health Service Planning Kit*, An OPM report, New South Wales.

TABLE 6.1 PERFORMANCE INDICATORS AT DIFFERENT LEVELS

Level	Level	Checklist	Example of an indicator	Example of a data source
Impact	Indicators used to track performance against the most ambitious objective upon which separate institutions, policies and programmes are expected to have a material effect.	The indicators must capture changes in people's lives or the underlying conditions of water resources; changes described are long-term effects, often reflect political normative goals and provide a rationale for activities, such as providing safe drinking water for all.	Percentage of people with access to safe drinking water.	Household survey of a national population.
Outcome	Indicators used to track short- and medium- term results.	Captures questions such as: Where do we want to be in five years? What are the most immediate things we are trying to change? What are the things that must be in place first before we can achieve our goals and have an impact?	Percentage of water samples taken at the point of water collection that comply with the national standard.	Data collected by the water laboratory of the ministry of health.
Output	Indicators used to track the quality and quantity of products or services produced.	Captures questions such as: What are the things that need to be produced or provided to achieve our short- to medium- term results? What are the things that different stakeholders in the water sector must produce?	Volume of water produced (cubic metres).	Benchmarking data from utilities/river basin organizations.
Input	Indicators used to track the amount of resources that are utilized, including financial and human. May also include legislation and policy instruments.	Captures questions such as: What are the resources that need to be made available and spent in order to achieve the desired outputs?	Amount of financial resources made available.	Budget and expenditure reports.
Process	Indicators used to track actions and achievements with regards to business process requirements (sometimes referred to as activity indicators).	Captures questions such as: What needs to be done to achieve these outputs?	Percentage of water points with actively functioning water and sanitation committees.	Audits.

Source: United Nations Development Programme, Oslo Governance Centre

and citizens to track results, both for the purposes of managing performance, but also for holding poor performers to account. Effective performance monitoring and evaluation is essential if countries, sectors and institutions are to know whether they are on track in achieving their objectives, and are to provide information that can be acted upon to maximize performance levels.

Within public sector organizations, measurements may be used as essential building blocks of 'performance-based management'. This is industry jargon for using a systematic approach to improve performance, based on a continuous and repeated process of establishing goals; measuring progress towards those goals; and using the results from those measurements to inform decisions on how to further improve performance. The term 'results-based management' is often used interchangeably with 'performance-based management' and can be defined through a similar cycle. Performance-based management requires that measurements are attached to a framework that assigns responsibilities for results, and that those responsible are held to account. In theory this is helpful in introducing the appropriate 'carrots and sticks' for rewarding

good performance and punishing bad—an incentive structure through which managers and staff can be encouraged to maximize performance (see Box 6.5).

Outside of public sector organizations, different measurements can also be used to strengthen accountability, which in turn may serve to enhance performance. Performance measurements can be targeted to higher-level decision makers and politicians, reinforcing different kinds of accountability relationships among actors and stakeholders. For example, institutions such as water commissions or parliament may be mandated to check other institutions, such as the ministry of water, and in these cases measurements may provide an evidence base against which progress can be tracked. This form of accountability is often referred to as horizontal accountability.

Similarly, measurements can serve as an evidence base allowing civil society organizations to monitor the performance of government. This form of accountability is often referred to as social accountability. In other cases, accountability can be strengthened through multi-stakeholder processes, offering a platform on which multiple actors can place a check on performance simultaneously (see Box 6.6 on Uganda; for more on how to measure accountability, see Chapter 5).

A word of caution when establishing indicators to enhance performance-based management: There is always the risk of getting it wrong and inadvertently creating perverse incentives, or of creating a measurement regime that requires too many resources, including time. One recommendation is to have managers within public sector organizations themselves

Box 6.5 Seven steps for establishing performance-based management

Step 1. **Define strategic performance objectives.** This could include, for example, the overall goal of a national water strategy.

Step 2. **Establish a theory of change by planning backwards.** Starting with impact, one needs to ask: Which outcomes are likely to lead to this impact? Which outputs are needed to achieve these outcomes? What activities are required to achieve these outputs? What kind of input and resources are required to conduct these activities?

Step 3. **Establish an integrated performance measurement system.** Measures are integrated and aligned within the organization, across stakeholders and aggregate from the regional to the national level.

Step 4. **Establish accountability for performance.** Ownership of each measure is formalized and resources allocated; managers use measures to evaluate performance; responsibilities for data collection, reporting and analysis are identified; reporting lines are established; checks and balances are institutionalized; oversight institutions are adequately funded and mandated; and consequences are enforced.

Step 5. **Establish a process/system for collecting performance data.** Data sources are identified; citizens' data and perspectives are included; transparent information systems are designed; and reliability, timeliness, accuracy and rapid access of data are addressed.

Step 6. **Establish a process/system for analysing, reviewing and reporting performance data.** Analytical capabilities are developed, results are analysed and validated, benchmarking and comparative analysis are completed.

Step 7. **Establish a process/system for using performance information to drive improvement.** Activity/process owners use performance information for continuous improvement; results are shared with decision makers, users and stakeholders; management feedback is provided for updating goals and measures; and performance information is used to identify opportunities for reengineering and reallocation.

set performance-based management indicators, rather than external actors or institutions. External actors are less likely to get the indicators right, since they do not necessarily know what information managers need to enhance their performance. Instead, the requirement of public sector organizations should be that they establish measures that, in their view, help them understand and improve performance. If and when they are assessed, they can demonstrate how they have satisfied the requirement and to what effect. The external assessment/audit question could be: Are they able to both gather information and monitor and evaluate data to inform decisions, and to use that data to makes smart choices?, rather than: Have they fulfilled the *externally set* requirement of producing *x* cubic metres of water in area *y*?

Higher-level indicators for measuring results, such as indicators at the outcome and impact levels, may be more appropriately set externally. Politicians, for example, may be best equipped to set political goals at the outcome and impact level—for instance, that access to safe drinking water in rural areas should be a priority. Public utilities and entities of rural water supply should then convert this overall strategic goal into more specific indicators and targets—for example, that *x* cubic metres of water will need to be produced in area *y*. The principal advantage of this approach is that it places the locus of control where it needs to be: with those who need to change. The assumption is that it will more likely foster innovation and good management.

When selecting performance indicators, it is helpful to keep in mind several generic considerations that apply to all sectors and not just the water sector:[32]

- **Start with the outcome, not the indicator.** The validity of your indicator depends on its relationship to the outcomes you seek to achieve and the ability of different people to calculate their value consistently to obtain comparable results over time.
- **Measure outcomes with balanced baskets of indicators.** Single indicators rarely measure an outcome well. Creating a basket of measures involves selecting a set of three to five indicators that capture different aspects of what you are trying to achieve, and that may give you greater confidence in the results. Building a balanced set of indicators involves articulating the multiple reasons that a single indicator might rise or fall and then identifying other valid indicators that would help resolve the ambiguity of the first.
- **Test your indicators for their sensitivity to the changes you hope to make.** Ask yourself: If your programme is successful over the first three to six months, when will that improvement be reflected in your indicators? If the change is not reflected quickly, look for indicators that are more sensitive to the changes you hope to make.
- **Design indicators that allow you to isolate the experience of relatively powerless groups, such as people living in poverty.** Some indicators will inherently reflect the special experience of particular groups, but you will have to be able to disaggregate the data for most indicators.
- **Avoid creating perverse incentives.** When constructing indicators, the idea is that the measures produced will promote and reinforce positive activities that move systems closer to a desired outcome.
- **Use the simplest and least expensive indicators that you can.** It is important to establish what data sources already exist that may inform an indicator before spending money to collect new data. If fresh data do need to be collected, there are usually both cheaper and more expensive ways to do so. The choices typically involve a trade-off between quality and cost.
- **Build confidence in indicators among stakeholders.** Changes in indicators over time should guide action, but this requires that responsible officials have confidence in the indicators.
- **Design indicators that make sense to most people.** The less you need to explain the indicators, the more readily they will be accepted.

32 Vera Institute of Justice, 2003, *Measuring Progress toward Safety and Justice: A global guide to the design of performance indicators across the justice sector,* Vera Institute of Justice, New York.

Box 6.6 Strengthening effectiveness through a Joint Sector Review in Uganda

A sector-wide approach to sectoral performance measurement in Uganda was established with an initial framework starting in 2003. Every year, approximately 200 professionals, including senior government officials, representatives of sector development partners, the private sector and civil society as well as political leaders gather in Kampala, Uganda's capital, to discuss efforts to improve water supplies, sanitation and hygiene practices. This event, known as the Annual Joint Sector Review, serves to track progress as well as to develop action plans. The multi-stakeholder process provides a platform from which performance is checked against results obtained on the Eleven Golden Indicators listed below.

Uganda's sector-wide approach underscores the importance of good planning, which goes hand in hand with good monitoring and evaluation. Good planning helps in focusing on results that matter, while monitoring and evaluation promote learning from past successes and challenges and also inform decision-making so that current and future initiatives may become more effective.

Theme	Indicator
1. Access	Percentage of people within 1.5 kilometres (rural) and 0.2 kilometres (urban) of an improved water source (in 2012, walking distance for rural areas was changed to 1 kilometre)
2. Functionality	Percentage of improved water sources that are functional at time of spot check
3. Value for money	Average cost per beneficiary of new water and sanitation schemes
4. Access/use (sanitation)	Percentage of people with access to improved sanitation (households and schools)
5. Quality	Percentage of water samples taken at the point of water collection, waste discharge point that comply with national standards
6. Quantity	Percentage increase in cumulative storage capacity availability of water production (later changed to cumulative water for production storage capacity, in cubic metres)
7. Equity	Mean Paris deviation from the district average in persons per improved water point (for national purposes, mean subcountry different from the national average in persons per water point is reported)
8. Access/use (hygiene)	Percentage of people with access and using hand-washing facilities
9. Management	Percentage of water points with actively functioning water and sanitation committees (rural/water for production) or boards (urban)
10. Gender	Percentage of water user committees/water boards with women holding a key position
11. Water resources management compliance	Percentage of water extraction and discharge permit holder complying with permit conditions

Discussions at the review are informed by sound data and analysis. Those attending the event, including the political leadership—ranging from the permanent secretary and the director of water development at the ministry of water and environment to district water officers—are offered an overview of the water and sanitation initiatives taking place in the country. Using this information, stakeholders at the review agree on key actions that will be worked on over the following 12 months. The measurement of sector performance is fully linked to the planning and budgeting process.

Questions for reflection

- What are the limitations of direct measures of effectiveness?
- Why is it important to measure outcomes with balanced baskets of indicators?
- What strategies can be employed to avoid perverse incentives when establishing a performance assessment system?

Source Guide

Contents

I Tools

II Cases

I TOOLS

This section provides an overview of the tools that were analysed for the *User´s Guide*. The term 'tools' as used here can be understood to be particular methodologies for assessing components of water governance through indicators that can be applied in multiple contexts. These tools are primarily analysed in terms of the strength and weaknesses of their methodology. First, each tool is briefly described highlighting its rationale, purpose and target group. In the analytical lens section, the tool's focus area within the water sector is identified as well as the assessed governance components and level of analysis. The methodology section describes the methodological approach, type of data (qualitative/quantitative and primary/secondary) and data collection method. Finally, information is provided on the application and impact of the tool: its influence on policy and governance; conditions for success; main lessons learned; type of stakeholders involved; and the strengths and weaknesses of the tool.

1. *African Development Bank Study on Water Governance*

African Development Bank Water and Sanitation Department initiative funded by the Multi-donor Water Partnership Programme and undertaken by Cowater International Inc. (2008)

www.afdb.org/en/news-and-events/article/afdb-to-launch-water-sector-governance-in-africa-report-7495/

The overall purpose of this study was to ensure the inclusion of good governance concerns in project identification, preparation and design processes in order to achieve equitable access to improved services, improved water resources management, and higher returns on investments. The report contains governance assessment templates with specific assessment tools to map governance risks at each stage of the African Development Bank project cycle. The assessment tools were specifically designed for Bank staff but can also be used by other water professionals working in Africa.

Analytical lens

Focus area	Water resources management, water services delivery.
Governance components	Sector policy, legislation and regulation; decentralization and devolution; sector-wide approaches; water sector financial management; monitoring and evaluation; integrated and transboundary water resources management; transparency, accountability and corruption; civil society participation; alternative service provision and public-private partnerships; gender; rights, voice and recourse; and equitable service delivery.
Level of analysis	Water sector.

Methodology

Approach	There are three main degrees of assessment: a light assessment that can be applied in the identification stage; a rapid assessment for the project preparation stage; and a full assessment, which can be applied at every stage of the project cycle. Each assessment tool contains a set of indicators to assess governance at a specific stage of the project cycle. Both subjective and objective indicators are used.
Quantitative/qualitative	Quantitative (scoring from 1-5) and qualitative (literature review, workshop discussions).
Primary/secondary	Primary and secondary data.
Data collection method	Data are collected by task managers at the African Development Bank's Water and Sanitation Department. Collection methods include scoring assessment indicators based on literature review and workshops.
Influence on policy and governance	Conducting the assessment makes Bank staff members aware of the main governance risks, and they can then act accordingly.
Conditions for success	The tool needs to be used at all stages of the project cycle.
Lessons learned	The full assessment takes so much time and effort that it is not being applied.
Stakeholders involved	The main actors involved in the assessment are task managers at the African Development Bank's Water and Sanitation Department.
Strengths	Detailed governance assessments templates are available, including indicators for each stage of the project cycle. The indicators can be used as a checklist (for example, a specific checklist of 'corruption warning signs' is available).
Weaknesses	There is a risk of subjectivity since the task manager is conducting the assessment him/herself.

2. *Annotated Water Integrity Scan*

Water Integrity Network, IRC International Water and Sanitation Centre (2010)

www.waterintegritynetwork.net/awis/awis

The Annotated Water Integrity Scan (AWIS) has been designed to quickly assess the integrity situation in the water sector through a one day multi-stakeholder workshop. The scan analyses water integrity risks that may facilitate corruption and hinder good governance. The scan aims to map potential integrity risks; increase awareness about water integrity; identify priority areas for action; and document change over time. The scan facilitates the exchange of information and perceptions through dialogue. This creates a basis for prioritization of water integrity actions.

Analytical lens

Focus area	Urban water supply.
Governance components	Policy and legislation, regulation, investment projects and programmes, service delivery, anti-corruption, transparency, accountability, participation.
Level of analysis	Can be adapted to all levels.

Methodology

Approach	The tool assesses transparency, accountability and participation (TAP) in five risk areas through scores that are complemented with annotations.
Quantitative/qualitative	Quantitative information (scores on TAP principles) is complemented by quantitative statements drafted by the group.
Primary/secondary	Primary data.
Data collection method	In a one-day multi-stakeholder session, participants anonymously assign scores to TAP principles for each risk area. Results are given to the facilitator and computed to obtain the average score of all participants for each of the TAP levels. The results are shared and discussed with the participants.
Influence on policy and governance	The scores and the annotations provide the basis to identify areas for priority action. Sharing the report enhances the awareness of the situation and initiates further action. In Kenya, the AWIS report was endorsed by the ministry, which will now organize a follow-up workshop to develop policy recommendations for a water action plan.
Conditions for success	A strong facilitator is required: someone who understands the methodology, knows how the water sector works, is capable of identifying the right group of participants, and ensures that the AWIS is being taken up afterwards into a long-term process.
Lessons learned	Within civil society it can be difficult to find a person who has both the perspective of a water user as well as good knowledge of how the sector works.
Stakeholders involved	AWIS is a process tool that initiates a meeting with key stakeholders involved in decision-making, who in a follow-up process can come up with policy recommendations.
Strengths	Citizens play an active role in data generation, and different stakeholders are given the opportunity to talk and interact. The scan can be easily implemented as a starting point for more in-depth assessments and further dialogue.
Weaknesses	The scan is a tool that needs to be complemented by an in-depth assessment.

3. *Asia Water Governance Index*

Eduardo Araral (assistant professor at National University of Singapore) and David J. Yu (PhD student at Arizona State University) (2010)

www.spp.nus.edu.sg/docs/AWGI%20brochure-IWP-LKYSPP(9-10).pdf

The Asia Water Governance Index (AWGI) provides a comparative overview of water governance across 20 countries in the Asia-Pacific region. The index is designed as a benchmarking tool to enable water policy makers in Asia to better understand how their country manages their water resources in comparison to other countries in the region. Policy makers can use the index to see how their country compares in specific institutional components and where to invest for improving water governance in their country.

Analytical lens

Focus area	Water resources management.
Governance components	Institutional aspects of water governance. The index identifies three main dimensions in water governance: the legal dimension, policy dimension and administration dimension.
Level of analysis	National level.

Methodology

Approach	The index is constructed by weighting and aggregating 20 indicators in the legal, policy, and administrative dimensions. Expert opinions were used to elicit indicator weights.
Quantitative/qualitative	Perception-based qualitative combined with quantitative numerical scoring.
Primary/secondary	Primary and secondary data.
Data collection method	Survey of 100 water professionals in 20 countries in the Asia-Pacific region.
Influence on policy and governance	Since there were only 100 survey respondents and most of the respondents were mid-senior level government officials, it is unlikely that the process of data generation itself has shaped or informed policy and governance. However, comparing countries can serve as an incentive for improving water policy and governance.
Conditions for success	Survey respondents should be knowledgeable about the topics in the survey.
Lessons learned	It is difficult to get responses to online surveys. Collecting data when all experts are in one place (for example, during a conference) is more effective.
Stakeholders involved	Government officials, academics and NGOs responded to the survey.
Strengths	The AWGI enables policy makers to compare their country with other countries in the region regarding specific institutional components. It can reveal investment opportunities for improving water governance in their country.
Weaknesses	Social and economic aspects of water governance are neglected, and the data are solely based on the opinions of experts. The focus on the national level neglects differences within countries, which makes the index inappropriate for large countries, such as India or China.

4. *Capability, Accountability and Responsiveness Framework and Drivers of Change Approach*

United Kingdom's Department for International Development (DFID) (2003), Overseas Development Institute (ODI), Janelle Plummer and Tom Slaymaker (2007)

http://www.odi.org.uk/sites/odi.org.uk/files/odi-assets/publications-opinion-files/602.pdf

The capability, accountability and responsiveness framework and drivers of change approach are two complementary approaches that were developed by DFID together with governance consultants for DFID country offices. The aim was to enhance understanding of the governance context in which the U.K. as a donor country is working.

The **capability, accountability and responsiveness (CAR) framework** was developed as a country governance assessment tool. It allows for monitoring of governance performance and revision to the design of aid instruments. In 2007 the CAR framework was elaborated in order to apply it to the water sector. The framework provides a tool for both i) sector analysis and ii) defining sector goals at the country level. In 2008, the NGO Tearfund began using the CAR framework in its disaster management work involving water, sanitation and hygiene.

The **drivers of change (DoC) approach** was developed in 2003 to conduct political economy analyses and to deepen understanding of complex political processes and decision-making outcomes. It is not a tool, but an approach meant to catalyse a shift in DFID country programmes. The DoC approach aims to inform the planning cycle, enhance engagement of governments and civil society, provide a basis for risk analysis and mitigation, and strengthen harmonization of donor and government efforts.

Analytical lens

Focus area	Water service delivery.
Governance components	The **CAR framework** identifies three main dimensions in governance: state capability, accountability and responsiveness. These elements are considered as requirements for good (water) governance. The **DoC approach** takes a political economy perspective and focuses on political systems, power structures and drivers of change.
Level of analysis	National water sector.

Methodology

Approach	The CAR framework identifies 15 subdimensions in three core dimensions: state capability, accountability and responsiveness. This forms a framework to formulate questions to assess the performance of each of these 15 subdimensions. The DoC approach is structured around six sets of questions in six key areas: basic country analysis; medium-term dynamics of change; role of external forces; link between change and poverty reduction; operational implications; and the functioning of DFID. The analysis based upon the questions reveals the incentives that drive the decisions in the water service delivery sector.
Quantitative/qualitative	Qualitative descriptive information following from the questions of the framework.
Primary/secondary	Both primary and secondary data can be used.
Data collection method	Both frameworks can be applied by DFID advisers in country governance assessments and sector-level political economy analyses. The data is mainly being collected by DFID country offices.
Influence on policy and governance	Both frameworks are meant to inform DFID programmes.
Conditions for success	–
Lessons learned	Translating high-level analysis and recommendations into operational strategies and programmes is challenging. Political analysis needs to be accompanied by practical examples.
Stakeholders involved	DFID staff and civil society organizations.
Strengths	The **CAR framework** is used by civil society organizations to develop a better understanding of the policy and political context in which the organizations are working. It helps to inform advocacy strategies and to monitor government performance in the water, sanitation and hygiene sector.
Weaknesses	Limitations of **CAR framework**: It focuses on governments and not on non-state actors. It focuses on the national level, while the water services sector is often decentralized. The 15 indicators are not all relevant to the water sector, and conversely some require greater emphasis. It might be challenging to apply the framework in countries that are not politically stable.

5. *Integrated Method to Assess the Governance of Water*

Scientific Committee Water Governance Centre: Jurian Edelenbos, Petra Hellegers, Matthijs Kok, Stefan Kuks, Marleen van Rijswick, Roy Brouwer, Geert Teisman (2012)

www.watergovernancecentre.nl

This method consists of a water governance assessment framework to assess the capacity of water governance in specific situations. It has been developed by an academic panel of professors from different disciplines, including water system analysis, economics, law and public administration. Its development was informed by the conviction that assessing water governance requires an interdisciplinary approach. The method has been applied in a number of areas in the Netherlands, in Ethiopia and is planned in other countries such as Colombia and Indonesia.

Analytical lens

Focus area	Cross-cutting.
Governance components	The main focus is on governance capacity. The interdisciplinary approach takes into account water system analysis, economics, law and public administration. It is assumed that all these domains influence water governance capacity.
Level of analysis	Can be applied at local, regional and national levels.

Methodology

Approach	This diagnostic method assesses nine water governance building blocks, grouped into three main dimensions: content, organization and implementation. The assumption is that water governance is sound when all three main dimensions and corresponding nine building blocks are dealt with. Assessment criteria—including indicators—have been developed for each of the building blocks.
Quantitative/qualitative	Qualitative (interviews).
Primary/secondary	Primary and secondary data.
Data collection method	Most data are collected through interviews with involved stakeholders. Questionnaires have been developed for the different building blocks. Data are collected by academic experts or trained water professionals.
Influence on policy and governance	The tool is meant to inform governance and policy-making. Its application has led to the identification of priority areas for action.
Conditions for success	The assessment should be multilayered, composing i) a self-assessment by local actors; ii) an assessment by trained experts; and iii) an expert judgement in which experts from different disciplines reflect on the outcomes of the assessment.
Lessons learned	Self-assessment provides valuable learning opportunities for stakeholders.
Stakeholders involved	Water authorities and other actors such as representatives from provinces, municipalities, drinking and waste water companies.
Strengths	The method adheres to the interdisciplinary and dynamic nature of water governance. The method is scientifically validated and developed by experts from different disciplines. The method takes into account the embeddedness of the water system in a wider planning and regional development context.
Weaknesses	More focus is placed on the (theoretical) background of the building blocks than on how to assess them in practice. The tool has a highly academic character; it will be fed with more practical experiences during the application processes. Disciplines such as sociology and cultural sciences are not included.

6. *Key Performance Indicators for River Basin Organizations*

Bruce Hooper, University Council on Water Resources Water Studies Fellow at the Institute of Water Resources, United States Army Corps of Engineers, Virginia, USA (2005)

http://onlinelibrary.wiley.com/doi/10.1111/j.1936-704X.2006.mp135001001.x/pdf

This tool consists of a template with key performance indicators for measuring the ability of river basin organizations (RBOs) to implement integrated water resources management. The overall purpose of the project was to measure the effectiveness of RBOs. The tool is primarily designed for RBO staff and was applied at several locations in the United States.

Analytical lens

Focus area	Integrated water resources management.
Governance components	Ten areas in river basin governance are assessed: coordinated decision-making; responsive decision-making; goals, goal shift and goal completion; financial sustainability; organizational design; role of law; training and capacity-building; information and research; accountability and monitoring; private and public sector roles.
Level of analysis	River basin.

Methodology

Approach	The tool provides indicators to i) assess the performance of RBOs in implementing integrated water resources management, and ii) assess the level of development of the RBO: initial/functionary, emerging auto-adaptive, and mature auto-adaptive.
Quantitative/qualitative	Quantitative (numeric scoring) and qualitative (perceptions).
Primary/secondary	Primary.
Data collection method	RBO staff fill out score cards.
Influence on policy and governance	Scoring the performance of their RBO can help the management and staff to identify ways to improve performance. The study mapped a wide range of indicators for best practices in integrated water resources management that can provide input for debate on these issues.
Conditions for success	RBO staff need to fully understand the indicators. Workshops should be organized to train the RBO staff to apply the tool, and a glossary should be produced to explain the indicators and concepts.
Lessons learned	RBO staff often have a different perception of water governance than researchers. A discussion with RBO staff about concepts and indicators is recommended before conducting the assessment.
Stakeholders involved	RBO staff and, in some cases, other stakeholders, such as communities and local governments.
Strengths	Self-assessment creates ownership and enhances knowledge about the organization.
Weaknesses	Self-assessment is easily manipulated and sketches a subjective picture of the development and effectiveness of the RBO. The majority of indicators developed in this study require evidence of their existence and efficacy of use.

7. *Middle East and North Africa (MENA) Regional Water Governance Benchmarking Project*

International Resources Group (IRG) in association with International Water Management Institute and Oregon State University for the United States Agency for International Development (USAID) (2010)

www.watergovernance.org

This project aimed at characterizing water governance regimes in a number of Middle Eastern and North African countries to allow comparisons across countries and over time. To do that, a conceptual framework to analyse water governance as well as desk and field-based methodologies were developed and piloted in six countries: Egypt, Jordan, Morocco, Turkey, Oman and Yemen. Due to time constraints, the project did not permit assessment of changes over time, but the framework does permit such assessments.

Analytical lens

Focus area	Water resources management.
Governance components	The project sees governance mainly in terms of decision-making. The conceptual framework assesses water governance based on i) essential governance functions and ii) characteristics of governance decision-making processes (transparency, accountability, and participation).
Level of analysis	National level.

Methodology

Approach	The assessment methodology consists of three components: policy and legal analysis; organizational analysis; and expert-based rating.
Quantitative/qualitative	Perception-based qualitative combined with quantitative numerical scoring.
Primary/secondary	Primary data collection from panel of experts, content analysis of secondary data.
Data collection method	Rating by experts using questionnaires and matrices in workshops at country level, document analysis by research team.
Influence on policy and governance	The factual snapshot of the status of water governance can serve as a basis for national dialogue and can be used to inform future policy reform, benchmark governance ratings against those of other countries, and assess changes in governance over time.
Conditions for success	Local facilitators need to fully understand the methodology to apply it effectively and fairly. Local experts doing the rating need to understand what the end points of the scales are to ensure that the assessment is standardized in all countries.
Lessons learned	Any assessment requires extensive training of the implementers to ensure a high-quality product.
Stakeholders involved	Government bodies, NGOs, water user associations, donor agencies, and private companies. Ownership was sought from top-level policy staff at the ministry level.
Strengths	Clear conceptual framework distinguishing water management functions from good governance process features; clear definition of water governance as a decision-making process; stratification and even weighting of expert assessments to avoid domination by particular water subsectors; innovative way of assessing process features by applying them to specific water-related challenges at country level.
Weaknesses	The application of the framework is somewhat limited as its focus is on policy-making at the water resources management level and the different water uses are only assessed indirectly. The use of perception-based rating by local experts can negatively affect the standardization of the tool in several countries and the benchmarking exercise.

8. *Regional Water Intelligence Report*

Stockholm International Water Institute (SIWI) (2010)

www.watergovernance.org/documents/WGF/Reports/Paper-15_RWIR_Aral_Sea.pdf

The Regional Water Intelligence Report (RWIR) provides regular updates on the political economy of transboundary water resources issues, management and development. The report focuses on the socio-economic aspects of water management and highlights the links between water, energy, food and human security from a regional perspective. The RWIR service is intended to be used by senior decision makers, managers and advisers in public and private agencies concerned with development investments. Clients targeted include multilateral and bilateral international financial institutions, government agencies, NGOs and private sector groups. To date, the tool has been applied in three regions: the Nile Basin and the Southern Sudan Referendum, Central Asia and the Middle East.

Analytical lens

Focus area	Cross-cutting.
Governance components	The entry point of the analysis is the political-economic situation. Water is reviewed in terms of the role it plays in the political economy to assess how investment in good water management and development can improve regional outcomes and support regional visions.
Level of analysis	The reports have a regional perspective but also include commentary on local, national and global influences such as markets, trade and climate change.

Methodology

Approach	Each RWIR is developed around a series of basic questions (that is, on politics and economy; water and physical resources; water use; governance and external drivers) and client-specific questions. Public sources are used as references and in some cases also grey literature.
Quantitative/qualitative	Quantitative and qualitative.
Primary/secondary	Secondary through desk review.
Data collection method	The RWIR draws on a wide range of information sources that are analysed by a team of sector experts drawn together for each report.
Influence on policy and governance	The RWIR is primarily meant to inform multilateral and bilateral international financial institutions on pre-investment and to support clients in processes important for investments.
Conditions for success	The reports are marketed as 'intelligence'. Therefore, ongoing collection of information to update the reports is a key element of the RWIR. Adequate funding needs to be built into RWIR costs to allow this ongoing intelligence to take place.
Lessons learned	–
Stakeholders involved	Involvement of national stakeholders in the research process is limited.
Strengths	The RWIR offers a unique yet flexible methodology to assess the role of water from a regional perspective by applying a combination of 'soft' (political economy analysis) and 'hard' (indicators on water coverage) data to the analysis.
Weaknesses	Since the methodology very much depends on the data available, working with regional/local experts could improve 'intelligence-gathering' in data-scarce regions.

9. *Status Report on the Application of Integrated Approaches to Water Resources Management*

Working group upon request from UN-Water for submission to the UN Commission on Sustainable Development, the Rio+20 conference 2012 (2012)

www.unwater.org/rio2012/report/index.html.

This report assesses progress in the application of integrated approaches to the development, management and use of water resources. It follows from a 2008 UN-Water report that took stock of the development and implementation of integrated water resources management and water efficiency plans. The present report is more extensive, covering more countries and addressing the development, management and uses of water resources, as well as the possible outcomes and impacts of integrated approaches. A regional report has been developed for Africa at the request of the African Minister's Council on Water. The report was intended to inform decision-making at the Rio+20 conference and follow-up global policy discourse and to facilitate information exchange.

Analytical lens

Focus area	Water resources management.
Governance components	The report and survey are structured around seven sequences: context; policy, strategic planning and legal frameworks; governance and institutional frameworks; management instruments; infrastructure development; financing water resources management; outcomes of integrated approaches to water resources management.
Level of analysis	National level.

Methodology

Approach	The assessment was based on two surveys: a questionnaire-based on a multiple-choice survey (Level 1 survey) among all UN countries, and an interview-based survey (Level 2 survey) in 30 representative countries designed to provide a more detailed in-depth understanding of country situations.
Quantitative/qualitative	Quantitative (multiple-choice survey) and qualitative (interviews).
Primary/secondary	Primary data (survey-based).
Data collection method	The Level 1 survey provided a self-assessment by national governments. The Level 2 survey was an extension of Level 1 to further qualify the findings from Level 1 through opinions and experiences from government and non-governmental stakeholders.
Influence on policy and governance	The report intended to inform decision-making at the Rio+20 conference and follow-up global policy discourse. The involvement of governments ensured ownership of the assessment process and increase the chances of producing a document that can inform decision-making and policy decisions.
Conditions for success	To get an acceptable response rate and to achieve a meaningful impact, a global survey of this kind needs to be administered by an organization perceived as legitimate by participating countries and with strong convening powers, such as the United Nations.
Lessons learned	Whereas global surveys are useful to inform on general targets such as the Millennium Development Goals (MDGs), regional and national reports are better at yielding more specific commitments and localized knowledge. Using a standardized questionnaire to assess water governance in multiple and diverse countries and where data is dispersed in many different institutions has its limitations.
Stakeholders involved	The respondents for the Level 1 survey were government officials. The Level 2 survey targeted non-governmental stakeholders.
Strengths	The report is based on the most comprehensive survey yet of the status of water resources management; given the high response rate and interest from member countries, it paves the way for future regular monitoring and reporting mechanisms.
Weaknesses	The survey captures the official perspective of governments and may not provide the checks and balances desired from other stakeholder perspectives, although this was partly addressed by interviews in selected countries. It is difficult to ensure equal objectivity in the responses among countries. The survey provides a single response that characterizes an entire country and is not able to capture regional differences. A survey targeting national governments may not provide an accurate picture of management responsibilities at subnational levels. It also does not capture transboundary responsibilities.

10. *Study on Accountability in Water Governance and Management*

United Nations Development Programme (UNDP) (2012)

The study was commissioned by UNDP in 2012 in Latin America to gather evidence on the link between better water governance and accountability on access to water and sanitation in different contexts. A qualitative case-study methodology was developed to ensure consistency in data gathering from primary and secondary sources and analysis of the data. The case-study methodology can be adapted to different contexts.

Analytical lens

Focus area	Water resource management, water service delivery.
Governance components	The effectiveness of accountability institutions/systems in meeting the right to water, ensuring equitable distribution and provision of water and resolving conflicts in the governance of the water sector.
Level of analysis	Water resource management at the river basin level, regional level and provision of water services at the local level.

Methodology

Approach	The study includes a mapping exercise to identify different water governance and management models in the target area. It looks at roles, responsibilities and relations among all stakeholders involved, and the conditions and gaps in accountability (vertical, horizontal, social and diagonal accountability) using a diverse set of criteria.
Quantitative/qualitative	Qualitative.
Primary/secondary	Primary and secondary data.
Data collection method	Review of water governance literature, information and official reports of government agencies, research papers and studies, in-depth interviews and focus group discussions with state actors and civil society.
Influence on governance and policy	The study maps out favourable conditions and gaps in accountability systems in the water sector. It provides inputs and practical recommendations aimed at actors in the water sector, NGOs and accountability institutions. It also aims to influence government policy decisions in order to guarantee the right to water and to improve overall governance and service delivery.
Conditions for success	A local technical expert team with connections to the water sector and with expertise in governance is required to carry out the study. To maintain the rigour of the study, it has be reviewed and verified at every stage of the process by the commissioning body/entity. The success of the study is also dependent on the involvement, cooperation and buy-in of all stakeholders.
Lessons learned	The usefulness of the study is dependent on the rigour with which it is carried out, including cross-analysis of data from diverse sources. The study has helped to unearth the 'logic' of previously unidentified challenges that affect the scope of water and sanitation service provision.
Stakeholders involved	Researchers, academics, civil society organizations, users organizations, operators and providers of water and sanitation services, representatives of water sector institutions, representatives of relevant accountability and oversight institutions.
Strengths	The study maps out the conditions and gaps in accountability that affect the overall scope to meet the right to water or universal provision of water and sanitation services. It is useful for a range of actors to make targeted changes in improving governance in the water sector.
Weaknesses	Since the study was intended as a regional study in Latin America it has some limitations: i) it does not offer generalizations and conclusions about the impact and effectiveness of accountability in the provision of safe water and sanitation; ii) it is limited in terms of comparability due to the weight of contextual variables and the section of the water sector analysed. However, the methodology of the study can be adapted to fit other geographic or basin areas.

11. *Water Governance in OECD Countries – A Multi-level Approach*

Organisation for Economic Co-operation and Development (OECD) (2011)

www.oecd.org/environment/watergovernanceprogramme.htm

In this tool, the OECD addresses coordination and capacity-building issues related to the design, regulation and implementation of water policies. The report focuses roughly on three aspects: the role and responsibilities of public actors in water policy at central and subnational levels; the governance challenges related to their interaction at horizontal and vertical levels; and the tools and strategies currently in use to enhance governance in the water sector. The rationale of the study is that the water crisis is mainly a 'governance crisis', since water policy reform faces complexity due to the multiplicity of actors, institutional inertia and related multi-level governance challenges.

The OECD multi-level governance framework offers governments a diagnostic tool for identifying the main multi-level governance challenges in the water sector and the policy instruments that can be used to overcome them. The results of the study are based on a Survey on Water Governance, in which half of the OECD countries (17) participated. Additional data were collected from countries in Latin America and the Caribbean, the Middle East and North Africa, Eastern Europe, the Caucasus and Central Asia.

Analytical lens

Focus area	Cross-cutting.
Governance components	The study takes a 'multi-level governance' approach, which refers to the sharing of policy-making authority, responsibility, development and implementation at different administrative and territorial levels. Strong focus on water policy.
Level of analysis	Local, regional and national government authorities.

Methodology

Approach	The multi-level governance framework identifies seven coordination gaps that frequently hinder integrated water policy: the administrative gap, information gap, policy gap, capacity gap, funding gap, objective gap, and accountability gap. Proxy indicators were developed to illustrate each of the gaps.
Quantitative/qualitative	The survey provides for both quantitative data (for example, the number of central government actors involved in water policy design) as well as qualitative data (such as the perceptions of respondents).
Primary/secondary	Primary and secondary data.
Data collection method	Data was collected through the OECD Survey on Water Governance. Respondents from central administrations, river basin organizations and regulatory agencies were asked to rank a series of water governance challenges according to a set of indicators.
Influence on policy and governance	The results of the study can be used by government authorities to improve water governance in their countries.
Conditions for success	The data collection method is dependent on the voluntary participation of countries and reliability and accuracy of survey respondents.
Lessons learned	–
Stakeholders involved	Policy makers from central and subnational administrations, regulators and river basin organizations.
Strengths	The study gives a quick overview of the water governance situation in a country.
Weaknesses	The method is prone to manipulation, since policy makers have to assess their own policies.

12. *Water Management Transparency Index*

Transparency International Spain, Botin Foundation (2012)

http://www.transparencia.org.es/VERSION_ENGLISH/INTRAG/INTRAG.htm

The index was developed by Transparency International Spain in collaboration with Spanish water experts. The purpose is to assess the level of transparency of water agencies by evaluating the extent to which the agencies make relevant information available on their websites. The index measures the level of transparency on the websites and assesses the degree of access to information about water management. The index is intended to increase awareness about the importance of transparency in the water sector and document change over time.

Analytical lens

Focus area	Water resource management.
Governance components	Information, citizen participation and accountability.
Level of analysis	River basin level.

Methodology

Approach	Through a set of country-specific indicators and questions, the Water Management Transparency Index looks at the level of access to information in six key areas. The quantity of information is assessed by using a score to indicate whether information is available or not.
Quantitative/qualitative	Quantitative.
Primary/secondary	Primary data.
Data collection method	Two evaluators consult the water agencies' websites to score the indicators. The scoring tables are analysed by a senior evaluator. Each water agency receives the preliminary scoring table for comments. This allows the agency to provide further links to required information and add information on the websites during the review period.
Influence on governance and policy	The scoring process creates an incentive among basins to improve their transparency index and thereby also increases the possibility for citizens to access necessary information. Information can help to demand higher accountability from basins or can create public pressure for transparent procurement and decision-making processes.
Conditions for success	A local technical expert team with connections to the country's water sector is required to adapt the indicators of the Water Management Transparency Index to the local context. Collaboration among experts is required to achieve a suitable selection of indicators that a champion can coordinate.
Lessons learned	The key to success is a 'champion' and the creation of incentives.
Stakeholders involved	A consortium of stakeholders who work on the adaptation and implementation of the tool (such as a university or NGO) and the basin offices. Through the incentive approach, the researchers enter into a dialogue with basin authorities and involve them directly in the assessment.
Strengths	The indicators can be used to compare performance over time. The indicators started a process whereby basin organizations have become more concerned about information provision as a result of the ranking. The methodology of the tool is based on the idea of incentive-setting.
Weaknesses	The index only assesses the presence of specific information on the web and not its quality or ease of access.

II CASES

This section provides an overview of the cases that were analysed for the *User´s Guide*. Cases are defined here as assessments that have been developed and applied for a specific context. These are primarily analysed as contextual experiences with focus on the particular lessons learned in the process of the tool implementation. First, each case is briefly described, highlighting its background and objectives. In the analytical lens section, the focus area within the water sector is identified as well as the assessed governance components and level of analysis. Subsequently, the methodology and main findings of the case study are described. Finally, more in-depth information is provided on stakeholders involved, conditions for success, and main lessons learned.

1. *Andhra Pradesh Water Governance Framework and Tools Project*

Indian Institute of Technology and IRC International Water and Sanitation Centre, working in partnership with Andhra Pradesh´s Department of Rural Development (2008)

www.source.irc.nl/page/49643

www.irc.nl/page/46415

This project investigated how to improve water governance in the state of Andhra Pradesh, India. The project was supported by DFID and carried out in 2008 by the Indian Institute of Technology and IRC International Water and Sanitation Centre, working in partnership with Andhra Pradesh´s Department of Rural Development. Central to this study was the aim to improve planning processes. The project focused on analysing legislation; developing an overall framework for improving water governance; and compiling a water governance toolkit. These components were selected based on experiences from other DFID projects.

Analytical lens

Focus area	Water service delivery and integrated water resources management.
Governance components	Planning processes, project cycle approach.
Level of analysis	State (province) level.

Methodology	Data collection was carried out through a legislation review and informal meetings with senior officials of the state of Andhra Pradesh. Water resources assessments were carried out in eight villages. The applied methodologies included: focus group discussions, key informant interviews, Qualitative Information System, social and institutional mapping, technical surveys and audits of the water-related infrastructure and the main sources of water supply. Also data sets from previous projects were used.
Main findings	Policies, institutional procedures and other aspects of water governance are needed that are firmly rooted in the principles of adaptive management: flexible planning backed by strong monitoring information management systems that allow constant adaptation and the upgrading of policies, legislation, plans and activities.
Impact	The impact of the project on departmental plans was less than expected due to a lack of high-level political and financial commitment. However, the results of the study fed into discussions on water governance in the departments and have been used to inform a subsequent project funded by the Bill & Melinda Gates Foundation on water management in Andhra Pradesh.
Countries	State of Andhra Pradesh (India).
Stakeholders involved	Senior officials of Andhra Pradesh state departments and research organizations. Learning alliances between government and NGOs were established.
Conditions for success	High-level political support and champions who take up the results of the project are essential.
Lessons learned	Change management programmes and information-sharing are essential elements in improving water governance. Alignment of planning and an integrated water resources management approach has to start before departments have produced their plans. Making an impact cannot be enforced, but intervening at the decision-making level will most likely influence policy and lead to improved governance. Anything that involves challenging norms takes time.

2. *Bangladesh: An Assessment of Water Governance Trends*

Ca' Foscari University of Venice, Italy and the United Nations University, Institute for Environment and Human Security (UNU-EHS), Germany (2011)

www.iwaponline.com/wp/up/wp2012143.htm

This study assesses trends in water governance regimes in Bangladesh. The researchers analysed how legal, administrative and political aspects of water governance evolved according to existing policy documents and also how effectively policy is implemented over time. The research was conducted to gain a better understanding of changes in water governance in developing countries, where research in this area is still rare. The researchers aim to contribute to a growing awareness among water managers in developing countries on the development potential of improved water governance.

Analytical lens

Focus area	Water resources management.
Governance components	Policy-making, institutional change.
Level of analysis	National level.

Methodology	Changes in water governance were analysed by studying policy documents and the perceptions of water user groups on the quality of governance. Ten structured interviews with water policy experts and two focus group discussions with water user groups were conducted. The interviewees were asked to judge the past, current and future state of water governance in Bangladesh and to evaluate the implementation of policies related to seven indicators.
Main findings	Water governance policies point to an improvement of water governance in Bangladesh, and this trend is expected to continue. According to the water user groups, the actual implementation of the policies lags far behind what policy documents indicate. Trust in the policies is low among water user groups. This can be explained in part by the lack of accountability of regulatory politics and weak legal enforcement.
Impact	The study is meant to inform future policy-making.
Countries	Bangladesh.
Stakeholders involved	Water user groups and water policy experts in Bangladesh.
Conditions for success	Involve stakeholders in an early stage of the process.
Lessons learned	Involving stakeholders early in the process and explaining clearly the approach, indicators, method and concepts prevents confusion or misinterpretation during the assessment. It also enables stakeholders to learn more about governance.

3. *Citizen Report Cards: Kenya*

World Bank's Water and Sanitation Program (2006)

http://water.worldbank.org/node/84003

Citizen report cards can be used to monitor government service provision of drinking water in terms of efficiency and accountability. They do so by collecting feedback from actual users of a service. The scorecards assess performance and compare performance across providers. The resulting data are used to create a database of feedback. The larger purpose of the tool is to use the survey results to advocate for improvements in the services provided and to further investigate the reasons behind the provision of inadequate services. By repeating the exercise on a continuous basis, the change in performance can be monitored and compared.

Analytical lens

Focus area	Drinking water service provision.
Governance components	Performance of (public) service provider, including responsiveness of service providers and corruption.
Level of analysis	Community level.

Methodology	Forty focus group discussions took place with 15–20 people in each to identify where main problems lie. Questionnaires were designed to collect quantitative data from water service customers. A seven-point rating scale was used to quantify citizen satisfaction levels with regard to service delivery, dimensions of corruption, staff behaviour, etc. Key findings on availability, usage, satisfaction and other areas were determined by collecting responses for each question. The results were compiled in a scorecard.
Main findings	Monitoring at the grass-roots level needs to continue; more regular interaction is needed with utilities; strengthened mechanisms are also needed to foster engagement between utilities and citizens.
Impact	The regulatory agency put in place a regulatory monitoring system for community-based residence advocates. 'Water Action Groups' were established and trained.
Countries	Kenya.
Stakeholders involved	A coalition of partners (multi-stakeholder groups) was established. Focus group discussions with a wide variety of stakeholders took place.
Conditions for success	Political will is necessary to take up the findings of the assessment. Suitable local conditions are required: a political context that allows for citizen participation in decision-making processes and a level of safety for researchers and citizens to conduct the survey. A reliable, independent institution is required to lead the effort. The findings need to be publicly distributed and followed up by local actors.
Lessons learned	Having the capacity to undertake research and create the space to discuss the findings are essential requirements for conducting the survey. Typically, civil society organizations can lead the process of conducting citizen report cards, thereby bringing credibility to the process. However, such organizations may have insufficient experience in developing a sampling frame and conducting the survey. To avoid surprising stakeholders by the findings of the final report, which can hamper ownership, draft findings should be shared in early stages of the process.

4. *Corruption Risks in Water Licensing: Chile and Kazakhstan*

Wageningen University and Research Centre, IRC International Water and Sanitation Centre, Water Integrity Network, Swedish Water House (2006–2007)

www.watergovernance.org/documents/WGF/Reports/Corruption_Risks_in_Water_Licensing.pdf

The research was conducted to address the lack of systematic inquiries on corruption in water resources management and water-licensing processes. It assesses and maps potential corruption risks in water licensing in two countries: Chile (liberal market-dominated water sector) and Kazakhstan (a state-dominated water sector) by interview-based data collection in the two countries.

Analytical lens

Focus area	Water licensing.
Governance components	Corruption, transparency.
Level of analysis	Local and national level.

Methodology	Indicators were designed to assess monopoly, discretion and transparency in a number of identified risk areas in the licensing process. Eighty semi-structured and open interviews were held with licensors issuing water licenses, water licensees, NGOs, private sector managers, press, water managers, and power companies. Field observations were made and relevant literature and previous studies were reviewed.
Main findings	Potential corruption risks in water licensing were identified in both countries. In Kazakhstan, small-scale corruption exists at the local level; in Chile, grand corruption exists at the national level.
Impact	The research in Chile facilitated information-sharing between NGOs and journalists within the country. The results of the study provided journalists, NGOs and individual activists with information to strengthen their campaigns. An article on water and transparency was published in the national newspaper.
Countries	Chile and Kazakhstan.
Stakeholders involved	Licensors issuing water licenses, water licensees, NGOs, private sector managers, press, water managers and power companies were interviewed.
Conditions for success	It is important to work with researchers who know the country well.
Lessons learned	Researchers can facilitate information-sharing within countries. Donors and consultants can encourage or discourage corruption. Changing the water laws does not necessarily mean changing practices; often there is a gap between water law and practice. The gaps in the system can facilitate corrupt practices.

5. *Egypt Water and Sanitation Governance Index*

Social Contract Centre: A joint project between the Egyptian Cabinet of Ministers' Think Tank, Information and Decision Support Center, and United Nations Development Programme (2011)

The Water and Sanitation Governance Index (WSGI) is based on a household survey in Fayoum, Egypt, to capture the perceptions of householders on water and sanitation service delivery. The results were complemented by information extracted from interviews with the sector´s key informants and NGO employees working in the governorate. The main objective was to draw a comprehensive picture of the sector's governance performance as perceived by the citizens.

Analytical lens

Focus area	Water and sanitation service delivery.
Governance components	The WSGI was developed on the basis of a governance assessment framework and comprises eight main dimensions: effectiveness, equity, efficiency, responsiveness, fighting corruption, participation, transparency and accountability.
Level of analysis	Governorate level.

Methodology	Separate numeric indexes were developed for water governance performance and for sanitation governance performance. The indexes comprised eight dimensions, broken down into subdimensions, indicators and subindicators. The index is based on a survey of 3,000 households in the governorate of Fayoum. Using a quantitative approach, the index scores each dimension, indicating the level of governance performance as perceived by householders. The results were endorsed with a descriptive approach from 88 sector key informants and 20 NGO employees.
Main findings	Water governance performance was 'moderate' and sanitation governance performance was 'weak'. Both indices score high on effectiveness, equity and efficiency, but low on transparency, participation and accountability. Households perceived the level of corruption to be lower than the key informants did.
Impact	A workshop will be organized with key informants and NGOs to discuss the results. A policy brief will be drafted to draw the attention of decision-makers to results and to highlight the importance of including citizens in decision-making processes. The WSGI provides policy makers with recent data from the field.
Countries	Egypt.
Stakeholders involved	Consultations were conducted with representatives from the water and sanitation sector, civil society organizations and the private sector, and with academic experts. Surveys of 3,000 households in the governorate of Fayoum were carried out. Data collectors were recruited from local information centres.
Conditions for success	Training the data collectors and paying them for each collected survey contributed to a smooth data collection process. The involvement of an independent company managing the data collection process contributed to the independence of the project.
Lessons learned	Researchers should think about follow up at an early stage of the project. The process of compiling the index contributed to building the capacity of Social Contract Centre staff in building a sectoral governance index.

6. *GoAL WaSH Water Sector Assessments*

United Nations Development Programme (2008)

UNDP's Governance, Advocacy and Leadership for Water, Sanitation and Hygiene (GoAL WaSH) programme aims to accelerate achievement of the water- and sanitation-related MDGs through strategically targeted interventions that strengthen water and sanitation governance. The programme was developed in 2008 and is currently being implemented in 11 countries. The assessments aimed to deepen UNDP's understanding of the status of water and sanitation (WatSan) activities at the country level, specifically in fragile countries that are off track in meeting related MDG targets. This was accomplished through an analysis of ongoing WatSan actions, key stakeholders, gaps, needs and opportunities. The second objective was to recommend potential entry points and areas of intervention for UNDP support in this field.

Analytical lens

Focus area	Water supply and sanitation.
Governance components	Water and sanitation governance, human rights-based approach to water and sanitation, policies and strategies, institutional framework of the water sector, sector capacity.
Level of analysis	National and, in some cases, municipal level.

Methodology	Diagnostic assessment through identification of key gaps, needs, constraints and opportunities in national WatSan plans, strategies and capacities. Data collection methods included interviews, dialogue with governments and key WatSan in-country partners, analysis of national statistics and data and stakeholders review.
Main findings	Different options for project interventions came out of the stakeholders review. The discussion about options engaged the UNDP office in seeing how they could fit them into the UNDP country programme. In the best case, the projects emerging from the review would reflect what was needed in the sector, government priorities and would fit with the UNDP country programme. However, that was not always the case.
Impact	–
Countries	Bosnia and Herzegovina, Djibouti, Liberia, Madagascar, Mali, Mongolia, Paraguay, Sierra Leone, Tajikistan, Zambia.
Stakeholders involved	Government officials, WatSan in-country partners, civil society organizations.
Conditions for success	Local ownership and engagement.
Lessons learned	This is a niche tool, focusing on specific problems of countries that are especially off track in terms of MDG water and sanitation targets and where it is unlikely that a lot of detailed information could otherwise be collected. The Country Sector Assessments were used to kick-start GoAL WaSH projects, but it is not a rigorous and powerful tool to be replicated. It was not designed as a detailed governance analysis, but as a 'big picture´ instrument.

7. *Integrity Assessment of the Water Sector in the Occupied Palestinian Territories*

Palestinian Water Authority, UNDP Water Governance Facility at the Stockholm International Water Institute, UNDP's Programme of Assistance to the Palestinian People, UNDP's Regional Water Governance Programme for the Arab States (2012)

www.watergovernance.org

This study assessed the Palestinian water sector in terms of its integrity levels. The assessment was initiated to address the conflicting roles of the Palestinian Water Authority in performing regulatory and policy-related functions and project implementation. It sought to identify particular areas with high corruption risks and associated costs. The assessment will inform ongoing water governance reform and lay the groundwork for developing a long-term programme to promote water integrity.

Analytical lens

Focus area	Water resources management and water service development and provision.
Governance components	The governance of the sector is assessed by looking at the roles performed by stakeholders and institutions and the levels of integrity in processes at the levels of governance, management and water supply provision, operation and maintenance.
Level of analysis	National and local level.

Methodology	Stakeholder mapping and analysis. An integrity assessment of each process—rated according to five indicators (standards, transparency, oversight, participation, ethics infrastructure)—was used to quantify the results of the findings, resulting in an Integrity Index for the sector as a whole. These results were complemented and validated by a quantitative Customers' Satisfaction, Perceptions and Experience Survey, based on interviews and case studies with service providers and customers.
Main findings	Lack of separation between political, strategic and regulatory aspects of activities and a lack of clear and workable lines of authority within the water governance system hampers efficient use of resources and a responsible use of power. Overlapping functions at the Palestinian Water Authority can cause a conflict of interests. Customers' perception of corruption in the water sector is significantly higher than their actual experience of corruption.
Impact	The integrity assessment process created an atmosphere where people are willing to improve the governance of the sector. The assessment findings and recommendations will be used to inform the work of the reform unit.
Countries/ territories/areas	Occupied Palestinian territories (specifically Gaza and the West Bank)
Stakeholders involved	The process was guided by a multi-stakeholder working group including the Palestinian Water Authority, ministries, water service providers, national and international civil society organizations and technical committees. The data was drawn from questionnaire-based interviews with service providers, customers, government bodies and other concerned stakeholders.
Conditions for success	Assessment findings need to be disseminated to both high-level individuals and practitioners in order to create a working atmosphere where everyone is thinking about how to improve the situation.
Lessons learned	It is important to be flexible and not impose a certain methodology, thereby leaving people space to participate in tool development. Although this can be time-consuming, it creates ownership and acceptance of the methodology and later on of the findings. The tool should reflect the local situation.

8. *National Water Integrity Study, Kenya*

Transparency International Kenya (2011)

www.tikenya.org

This study provides an overview of the Kenyan water supply sector in terms of integrity and performance, while focusing on informal service provision arrangements. It outlines the levels of integrity and analyses performance in the Kenyan water supply sector by conducting a literature review, using the outcome of focus group discussions and providing case studies. The case studies present contextual performance and integrity review based on risk-mapping methodology that analyses relationships among public officials, regulators, service providers and users in terms of transparency, accountability and participation.

Analytical lens

Focus area	Water service development and provision.
Governance components	Transparency, accountability and participation in water service provision.
Level of analysis	Institutional and organizational structures at the national, regional and local level.

Methodology	Two methods were applied for the integrity assessment: a performance analysis (that is, a qualitative assessment of how the sector/policy reforms have affected performance) and an actor analysis. The actor analysis was carried out using the TAP risk-mapping method, producing visual risk maps for different actors in the water service provision. The tool identifies relevant stakeholders and assesses the integrity of their relationships in terms of transparency, accountability and participation. Clear definitions have been established for TAP and specific questionnaires are used for each group of stakeholders. The tool generates, structures and assesses information on i) the actors involved in water supply systems, ii) the relationships among stakeholders and main water provider(s), and iii) the risk levels in regard to TAP in the relationships among each group of actors.
Main findings	Financial constraints, weak corporate governance, weak participation by citizens and illegal water connections have been identified as major concerns undermining performance in the sector. With regards to the actor analysis, several challenges were underscored by the study. Accountability is weak because sanctions and anti-corruption measures are not applied, and incentive systems to facilitate the development of good governance are weak. Poor access to information is a major problem hampering public participation.
Impact	Several policy recommendations were made as an outcome of the assessment, one of which resulted in the creation of the Mombasa Water Improvement Pact to make service provision more transparent.
Countries	Kenya.
Stakeholders involved	The assessment included gathering data from key informant interviews, focus group discussions and household interviews. In total, 50 people in urban areas and 30 in rural areas provided data.
Conditions for success	–
Lessons learned	By understanding and discussing the risk levels of TAP in each relationship, the risk map can contribute to stimulating dialogue about integrity and serve as a basis to identify options for improvement. It is important to realize that case study findings may not be representative of a whole country; however, they do provide good contextual and qualitative data that indicate the level of integrity, thereby offering insights into the risk of corruption.

9. *Rural Water Supply Corruption in Ethiopia*

Roger Calow, Alan MacDonald, Piers Cross (2012)

http://nora.nerc.ac.uk/19248/

The aim of the study was to discuss the importance, scope and nature of corruption in the provision of rural drinking water supplies in Ethiopia. The objectives were to map the different forms, links and scope of corruption in Ethiopia's rural water supply along the service delivery 'value chain'—from policy development (at the top of the chain) to scheme implementation and management (at the bottom). The study also sought to identify particular points along the value chain that are vulnerable to corruption and to work with key sector stakeholders to validate findings and develop recommendations to address vulnerabilities.

Analytical lens

Focus area	(Groundwater-based) rural drinking water supply.
Governance components	Corruption.
Level of analysis	Policy-making and federal level, project and programme level, community level.

Methodology	A general overview of how corruption plays out and affects the water and sanitation sector was based on a literature review. International and local consultants developed a diagnostic approach for mapping corruption. Corruption was mapped at the different levels by conducting a stakeholder analysis, interviews with stakeholders, perception studies, and a field survey of rural drinking water boreholes. Key findings were discussed in a validation workshop.
Main findings	Ethiopia has made significant strides in policy development, financing, governance and management, resulting in generally low levels of corruption and perceptions of corruption along the value chain. The study highlights a number of remaining vulnerable areas, particularly at the lower (procurement and construction) end of the value chain. Stakeholder perceptions of corruption vary significantly in some instances.
Impact	Key policy recommendations were formulated.
Countries	Ethiopia.
Stakeholders involved	Key sector stakeholders were involved in validating the findings and developing recommendations to address vulnerabilities.
Conditions for success	–
Lessons learned	–

10. *Tajikistan Water Integrity Risk Assessment*

United Nations Development Programme (2012)

www.undp.tj/files/reports/Integrity_Risk_Assessment_in_Water_Sector_in_RT_eng.pdf

This thematic assessment analyses corruption in the water supply and irrigation subsectors in Tajikistan. It was implemented by UNDP in partnership with the national anti-corruption agency. The purpose was to identify corruption risks in the water sector in order to facilitate the development of risk mitigation plans as part of advancing the national anti-corruption strategy and national development strategy. The study captured perceptions from farmers and householders in relation to access to water services, the relationships between suppliers and users in terms of transparency and accountability, as well as petty corruption in the maintenance of water systems.

Analytical lens

Focus area	Water supply and irrigation.
Governance components	Transparency, accountability, equity, petty corruption.
Level of analysis	National level.

Methodology	A combination of qualitative research methods (focus group discussions, interviews with key informants and desk study), and a perception-based quantitative survey targeting domestic and agricultural water users was applied.
Main findings	Systemic risks, legal risks and risks of the transition period (that is, risks associated with 'conflict' between the old and new relationships in the sector).
Impact	The findings were validated in a workshop and a road map was developed, which will be used for guidance and to inform planned sector reform. Findings will also be used to inform and facilitate the implementation of the anti-corruption strategy, to prioritize interventions and to identify what needs to be done in order to achieve some of the stated goals and targets.
Countries	Tajikistan.
Stakeholders involved	A high-level advisory group (including representatives from state ministries, parliament and civil society organizations) and a middle-level expert 'research group'. Main local counterpart was the State Agency on Financial Control and Anti-corruption.
Conditions for success	Ability to be flexible and change the approach due to changing circumstances.
Lessons learned	Good preparation is needed when identifying questions. Working with governance research institutes can be difficult when assessing sensitive issues such as corruption.

11. *Uganda Water Integrity Study*

Government of Uganda, Water and Sanitation Programme – Africa (WSP) and the Water Integrity Network (WIN) (2009)

www.waterintegritynetwork.net/uganda/water-integrity-study-in-uganda

In this study corruption risks in the Ugandan water sector were mapped. The objective of the study was to update the existing Good Governance Action Plan developed by the Ministry of Water and Environment. The research helped Uganda's Water Ministry to develop evidence-based strategies and programmes to address corruption risks.

Analytical lens

Focus area	Water supply.
Approach, governance areas	Corruption.
Level of analysis	National level.

Methodology	A qualitative risk/opportunity mapping study identified weaknesses in national institutions and opportunities for corruption using existing data, legislation and interviews with key informants. To validate and substantiate the findings of the mapping study, a quantitative national baseline integrity survey with 2,000 respondents was conducted, focusing on experiences of corruption among water service providers and consumers.
Main findings	Inadequate integrity in the Ugandan water sector has resulted in: loss of investments, exploitation of contractors, compromised professionalism, contracts issued for personal gain, resources lost through poor quality and incomplete works, and political interference. Services and investments have been targeted towards affluent communities at the expense of poor people.
Impact	A two-day National Water Integrity Workshop was held in which more than 100 stakeholders validated the findings of the studies and jointly agreed on selected recommendations to update the ministry's existing anti-corruption action plan. The updated action plan was approved by the Water and Sanitation Sector Working Group, the highest decision-making body, and subsectors are now reporting progress on the plan. A national Ugandan water integrity coalition, composed primarily of civil society members, has been set up to support the ministry in executing the action plan.
Countries	Uganda.
Stakeholders involved	The study was managed and supervised by a multi-stakeholder working group based at the ministry with members from government, civil society, private sector and international development partners. Throughout the process, different stakeholders were involved, such as the Uganda Bureau of Statistics. The national anti-corruption agency trained the data collectors on interview techniques.
Conditions for success	A collaborative multi-stakeholder design and oversight are required to create a shared sense of ownership of the research and action programme. A comprehensive communication and media strategy should be made publicly available.
Lessons learned	The baseline survey led to open acknowledgement by top policy makers of corruption as a problem for the sector. The inclusive and participatory manner in which the studies were undertaken contributed to wide ownership of the findings. A common understanding of how corruption harms the sector and what can be done to reduce it was developed. The workshop provided a forum for public discussion regarding corruption. Since corruption is multifaceted and involves many diverse actors, this cross-sectoral, multi-stakeholder dialogue was an important mechanism for effecting change.

12. *Water Governance Scorecard*

Global Water Partnership, MetaMeta (2005)

www.washdoc.info/docsearch/title/173455

The Water Governance Scorecard was developed for the Global Water Partnership Programme for Effective Water Governance to diagnose and map water governance in West and East African countries. The scorecard provides a snapshot overview of water governance arrangements and the scope for improvements. It serves to build the agenda for national governance discussions and helps to identify priority improvements. The tool can be used by civil society, government and independent consortium and development agencies.

Analytical lens

Focus area	Water service provision.
Governance components	Legislative framework, regulatory instrument, institutions, institutional effectiveness, barriers to institutional effectiveness.
Level of analysis	Water management institutions.

Methodology	Assessments were put together by national consultants and included reviews of existing literature; a survey to identify the major water users in the various sectors of the economy; and discussions and interviews with key personnel and executive officers. The responses obtained provided the basis for assessing the mode of operation and its strengths, weaknesses, opportunities and threats. The assessments were discussed in national workshops.
Main findings	–
Impact	Following the workshops, actions proposals were developed. The emphasis was on specific doable actions that could be undertaken to practically move effective water governance forward.
Countries	Benin, Burkina Faso, Ghana, Kenya, Niger, Uganda and the United Republic of Tanzania.
Stakeholders involved	Representatives of water management institutions, civil society organizations, members of country water partnerships.
Conditions for success	It is important to follow up and publish the results—for example, by press releases about the top performer.
Lessons learned	The tool focuses on institutions and regulations and how they are being applied. Governance is also about how different groups interact and who gets a seat at the table. That aspect of governance is more difficult to capture in the assessments. This is a tool to start a discussion between various stakeholders; it only works if it is part of such an activity. The methods to apply it to structured discussions could be improved. With more time and resources, quantitative data could have been collected.

Annex 1. What do water governance assessments measure?

Assessments	Components													
	Political economy analysis	Legal framework (policy, legislation, regulations)	Rights to water	Equitable provision of services	Physical water resources and water resource management (IWRM)	Sector performance assessment, effectiveness, and operational efficiency	Decentralized water services and local institutional capacity	Alternative service providers	Financial management	Pricing/ licensing	Corruption risks	Anti-corruption framework	Transparency, accountability and participation	Gender
Africa Development Bank Study on Water Governance		X	X	X	X	X	X	X	X		X		X	X
Annotated Water Integrity Scan		X		X					X		X	X	X	
Asia Water Governance Index		X	X	X	X		X	X	X	X			X	
Capability , accountability and responsiveness framework and drivers of change approach	X	X	X	X		X	X	X	X	X	X	X	X	X
Key performance indicators for river basin organizations		X			X		X	X	X				X	
MENA Regional Water Governance Benchmarking Project		X		X	X	X							X	
Quick scan water governance capacity														
Regional Water Intelligence Report	X				X									
Status Report on the Application of Integrated Approaches to Water Resource Management		X			X		X		X				X	
Water governance in OECD countries	X	X			X		X		X				X	
Transparency Index in water management (INTRAG)					X		X		X	X			X	

Case studies	Political economy analysis	Legal framework (policy, legislation, regulations)	Rights to water	Equitable provision of services	Physical water resources and Water resource management – including planning (IWRM)	Sector performance assessment, effectiveness, and operational efficiency	decentralized water services and Local institutional capacity	Alternative service providers	Financial management	Pricing/ licensing	Corruption risks	Anti-corruption framework	Transparency, accountability and information	Participation	Gender
Andhra Pradesh Water Governance Framework and Tools Project				X	X		X						X		
Bangladesh Assessment of Water Governance Trends		X		X										X	
Citizen Report Cards: Kenya				X		X					X			X	
Corruption Risks in Water Licensing: Chile and Kazakhstan						X				X	X				
Egypt Water and Sanitation Governance Index						X					X	X	X	X	
GoAL WaSH Water Sector Assessments		X	X		X	X	X								
Integrity Assessment of the Water Sector in the Occupied Palestinian Territories		X		X	X		X				X				
National Water Integrity Study: Kenya				X							X		X	X	
Rural Water Supply Corruption in Ethiopia		X				X	X				X				
Tajikistan Water Integrity Risk Assessment		X					X				X		X		
Uganda Water Integrity Study		X		X			X	X	X				X	X	
Water Governance Scorecard		X	X		X	X	X						X		

Annex 2. Links between water governance and broader governance and political economy

Examples of links between water governance and broader governance and political economy		
Possible assessment areas	**Water governance**	**Broader governance and political economy**
Political stability and personal security	Role of water in conflict-resolution and in prioritizing water services as an essential basic service in recovery and reconstruction	Improving state commitment to peace and stability; includes establishing linkages between poverty reduction and political stability
Economic and social policy management	Policy efforts to integrate water into poverty reduction strategies and to understand how water services can help poor people tap into economic growth.	Developing macro-economic stability and linking poverty reduction to sound economic management at the macro level.
Government effectiveness and service delivery	Strengthening capacity of local government/utilities in managing and maintaining service delivery; strengthening leadership; separating institutional roles and responsibilities.	Decentralization, civil service reform, effective public administration and participatory planning and budgeting at the macro level.
Revenue mobilization and public financial management	Management of finances by water ministry and local governments— budgetary and financial management, quality of decision-making, planning, budgeting and monitoring, tracking sector financial flows and sustainable financing strategies.	Improving fiduciary accountability, strengthening financial management performance, and improving planning, budgeting and monitoring.
Conditions for private sector investment	Putting in place well considered strategies that contribute to an overall water services policy framework, including policy, legislation, appropriate regulation and incentives toward public-private partnerships, small-scale private providers and investment in the sector.	Rules and regulations, adherence to the rule of law, creating conditions for investment and trade, promoting growth of jobs and income, and development of an enabling environment for private sector investment.
Political participation and checks & balances	Improving the accountability and capacity of national and local politicians and strengthening consumer/ user voice to enhance political accountability for water services.	Political participation and citizen empowerment, information, political rights and awareness, improving capacity of parliamentarians and councillors, strengthening decentralization at the local level.
Transparency and media	Improving access to reliable information that is understandable to citizens, information and transparency on water rights, access, planning, budgeting and expenditures.	Legislation and policy towards the media, establishing and enforcing the freedom of the press and right to information.
Judiciary and rule of law	Ensuring water rights and providing for recourse, arbitration, conflict-resolution and appeal.	Functional court systems and creating the environment for enforcement of rules and for sector behaviour, contract law, equitable water and property rights, and access to justice for all.
Civil society	Support sectoral social accountability mechanisms (participatory planning, budgeting, monitoring of water services, water expenditure tracking, and the promotion of citizens' voices and empowerment of the marginalized.	Strengthening the operating environment for civil society, empowering citizens to demand accountability.
Respecting human rights	Process of articulating, agreeing, implementing and monitoring the fulfilment of rights to water resources, water supply and sanitation.	Improving state commitment to human rights, women's rights, and rights to development; may be closely linked to poverty reduction strategies.

Examples of links between water governance and broader governance and political economy		
Possible assessment areas	**Water governance**	**Broader governance and political economy**
Pro-poor policy	Developing pro-poor water service delivery approaches, institutional mechanisms to deliver policy, financing strategies, pro-poor approaches in the water sector, responding to increasing demand from poor households for adequate and affordable services.	Formulation and implementation of policies to meet the needs to the poor, strategic planning and implementation for poverty reduction, pro-poor spending, addressing regional disparities.
Gender	Gender-based approaches to service delivery, gender mainstreaming of service inputs and outcomes, women's participation in water user groups and decision-making bodies.	Women's roles in politics, management positions in government and NGOs, and decision-making at national and regional levels.
Regulatory quality	Regulatory environment that encourages the types of services the poor use, minimum standards for water services, water pollution issues, integration of alternative service providers.	Labour laws that protect the poor, environmental and pollution laws.
Corruption and integrity	Tackling misallocation and diversion of resources intended for water resources, mapping and prioritizing an anti-corruption agenda.	Improving integrity of civil service, procurement reform, transparency and access to information, developing anti-corruption laws and institutions.

Annex 3. Sample terms of reference for a water governance assessment

Promoting Inter-ministerial Coordination of Decision-making in Iraq

The overarching aim of the assessment is to contribute to improving water management in Iraq through the strengthening of water governance. The scope of the assessment is to map and analyse water institutions and stakeholders in Iraq with the following objectives:

- Identify institutional strengths and weaknesses in the water sector and opportunities for change
- Inform the ongoing water governance reform process with regard to institutional development
- Contribute towards developing a long-term water programme to promote integrated water resources management.

To ensure ownership of process and findings, inception and validation and action planning workshops for the sector stakeholders should be held.

The following steps were performed to better understand the water sector performance in Iraq:

Step 1: Assessing water in the broader political economy

a) Analyse water issues within the context of security and development. Consider how Iraq's status as a federal state impacts water resources governance and relations among the federal government and governorates. Key questions include: Are there other related public sector reforms that can be built on? How does the ongoing debate on decentralization spill over to the water sector? How does water resources development fit with the development ambitions of the country?

Step 2: Stakeholder mapping and institutional analysis

a) Map out the relevant actors and their mandates, capacities, interests and powers, including relationships and incentive structures between different stakeholders. It should include both political and administrative levels and non-governmental and private sector actors.
b) Review of water-related policies, legislation and institutional set up to identify strengths and weaknesses.
c) Mapping of ongoing water reform processes and relevant water programmes in relation to improving integrated water resources management.

Step 3: Assessing water governance linkages

a) Assess the governance linkages with regard to coordination of decision-making (inter-ministerial and between central government and governorates).
b) Also assess aspects such as access to information, participation, accountability and responsiveness.

Step 4: Analysis and recommendations

a) Analyse governance reform readiness, priorities, sequencing, etc. and provide recommendations for strengthening water institutional systems and incentive structures to promote horizontal and vertical coordination of decision-making.

b) Analysis and recommendations for developing a long-term programme on integrated water resources management, including capacity development needs.

It is important that the work captures socio-economic dynamics in relation to water governance and how this can provide opportunities and challenges for water reform. The work will provide an institutional overview, but it should put emphasis on existing coordination mechanisms among different stakeholders, decision-making processes, organizational mandates, legal set up, etc. This is important to be able to pinpoint the problem (institutional change) and how it affects water sector management and its performance at regional, national and governorate levels.

Source: WGF/SIWI

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