



A primer for individuals as well as central governments in developed and developing countries, sub-sovereign national bodies, companies, universities and research institutes, community organisations, non-governmental organisations, inter-governmental organisations, banks and private investors, aid donors, multilateral financial institutions, UN agencies and other international organisations.

SWEDISH  
**WATER**  
HOUSE

**SIWI**

**WIN** Water  
Integrity  
Network  
Fighting corruption in water worldwide

# CORRUPTION IN THE WATER SECTOR

## Causes, Consequences and Potential Reform



Photo: Bernie Olbrich, AfriPics

## Note to the Reader:

Swedish Water House Policy Briefs explore key future-oriented – yet often inadequately explored or understood – water and related subjects. Each brief 1) outlines the specific issue/problem, 2) explains its relevance, 3) presents and explains new solutions and 4) offers conclusions which present policy recommendations, recommended approaches or lessons learned.

The malice of corruption in the water sector has only recently been identified by policy makers and researchers. There is an eminent need to build a deeper understanding of the scope and nature of this problem and several knowledge-creating initiatives are already underway. This policy brief aims to capture the current level of knowledge within the field and identify key areas for further knowledge generation and policy development.

This is thus a work in progress and the views expressed here are those of the author and not necessarily representative of the Swedish Water House, Stockholm International Water Institute or Water Integrity Network. The author is a part of the Swedish Water House (SWH) Anti-Corruption in the Water Sector cluster group. SWH is a founding member of the Water Integrity Network (WIN) set up in 2006 with the aim of fighting corruption in water worldwide. Valuable comments have been made by other members of WIN, in particular Ms. Janelle Plummer, Mr. Håkan Tropp, Stockholm International Water Institute (SIWI), Mr. Donal O'Leary, Transparency International (TI), and Ms. Grit Martinez, NetImpact. Comments and suggestions should be addressed to the author, Dr. Patrik Stålgren.<sup>1</sup>

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# Why Fight Corruption in the Water Sector?

Conservative estimates hold that the lack of access to clean water causes the death of five million people worldwide every year.<sup>2</sup> To grasp the magnitude of this figure, think of 34 jumbo jets, each carrying 400 passengers, crashing every day of the year – that adds up to some 12,500 planes annually.<sup>3</sup>

Beyond these catastrophes, on a global scale there is an increase in competition for water resources as well as escalating water pollution. The resulting soil degradation, destruction of ecosystems, and loss of productive land seriously impacts sustainable socio-economic development and political stability.<sup>4</sup>

The main reason behind all this is not the lack of a natural supply of water, nor is it primarily an engineering problem, i.e. stemming from the lack of technical solutions. Instead, this global water crisis is primarily a crisis of governance. As a group of experts working under the UN Millennium Project put it, the problem is “the lack of appropriate institutions at all levels, and the chronic dysfunction of existing institutional arrangements”.<sup>5</sup>

Corruption is at the core of the governance crisis in the water sector. Whereas the scope of corruption varies substantially across the sector and between different countries and governance systems, estimates by the World Bank suggest that 20% to 40% of water sector finances are being lost to dishonest and corrupt practices. The magnitude of this figure is distressing, especially if one considers current efforts to aggregate the USD 6.7 billion needed annually to meet the Millennium Development Goals (MDGs) for water and sanitation in Sub-Saharan Africa.<sup>6</sup> An average level of corruption of 30% represents a leakage of USD 20 billion over the next decade. While there is a need to scale up financial commitments within the sector, current levels of corruption necessitate reform to increase the effective use of existing financial resources.<sup>7</sup>

Ecosystems suffer because of this corruption. Bribes are paid to cover up the discharge of wastewater and toxins in water resources, and to allow for excessive abstraction from rivers and groundwater reservoirs. Where there is a lack of functioning public institutions (typically engendered by corruption) and a vibrant civil society, the environment is often stuck bearing the burden.

Furthermore, corruption increases transaction costs and discourages investments in infrastructure, e.g. hydropower production. In fact, the biggest constraint on business development in emerging and transitional economies is corruption, second only to access to financial resources.<sup>8</sup>

At the level of household economies, its cost is felt in deficient water service delivery and practices, contributing to the

40 billion working hours lost annually at a global scale due to inefficiency in the water sector. It thereby keeps many children out of school, as they are instead occupied by the time-consuming burden of collecting household water – a burden that traditionally falls largely on females.

Whereas much effort has been made during recent decades to widen stakeholder participation in water resources management and delivery, corruption jeopardises the democratic principles of equal access in decision making by reducing public agencies to instruments of private benefit. Furthermore, it undermines the rule of law, thereby depriving water users from their right to a just legal system and impartial law enforcement.<sup>9</sup>

Water scarcity is often cited as a potential source of conflict. According to the UN Global Programme Against Corruption, corruption adds to this threat by undermining government security institutions (rule by law), increasing the gap between rich and poor and fostering a culture of crime and illicit behaviour which upsets social and political stability and sparks violence.<sup>10</sup>

In short, corruption affects the governance of water by affecting who gets what water when, where and how. It also determines how costs are distributed among individuals, society and the environment.<sup>11</sup> Corruption worsens the world water crisis and evidence suggests that the costs are disproportionately borne by the poor and by the environment.



Photo: Q

## Time to take action

Rising awareness about the debilitating effects of corruption in the water sector has meant fewer actors view it as a lubricant that facilitates economic transactions and increases efficiency by cutting bureaucratic red-tape. Despite this recognition, a firm and systematic response has only recently started to take form.

Today there are a wide array of initiatives backed by widely recognised institutions such as the Organisation for Economic Cooperation and Development (OECD), the United Nations (UN), the United Nations Development Programme (UNDP), the World Bank and Transparency International. These initiatives are important but all have a general scope, lacking a clear application to the water sector. Moreover, few, if any, derive their strategy from a firm understanding of corruption's dynamics and which anti-corruption activities are likely to obtain the desired effect. In fact, it is widely acknowledged that research in this field is still only in its infancy.<sup>12</sup> Corruption research out of the World Bank concludes that "many [anti-corruption] programmes are simply folk remedies or one-size-fits-all approaches" with little or no chance of success.<sup>13</sup> While solid knowledge on tackling corruption is in high demand, the supply is disappointingly low. Notwith-

standing some scattered islands of knowledge, diagnostics and a systematically developed understanding of anti-corruption measures are only beginning to develop.

The aim of this policy brief is to enhance understanding of the diversity and scope of corruption in the water sector and to give an overview of existing knowledge of available tools to combat corruption. There is particular focus on corruption's links to the creation and alleviation of poverty. Examples are drawn from a wide variety of water usages (including water resources management, supply and sanitation, agriculture and hydropower production) as well as from different geographic and socio-economic contexts.

Following this introduction, the second part of this Policy Brief focuses on the diversity of corruption across the water sector. The third section contains a critical examination of existing anti-corruption measures available for the water sector. Section four identifies some key areas for further knowledge generation. Section five provides elements of a strategy for how to tackle corruption in the water sector. The final section provides the conclusion; the "Key Recommendations" of this and policy implications for engaged public, private and non-governmental actors are found in Box 1 below.



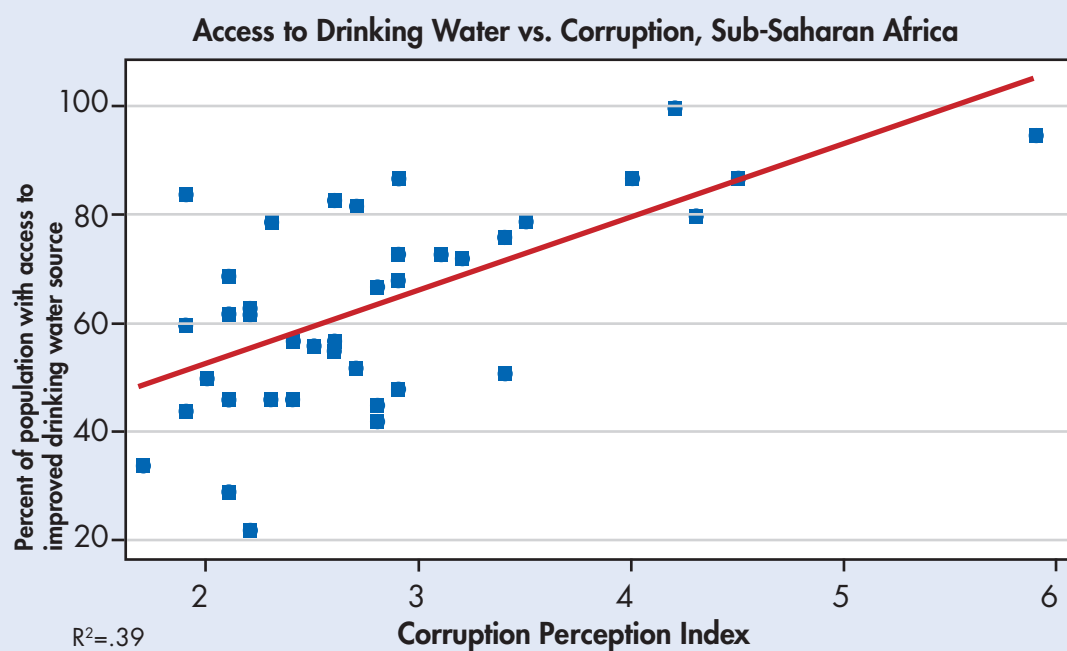
Photo: Mats Lammestad

### Key Recommendations

- Align anti-corruption measures in the water sector with national governance reform
- Mobilise political support and engage leaders as constructive anti-corruption partners
- Diagnose anti-corruption measures. Rethink traditional one-size-fits-all responses to anti-corruption measures to make them more applicable to the water sector
- Corruption is the symptom: target the system. Corruption is not primarily driven by individuals trying to earn an extra buck, but is part of established social systems in need of reform
- Be preventive rather than reactive. Corruption has immediate negative effects and once corrupt systems are established, they tend to stick
- Don't stand alone. Build comprehensive networks of actors from the local, national, regional and international level and from all spheres of society: private, public and civil society
- Recognise that no one is immune to corruption. Poor marginalised women, well-educated scientific experts and well-meaning international aid workers can all be part of the problem.
- Work around as well as on corruption. When corruption takes on systemic proportions, the requirements for targeted action may be absent, which calls for an indirect approach
- Anticipate unexpected consequences. Tackling corruption means moving in uncharted territory where targeted measures can result in unintended effects, and the intended consequences can be severely delayed. This calls for patience, resources and political and institutional reserves
- Focus on the needs of poor and marginalised people. They are often the most affected by corruption and can, in the short run, be disenfranchised by effective anti-corruption measures

### Box 1: Access to Drinking Water vs. Corruption, Sub-Saharan Africa

This diagram illustrates that there is a correlation between corruption and access to improved drinking water in Sub-Saharan Africa (SSA). The more corrupt a country is, the smaller the fraction of its population that has access to improved drinking water.



Comment: The diagram builds on the assessment of levels of corruption in 39 countries as measured by the Corruption Perception Index (2005) developed by Transparency International. Scoring a low figure on this index indicates that the level of corruption is high. Figures out of WHO/UNICEF Joint Monitoring Programme on Water Supply and Sanitation give the indication of percentage of population with access to improved drinking water.

Photo: Mats Lammers





# Form and Scope of Corruption in the Water Sector

## Defining corruption

Transparency International's definition of corruption – the misuse of entrusted power for private gain – is widely cited and encompasses most other definitions. It expands on the classical definition, which limited corrupt behaviour to the interface between public and private sectors by stating that corruption

is the abuse of public power for private benefit. There is, however, no clear-cut definition of corruption and analysts have made a number of attempts to increase the conceptual clarity around corruption by talking about different kinds of corruption. Box 2 provides some useful examples, while Boxes 3, 4 and 5 give examples of both problems and solutions in the field.



Photo: David Dahmen

## Box 2: A Breakdown of the Concept of Corruption<sup>14</sup>

The word “corruption” comes from “corruptus” which is Latin, meaning “to be broken”. But corruption does not necessarily entail breaking the law. In fact in many corrupt societies, the legal system is quite flawed. Corruption is about breaking socially established expectations of appropriate behaviour.

Bribes or kickbacks are the most cited forms of corruption and include the payment of a fixed sum, a certain percentage of a contract or in-kind favours. Fraud involves manipulation or distortion of information, facts and expertise for private gain by people entrusted to cater to the public good. Fraud is a purposeful act and does not include unwilling misconduct or negligence. Favouritism, clientalism, cronyism and nepotism are the use of entrusted power to provide preferential treatment to friends, family, kin or anybody close and trusted. This form of corruption stands out, as it concerns the distribution of resources as opposed to its accumulation.

Corruption is an exchange of either economic or social resources. Economic corruption is the exchange of tangible goods such as cash, official positions or material goods, while social corruption also includes the exchange of favours, social acknowledgement and power that cannot directly be translated into material resources.

Corruption is active, for instance when political influence is used to get preferential treatment e.g. in the review of contracts during procurement of a drilling contract. It is passive when, say, a public official overlooks the pollution of a water source.

A useful distinction is that between grand and petty corruption, which points to differences in scale and frequency of corruption. Grand corruption is typically less frequent but involves larger sums of money being paid as kickbacks, e.g. during the procurement process for large-scale infrastructure projects. Petty corruption, by contrast, is more frequent and involves lesser sums of money or favours, e.g. cutting red-tape in applications for reservoir water abstraction or expediting a household’s connection to municipal water supplies.

Corruption almost always involves at least two actors – someone who gives the bribe and someone who receives it. This exchange is collusive in that these actors are on equal terms and both gain from the exchange. It is extortive when the bribe-taker exploits or blackmails the bribe-giver through mafia-style harassment or intimidation.

Rent-seeking is sometimes used interchangeably with corruption. While there may be some overlaps, rent-seeking refers to an economic actor’s pursuit of rents in the economy while corruption technically refers to an illegitimate transfer.

Photo: STWZ

## Box 3: Example of Corruption in the Water Supply and Sanitation Sector in India

A more systematic effort to map petty corruption and its modus operandi in India’s water sector has been done recently.

Results show that:

- 41 % of the customer respondents had made more than one small payment (median payment USD 0.45) in the past 6 months to falsify meter reading to lower bills
- 30% of the customer respondents had made more than one small payment (median payment USD 1.90) in the past 6 months to expedite repair work
- 12% of the customer respondents had made payment (median payment USD 22) to expedite new water and sanitation connections

The cumulative revenue losses stemming from falsified water meters add up to large sums over time. This is money that alternatively could be spent on improved operation and maintenance, new investments to improve water and sanitation systems for economically weak groups, etc. Such alternative costs are rarely taken into account in corruption equations.

The study also indicates the frequency of side payments from contractors to public officials within the water and sanitation sector: According to public official respondents, side payments occur on a frequent basis:

- 17% said that it takes place every time
- 33% claimed it was quite common
- 8% said that it takes place about half the time
- 17% said that it occurs occasionally
- 25% said that it occurs infrequently/never

The value of kickbacks to public officials normally ranged from 6% to 11% of the contract value. The study also suggests that side payments for transfers of staff occur frequently. Interestingly, side payments for promotions were less common.

Source: Jennifer Davis, “Corruption in Public Service Delivery: Experience from South Asia’s Water and Sanitation Sector”, *World Development Report*, Vol. 32, No. 1 pp. 53-71, 2004.

#### Box 4: Lesotho Highlands Project Trials

The Lesotho Highlands Water Project (LHWP) is the largest international water transfer in the world. Its aim is to provide extra water to the city of Johannesburg, South Africa, by transferring water from the Orange to the Vaal river. Lesotho receives royalties for the water – amounting to USD 31 million in 2004, roughly 5% of its GDP. Phase 1 of the project has been completed and created four dams and 110 kilometres of tunnels at a cost of about USD 2 billion. It transfers 750 million cubic metres of water to South Africa annually.

In 2001 the first Chief Executive of the Lesotho Highlands Development Authority (LHDA) in charge of overseeing the LHWP, Mr. Masupha Ephraim Sole, was on trial on charges of bribery and fraud. He was convicted on 11 charges of bribery and two of fraud and then sentenced to 18 years imprisonment (reduced to 15 years on appeal) for the way in which he awarded construction contracts on the project. He was paid these bribes by foreign construction companies working on the project. The prosecution of Mr. Sole was a victory in the fight against corruption – showing what can be done by a government which decides to take the issue seriously. In recognition that bribery has both a demand as well as a supply side, the next step the government of Lesotho took was to start prosecutions against the multinational companies who bribed Mr. Sole. Thus far three of the firms have been successfully convicted of bribery by

the High Court of Lesotho, including Acres of Canada, Lahmeyer of Germany and Spie Batignolles of France. All three have paid their fines and Acres was also barred by the World Bank from bidding on projects.

Several points of importance for future bribery prosecutions were set as precedents by these trials, including:

- **Bribery** – what has to be proven by the prosecution? Ruled that crime is committed when the agreement is made – no action on the part of the public official needs to be proven, making the prosecution of the crime easier.
- **Jurisdiction** – where did the crime take place? Not possible to say where the agreement to bribe was made – but the impacts of the crime were felt in Lesotho – thus jurisdiction was ruled to be in that country
- **Financial Transparency** – a major breakthrough in the trials was when the prosecution team gained access to the Swiss banking records of the accused – allowing them to construct a web of transactions from the multinational companies via intermediaries to Mr. Sole.

The Lesotho Highlands trials are a clear example of what can be done when the highest levels of political support are given to combating both sides of the bribery equation.

*Earle, A., & Anthony Turton "No Duck no Dinner: How Sole Sourcing Triggered Lesotho's Struggle"*

## What does Corruption Look Like in the Water Sector?

The water sector is characterised by a number of factors that increase the likelihood of corruption. These include

- Large-scale construction and monopolies
- High level of public sector involvement
- Technical complexity, which decreases public transparency and leads to an asymmetry of information
- High demand for water services, which reinforces the power position of suppliers and encourages bribery
- A high frequency of interrelations between suppliers and consumers, which fosters an atmosphere of discretionary action

Corruption in the water sector comes in many different forms and the scope varies substantially across types of water practices, governance structure and the perceptions and norms of actors involved. Typical examples of corruption include falsified meter reading, distorted site selection of boreholes or abstraction points for irrigation, collusion and favouritism in public procurement, and nepotism in the allocation of public offices.

The variation in sorts of corruption activities is partly explained by the large number of different kinds of actors engaged in the water sector. In the public domain, this includes political leaders, policy makers, procurement and regulation

officials, law enforcement agencies, local water bailiffs and technical staff, as well as international development partners. In the private sector, actors range from senior management dealing with procurement to technical staff and consultants engaged in the preparation and implementation of contracts. Civil society plays a vital role via stakeholder facilitation, allowing demands and discontent to be voiced and playing a key role in advocating reform. Notable actors include the media, water stakeholder associations, environmental protection groups, as well as religious leaders concerned with social justice and sustainable development.

None of these actors are immune from the risk of being corrupt. Recent corruption cases in organisations such as the World Bank and the UN, and in nations with fairly transparent political systems such as Sweden, serve as a reminder that any society or organisation is susceptible, even where seemingly well-established checks and balances are in place.

This calls for a comprehensive framework to understand the multiple forms of corruption in the water sector<sup>15</sup>. Such a framework can take as a point of departure the idea that society is divided into different spheres. Each social sphere is characterised by its own set of rules and norms which guide socially legitimate behaviour. What is accepted behaviour in the private sphere, such as looking out for family and friends, is not accepted in the public sphere. Corruption typically originates in





the interface between public and private spheres of society, i.e. between the state and consumers, as well as between the state and market actors. Corruption also occurs within the public sector when public officials favour private interests rather than the public good which they are entrusted to serve.

The matrix in Box 6 provides a comprehensive framework for mapping different kinds of corruption by building on the interface between different spheres of society. The matrix fur-

ther points to variations and similarities between different sub-sections of the water sector: water resources management, supply and sanitation, hydropower production, irrigation and groundwater extraction.

The rationale for this breakdown is to develop a clearer picture of corruption as a first step towards tailoring more effective responses.

#### Box 5: Development of an Anti-corruption Agreement with the Waterpipe Manufacturing Companies in Colombia

*"An ethical agreement among equals, in which companies have defined their own rules above and beyond legal reforms or statutes, may also give rise to cultural transformations, based on new convictions regarding the way to conduct business in the context of the acceptance of and respect for the rule of law."*

Rosa Inés Ospina Robledo  
Executive Director  
Transparencia por Colombia

**Background:** The initiative for this sectoral anti-bribery agreement was taken by ACODAL – the Colombian Association of Environmental and Sanitary Engineers, whose affiliated waterpipe manufacturing companies accounted for 95% of the national market and 100% of the bids in public tenders for water supply and sewer systems. ACODAL approached Transparencia por Colombia (TI-Colombia), and the two organisations worked together to develop an Agreement amongst the piping companies based on TI's Business Principles to Counteract Bribery (BPCB).

Since this Agreement was signed in April 2005, there has been a significant reduction in the bid award prices for projects involving the Agreement signatories, which reduces the scope for paying bribes. A similar agreement was signed in Argentina in December 2005. Agreements are also being considered in Brazil and Mexico.

*"The impact and effect of this Agreement will be very strong, since we never before have had a code to guide us on these matters. Now we have parameters for action. Furthermore the sanctions that have been established are very important. With this Agreement we, pipe manufacturers, will act differently amongst ourselves, since the same rules and regulations apply to all"*

Testimony of a participant in the agreement

**Motivation:** The Agreement developed in response to the absence of transparency in the pipe business sector and in particular in public sector procurement (purchases), which gave rise to an environment of mistrust and to a credibility crisis in its

entrepreneurial activity. In addition, it led to the loss of public resources caused by the unethical over-pricing of products, and substandard quality of public projects and utilities. The situation eventually turned unmanageable for the companies and for the trade association itself, which not only experienced unattainable transaction costs but also a sense of moral fatigue.

**The Agreement:** The Agreement included the development of a general anti-corruption policy in each company as well as specific guidelines regarding each of the forms of bribery specified in the (BPCB). The guidelines were quite detailed and covered issues such as pricing and purchasing, distribution and sales schemes, implementation mechanisms, internal controls and audits, human resources management, communications, internal reporting and consulting, as well as protection of "whistle blowers". In addition, the Agreement specifies the roles of an Ethics Committee and a Working Group tasked to supervise the implementation of the agreement and enforced with far-reaching legal and economic powers that could be used towards companies failing to comply.

**Lessons learnt:**

- Ethical commitment and motivation can engage private sector entrepreneurs to self-regulation and common standards to reduce corruption.
- Leadership from top management of companies must be firm and enduring.
- Coordination with national governance reforms helps to mobilise political commitment, to move beyond the needs of specific individual business and to ensure that the Agreement is followed up by parallel work in the public sector to prevent corruption risks arising from the State.
- Involvement of a third-part actor, such as Transparency International, can help coordinate and facilitate an agreement.

Alma Rocio Balcazar (2005), *The Establishment of an Anti-Corruption Agreement with Pipe Manufacturing Companies: A Colombian Experience. Presented at the Seminar on "Meeting International Targets without Fighting Corruption", Stockholm, World Water Week 2005, August 21.*

**Box 6: A Framework of Corruption in Different Sub-sections of the Water Sector**

	WSS	WRM	Hydropower
<b>Public – Public</b>	<ul style="list-style-type: none"> <li>Inter-departmental collusion in selection and approval of water projects</li> <li>Bribery to silence accusations of collusion with contractors</li> <li>Bribery for oversight in monitoring and control of urban pipe systems</li> <li>Distorted site selection in favour of a public official's residence</li> <li>Bribery for promotions, appointments and transfers within public administration</li> </ul>	<ul style="list-style-type: none"> <li>Inter-departmental collusion to cover up pollution of water resources</li> <li>Bribery to obtain water permits</li> <li>Bribery to silence accusations of collusion with private contractors regarding pollution rights</li> <li>Bribery for promotions, appointments and transfers within public administration</li> </ul>	<ul style="list-style-type: none"> <li>Bribery to silence accusations of collusion with contractors</li> <li>Bribes to cover up embezzlement of public supplies for an official's private use</li> <li>Bribery for promotions, appointments and transfers within public administration</li> </ul>
<b>Public – Private</b>	<ul style="list-style-type: none"> <li>Collusion in public procurement</li> <li>Kickbacks for awarding large-scale contracts</li> <li>Manipulation of documents and facts to cover up use of uncertified material in construction</li> <li>Kickbacks to accept inflated bills (unit costs, and amount of material)</li> <li>Preferential treatment of contractor who sites a water project in a public official's home area</li> <li>Corruption to manipulate information for auditing authorities</li> </ul>	<ul style="list-style-type: none"> <li>Kickbacks to regulatory officials to cover up pollution of water resources</li> <li>Bribes to cover up wastewater and pollution discharge</li> </ul>	<ul style="list-style-type: none"> <li>Collusion in public procurement</li> <li>Payment (kickbacks or high-level jobs) for awarding large-scale contracts</li> <li>Overdesign of projects</li> <li>Licensing of projects with unacceptable environmental or social management plans</li> <li>Manipulation of documents and facts to cover up use of uncertified material in construction</li> <li>Kickbacks to accept inflated bills (unit costs, and amount of material)</li> <li>Bribery to cover-up failures to meet contractual deadlines</li> </ul>
<b>Public – Consumer</b>	<ul style="list-style-type: none"> <li>Corruption to falsify meter reading</li> <li>Preferential treatment for services or repairs</li> <li>Bribery to obtain access to water – installation, concealing illegal connections, avoiding disconnection</li> </ul>	<ul style="list-style-type: none"> <li>Bribery to silence public protest over water resource contamination</li> </ul>	<ul style="list-style-type: none"> <li>Power utilities that implement hydropower projects are prone to many of the public-consumer sources of corruption common in water utilities, including false metering, billing and collection as well as preferential treatment for services and repairs and bribery to be illegally connected to the distribution grid</li> </ul>

Source: Authors' aggregation inspired by Plummer and Cross 2006; Davis 2004; Kaufmann 2002. Useful comments by Donal O'Leary, TI, regarding corruption in hydropower production are gratefully acknowledged. The table excludes private-private forms of corruption, such as collusion among contractors bidding for public-financed projects, which is an acknowledged problem.



Photo: Mats Lannestad

## Corruption in the Water Sector Hurts the Poor the Most

Corruption in the water sector undermines development of society as a whole. It contributes to unsustainable development by discouraging investments, undermining efficient water resource management and service provision, and degenerating public institutions. Poor people are particularly hurt by corruption in the water sector, mainly because it creates poverty by reducing effectiveness and efficiency. In Sub-Saharan Africa, 44% of the countries are unlikely to attain the MDG target for drinking water before 2015, and when it comes to the sanitation target, a staggering 85% are off track. Corruption has been identified as a major cause of this. That is to say that corruption contributes to millions of people dying from illnesses caused by lack of access to clean water and sanitation.

	Irrigation	Groundwater extraction
	Corruption to distort site selection in favour of public official's residence Bribery for promotions, appointments and transfers within public administration	Distorted site selection in favour of public official's residence Bribery to obtain drilling permit Bribery for promotions, appointments and transfers within public administration
	Bribery for diversion of water for commercial irrigation Collusion in public procurement Kickbacks for awarding large-scale contracts	Kickbacks to favour costly, oversized and technically complex systems Bribery to obtain drilling permit Bribery to cover up use of substandard material (such as lining materials and cement) Kickbacks to accept inflated bills (unit costs, and amount of material)
	Bribery for diversion of water Corruption to falsify meter reading Bribery to obtain preferential treatment for services or repairs	Bribery for excessive abstraction Corruption to falsify meter readings Bribery to obtain preferential treatment for services or repairs

In addition, poor people are often engaged in agricultural production which makes them particularly dependent on water services for their livelihoods. Poor people have few, if any, means to enter alternative markets when corrupt public systems fail to deliver. Corruption also undermines democracy and the legal system which otherwise can empower the poor. Acting within such a system, poor people typically cannot afford to pay bribes, and when they do, research shows that they have to pay a higher amount relative to their income. If a scarce resource or service is only delivered to the one offering the highest bribe, the poor will lose out. Typically, poor people also lack the influential contacts and relationships that determine delivery and allocation of public offices in corrupt systems.

### Box 7: Driving Forces of Corruption

The academic literature points to individual, institutional and norm-based causes of corruption. Each of these perspectives adds to the understanding of the causes of corruption, but doesn't give the full story. While there have been (unsuccessful) attempts at merging these perspectives into a comprehensive picture that grasp the complexity and diversity of corruption, additional research is needed.

**Individual choice:** Actors get involved in corruption when the expected net benefit is positive. When an actor contemplates engaging in corrupt activities, the value of the potential gains will be weighed against the anticipated punishments and risks of being caught. An individual will, however, not only calculate the externally imposed tangible cost/benefit ratio from corruption; social expectations, norms and actors' social identities can also create moral costs and rewards.


**Institutions:** Variations in institutional structures and systems of governance play out on the realm of corruption. Public institutions are essential, but not immune to institutionally driven corruption from the economic sphere, depending on the quality and strength of civil society institutions. Klitgaard (1998) suggests a definition of corruption that captures this institutional perspective:  $\text{Corruption} = \text{Monopoly} + \text{Discretion} - \text{Transparency}$ .<sup>16</sup> According to Klitgaard, institutions that allow for a low level of economic competition and a high level of discretion tend to increase corruption; institutions that provide for transparency in political and economic exchanges and empower people to voice their discontent tend to have the opposite effect.

**Norms:** Corruption can be an intrinsic part of social systems where the distinction between the public and private spheres is not well established. When this distinction is blurred, it becomes difficult to conceive of what should count as corrupt behaviour, as most definitions of corruption turn on the idea of the legitimate distinction of social spheres.

Furthermore, corruption can be so widespread in society that it is seen as a natural part of life. It is the norm, rather than the exception. Reporting from the Democratic Republic of Congo, Brown and colleagues concluded that corruption "has become so deeply rooted in the Congolese culture since independence that its existence is virtually accepted as a given. This is because 100% of either 'legal' or illegal transactions involve some dimension of corrupt practice".<sup>17</sup>

This type of situation is often caused by a self-perpetuating process whereby engaging in corruption becomes the rational thing to do. It is thus not typically a question of some cultures being prone to corruption; it becomes the norm for actors to assume that everybody else is corrupt. From the perspective of the individual, it is typically rational to engage in corrupt practices if everybody else does, and the cumulative effect is devastating.





# Cracking Corruption in the Water Sector

Photo: STWT

Eradicating corruption from the water sector is unrealistic, but significant reductions are a necessity from any perspective, whether the focus is economics, human rights or ecological sustainability. Estache and Kauassi show that if water utilities in Africa would operate in a corruption-free environment, efficiency would increase by 64%.<sup>18</sup> In spite of the high demand for sound measures to combat corruption, effective tools to do so are hard to come by.

However, as Estache and Kauassi argue, even a marginal reduction of corruption yields significant effects. Measuring corruption on a 16-point scale, they show that a cutback of corruption by one point from the average level of 10.2 to 9.2 would increase efficiency by 6.3%. This is, as the authors point out, more than the calculated total gain achieved from privatisation.

## Measures to Combat Corruption

There are four main categories of existing anti-corruption measures that can be employed in the water sector: (i) legal and financial reform; (ii) reform of public service delivery systems, (iii) reform in the private sector, and (iv) public awareness and capacity building.

### (i) Legal and financial reform

Legal and financial instruments to battle corruption include reformed procurement procedures, monitoring and oversight, deterrence, increased economic competition and decentralisation. Reducing complexity in regulation, licensing and control are central elements of these reforms, typically led by government agencies. The likelihood of success is increased if measures are supported by the private sector, civil society and the international community.

**Procurement processes:** Public procurement is a hot spot for corruption. Determining the nature of the contract includes possibilities for tailoring the bid requirements to suit a specific bidder, while the tendering process can be manipulated by reducing information about contracting opportunities and create an excuse for sole sourcing. Private contractors are prone to engage in collusion whereby they undermine competitive bidding and secretly agree to take turns making the lowest bid. Being able to control the competition, they can

inflate their bids and create a profit margin that is shared among the colluding partners.

Procurement reforms should therefore be developed in close cooperation with private companies within the sector who can be encouraged to form “integrity pacts”. These foster peer control and socialisation that breaks established behavioural patterns and moral standards (see separate section). Civil society can play a key role, e.g. in the form of public ombudsmen – operating under a code of confidentiality – who oversee the procurement process.<sup>19</sup>

Other measures include reducing the size of contracts. Even a small percentage of comprehensive contracts concerning the construction of dams or drilling concessions can add up to irresistible temptations.<sup>20</sup> Contractors often don’t think that it is worth the risk to engage in collusions on smaller projects, reducing the incentive to take the risk. However, in many countries, to enhance the possibility of their winning contracts, local contractors push to have the sizes of contracts reduced; this is generally recognised to be one of the major causes of corruption. Furthermore, it is much more difficult to manage a project consisting of many small contracts rather than a number of large ones. This increases the level of discretion for public officials and hence the risk for corruption.

Public procurement officials can introduce the use of “rate-books” that contain unit costs (e.g. for well lining materials, cement, drilling mud, pumps, etc.). Reviewing bids coming in during the tender, these rates can be used as a baseline to detect and check collusion amongst the bidders.<sup>21</sup> Similarly, by increasing the level of technical precision in public contracts, a public official’s level of discretion will decrease.<sup>22</sup>

**Monitoring and oversight:** Contractors are likely to collaborate with technical staff to increase their profit margins after a contract has been won. This includes bribing public officials to turn a blind eye to the use of substandard material, inflated invoices and covering up missed deadlines. Similarly, in intra-governmental endeavours, public officials may collude with colleagues to hide negligence, manipulate public accounts or delay licensing applications in anticipation of a side payment or a promotion. Participatory monitoring and oversight mechanisms can counter this, including independent auditing

units, transparent access to public accounts and decision making, as well as whistleblower protections that encourage public officials and private sector employees to report illicit behaviour. Naturally, action in response to monitoring is critical.

**Deterrence** is an important element of any comprehensive anti-corruption strategy. Regardless of whether corruption is a calculated and premeditated act, or part of established social and corporate cultures, deterrence can have a significant effect. Among these are legal and financial instruments of deterrence which increase penalties and losses for corruption, including wages and social benefits. Negative deterrence involves measures to widen the risk and scope of punishment, such as increased prison sentences, economic fines and vigorous implementation of water laws and regulations.

**Increase economic competition:** The water sector traditionally comprises large-scale national monopolies. Monopolies tend to increase corruption because they distort supply- and demand-driven prices, which in turn creates a space for bribes and other forms of corruption. In interaction with private contractors, state monopolies typically involve very large contracts that can increase the expected net benefit of corruption. Monopolies also tend to place enormous power in the hands of public officials with substantial discretion, and research shows that the higher the degree of discretion, the higher the incidence of bribery.<sup>23</sup> This is the rationale for increasing economic competition as part of anti-corruption reforms. Accumulated experience calls for caution, however, as privatisation processes themselves are prone to corruption, and market actors need support from functioning public institutions which tend to be in short supply in societies hit by corruption.<sup>24</sup>

**Enable intra-governmental cooperation:** Recent reforms within the water sector are increasingly linked to the international regime of integrated water resources management (IWRM). In short, IWRM calls for a high level of intra-governmental coordination and coherence in light of the integrated role of water in ecosystems and societies as a whole (Box 8). Research suggests that relations between different government departments and agencies are a good breeding

ground for corruption, and by extension this implies that IWRM can spawn more corruption. Moreover, the decision making processes in IWRM are typically highly complex, involving multiple stakeholders from several sectors of government who lack a history of peer review and professionalism.

Measures to deter corruption in intra-governmental cooperation include strengthening national policies and implementation agencies, the formalisation of inter-departmental decision making processes, broadening of technical training to detect irregularities, integrating members of inter-departmental bodies in home departments, peer control and professionalism.

**Decentralisation:** Decentralisation is part of IWRM reforms, whereby institutions for stakeholder participation are introduced on catchment or sub-catchment levels. Through decentralisation, the hope is that by inviting those who are hardest hit by corruption to take part in the decision making process, there will be fewer incentives to engage in corrupt practices. Moreover, decentralisation increases the level of information available for management and oversight, and a closer relationship between service providers and their clients can increase the moral cost of corruption.<sup>25</sup>

To date, research on the effects of decentralisation on corruption is inconclusive. Whereas there is some support that it can be an antidote, decentralisation can also induce the proliferation of public offices and with it the number of officials who can exercise their powers for private gain.<sup>26</sup> Moreover, evidence suggests that the close interactions between public officials and consumers created by decentralisation entails a personalisation of relationships with high levels of patron-client relations. This is often overlooked by advocates of decentralisation who tend to romanticise the local level and disregard the role of locals in the creation of corruption.<sup>27</sup> Also, as a means to curb corruption it may be particularly problematic to decentralise the water sector due to problems of vertical and horizontal coordination of river basins. Finally, in the case of nationwide irrigation and dam construction, there tends to be a lack of qualified employees and stringent monitoring mechanisms to uphold national water standards and regulations at the local level.<sup>28</sup>





### Box 8: Does IWRM Foster Corruption?

The delegates at the 2002 UN Summit in Johannesburg recommended adoption of IWRM as the basis for national water management policies and to meet the MDGs. To date, more than one hundred countries have embarked on IWRM-based reforms.

IWRM proposes an approach based on water as part of the ecosystem, its economic value and stakeholder participation. Implementing IWRM calls for intensive coordination and cooperation among previously independent government agencies, e.g. those responsible for water,

land, environmental protection, education, health, tourism, finance and so on.

Research suggests that the risk of corruption increases in the interface between actors without a previous history of interaction. The reason is that the level of social control and administrative monitoring decreases as interactions occur outside, or on the margins, of established organisational systems.

This begs the question: Does IWRM's call for increased inter-governmental coordination give rise to corruption? How can anti-corruption measures be made part of IWRM reforms?

#### (ii) Reform public service delivery systems

**Improved human resources management:** Not surprisingly, improving the working conditions of public officials and private employees is a key to reducing corruption. The goal is to create a professional environment that discourages the use of entrusted power for private gain. Attaining this goal through wage hikes in the public sector has been called into question. In corrupt societies, public office-holding is a tradable commodity. Higher salaries simply make public offices more attractive and raise their value on parallel markets.<sup>29</sup> However, common sense suggests that if an employee does not get a salary on which he or she can be supported, the incentive to engage in corruption is increased. Some research points out that the incentive to engage in corruption lies not in the absolute levels of salary, but in the difference between expected and actual levels of pay. If the wage level is perceived as "fair", it is unlikely to spur corruption.<sup>30</sup>

Similarly, regular staff transfers have been suggested as one way to avoid a personalisation of public-client relation-

ships associated with higher risks of corruption. But research in Asia suggests that in corrupt water sector environments, the management of transfers becomes a cradle of corruption where officials can buy a position close to home or further up in the hierarchy.<sup>31</sup>

Independent of how a service is structured and monitored, public officials will always have a certain level of discretion. There is simply no (economically feasible) way of policing and controlling every interaction, e.g. a contractor's work, a household's meter reading or an irrigation canal's management. Corruption therefore becomes a matter of integrity and moral standards. Davis shows how regular interaction with poor water users, and the hardships faced by them, induces a sense of "calling" in the execution of public authority, increasing the "moral cost" of corruption.<sup>32</sup> From improved recruitment and training of staff down to symbolic gestures such as work uniforms, these measures are reported to imbue a collegial culture of professionalism that encourages officials and private sector employees to spurn corruption, even when the "stick" and "carrot" of institutional oversight and economic incentives would suggest otherwise.



Photo: Mats Lamerstad



**Improving technical know-how and systems:** Corruption is about making choices: accepting a bribe, falsifying water meter readings, allowing excessive abstraction of water, overlooking wastewater dumping or the use of substandard material in dam construction. Technical solutions and control decreases the discretion of individual actors, thus making such choices more difficult and risky. Examples include improved meter readers in urban settings, double locks on abstraction points in irrigation systems, and more frequent analysis of water resources near industrial areas. Also key are technically competent, independent auditing personnel to assess complex construction sites and reports from international contractors.

Similarly, information technology can be used to simplify public services, e.g. processing applications to abstract water from a dam or well-drilling licenses. Reporting from Southeast Asia, Davis found that at least 14 public officials were involved in processing one household's application for access to public water. By simplifying the procedure and using information tech-

nology (IT), this number was reduced significantly, decreasing public-client interactions and thereby cutting corruption.

**Increase public sector capacity:** The lack of economic and technical capacity in public institutions raises the likelihood of unofficial, undetected connections to urban water systems and irrigation canals, which engenders non-revenue water (NRW). It allows for "ghost" workers and moonlighting, and escalates discretionary interactions between water users and utilities.<sup>33</sup>

The need for public sector capacity building is evident, especially in such common situations as the construction of large infrastructure projects where the public official in charge is less technically competent vis-a-vis the international contractors involved. This makes detecting and assessing irregularities exceedingly difficult. Moreover, if the setting is a developing country, the official's salary is most likely a fraction of the international contractor's. In fact, the GDP of his country may be significantly lower than the annual turnover of the private concern involved.

### Box 9. The PACTIV Approach to Combating Corruption in the Water Sector

The first letter of five vital building blocks for combating corruption in the water sector makes up the acronym PACTIV: Political leadership, Accountability, Capacity, Transparency, Implementation and Voice.

This acronym also includes the word PACT – emphasising the need for broad-based alliances—as well as the word ACTIV—which is a reminder of the urgency of take action in fighting corruption in the water sector.

Building block	Rationale	Type of action
<b>Political leadership:</b>	Mobilise support from political leaders and engage them as constructive anti-corruption partners	<ul style="list-style-type: none"> <li>• Illuminate the potential political leverage from decreased corruption in the water sector (e.g. WWS and irrigation)</li> <li>• Include political leaders in discussions at all stages of water projects</li> <li>• Record and publicly display commitments of support made by politicians</li> </ul>
<b>Accountability:</b>	Reform political and judicial institutions to reduce discretion and increase integrity	<ul style="list-style-type: none"> <li>• Increase competition in elections to catchment boards</li> <li>• Expose public officials to the hardships of the poor water users they are entrusted to serve</li> <li>• Check contractors' support of political election campaigns</li> <li>• Strengthen independent auditing</li> </ul>
<b>Capacity:</b>	Strengthen capacity of public institutions and civil society	<ul style="list-style-type: none"> <li>• Increase technical competence of regulators and procurement officials</li> <li>• Create professional working environments with reasonable wages</li> <li>• Support independent data collection and diagnostics by civil society</li> </ul>
<b>Transparency:</b>	Encourage openness and freedom of information to allow for advocacy and disclosure of illicit behaviour	<ul style="list-style-type: none"> <li>• Train media in investigative journalism on corruption in water</li> <li>• Publicly display (in newspapers and in villages) information on water contracts and accounts</li> <li>• Disclose water authorities' decision making procedures and protocols</li> </ul>
<b>Implementation:</b>	Put existing reforms and anti-corruption tools into action	<ul style="list-style-type: none"> <li>• Make use of existing technical equipment for monitoring</li> <li>• Execute on-the-shelf policies</li> <li>• Impose stiff judicial and economic sanctions on culprits</li> </ul>
<b>Voice:</b>	Strengthen channels for water users, public officials and private employees to voice discontent and report corruption	<ul style="list-style-type: none"> <li>• Introduce whistleblower programs in utilities and public agencies</li> <li>• Expand voting rights in elections for catchment and sub-catchment boards</li> </ul>



Photo: Mats Lamerstad

Public officials faced with these kinds of asymmetric situations testify to the high level of courage and professionalism needed to turn down offers of kickbacks in return for preferential treatment.<sup>34</sup> Measures that can level the playing field include better training in negotiation techniques, state-of-the-art technical education, higher salaries for key staff members and whistleblower protection. As elaborated below, the private sector clearly has a high responsibility to refrain from taking advantage of weak public sectors.

### iii. Reform in the private sector

Almost 50% of firms pay bribes for public procurement contracts in emerging economies. If the firm is from an OECD country, the figure is 45%.<sup>35</sup> Whereas these figures refer to non-water and water-related companies alike, the magnitude of the problem is supported by a recent survey where the majority of water sector representatives from 15 countries (mostly African) reported high levels of corruption during procurement. They identified this as the most common type of corruption, second only to bribes for new connections and falsified metering.<sup>36</sup>

Collusion is perhaps the most frequently cited form of corrupt behaviour in the private sector, but it also includes systematic forms of corruption, or “capturing”, of public institutions. Capturing refers to situations where powerful companies obtain preferential treatment at the policy making level in order to

undermine the independence of regulatory authorities. There are also bribes for officials to cover up use of substandard materials in infrastructure, inflated invoices, pollution discharge and failure to meet contractual deadlines. Kickbacks to expedite drilling or digging licenses and bribes to customs officials are other typical examples.

There are signs that companies in the water sector are less inclined to view corruption as a way to grease the wheels during negotiations and raise profit margins. Factors contributing to these changed perceptions include the harm to companies’ brands and reputation if they are caught engaged in bribery, and the recent initiative by the World Bank to blacklist corrupt companies. Discussions on how governments and development partners can follow suit are underway, as well as investigations of forms of international support to developing partners willing to file charges against multilateral contractors.<sup>37</sup>

A number of international initiatives have been put in place to encourage collective action among private companies (Box 10). Transparency International has developed a set of tools, including the Business Principles and the Integrity Pact, to encourage integrity and deter collusion and bribery. There have been successful applications of these tools in the water industry, e.g. sector wide agreements among pipe manufacturing companies in Colombia, and the Greater Karachi Water Supply Scheme in Pakistan.<sup>38</sup> Assessments



suggest that these tools lower transaction costs up to 15%, which translates into substantial savings for contractors. In the Greater Karachi case, the intensified economic competition led to the awarding of contracts at an average of 15.8% below the estimated cost to the public.

Other measures that can be undertaken include the implementation of anti-corruption and integrity standards, and corporate social responsibility guidelines. This includes practical methods such as hotlines to anonymously report suspicious behaviour and the systematic building of a professional corporate culture.

#### Box 10: International Initiatives Against Corruption<sup>39</sup>

The following are some of the most important international conventions against corruption, which are designed to plug gaps in national anti-corruption legislation. They are particularly designed to combat corruption involving large multinational contractors and businesses, including the water sector:

UN Convention Against Corruption: (UNCAC), which came into force on December 14, 2005, has been signed by 133 countries and ratified by 52. Of all the existing anti-corruption conventions, the UNCAC has the most extensive provisions on the ways, means and standards for preventive measures in the public and private sectors. It calls for criminalisation of a wide range of offences, contains a broad definition of the term “public official” and includes both public and private sector (private-to-private) corruption. UNCAC includes recommendations to implement a range of specific anti-corruption measures by means of an Implementing Mechanism.

The OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (“The

Convention”) together with the Revised Recommendations on Combating Bribery in International Business in International Business Transactions (“The Revised Recommendations”) were adopted in 1997 by OECD Members and associated countries. The OECD Convention imposes criminal sanctions on those convicted of bribing foreign officials and provides for monitoring and evaluation through country peer reviews. By focusing on deterrence and prevention of foreign bribery, the Revised Recommendations complement the Convention. Since the Convention entered into force in 1999, the 36 Party countries have been monitoring participating countries’ implementation and enforcement of both the Convention and the Revised Recommendations.

In addition, the OECD has published a “Risk Awareness Tool for Multinational Enterprises in Weak Governance Zones”. This addresses risks and ethical dilemmas that companies are likely to face in weak government zones, with a focus on how to manage investments and communicate risks and illicit behaviour in relations with public sector officials.

Photo: Mats Lammersad

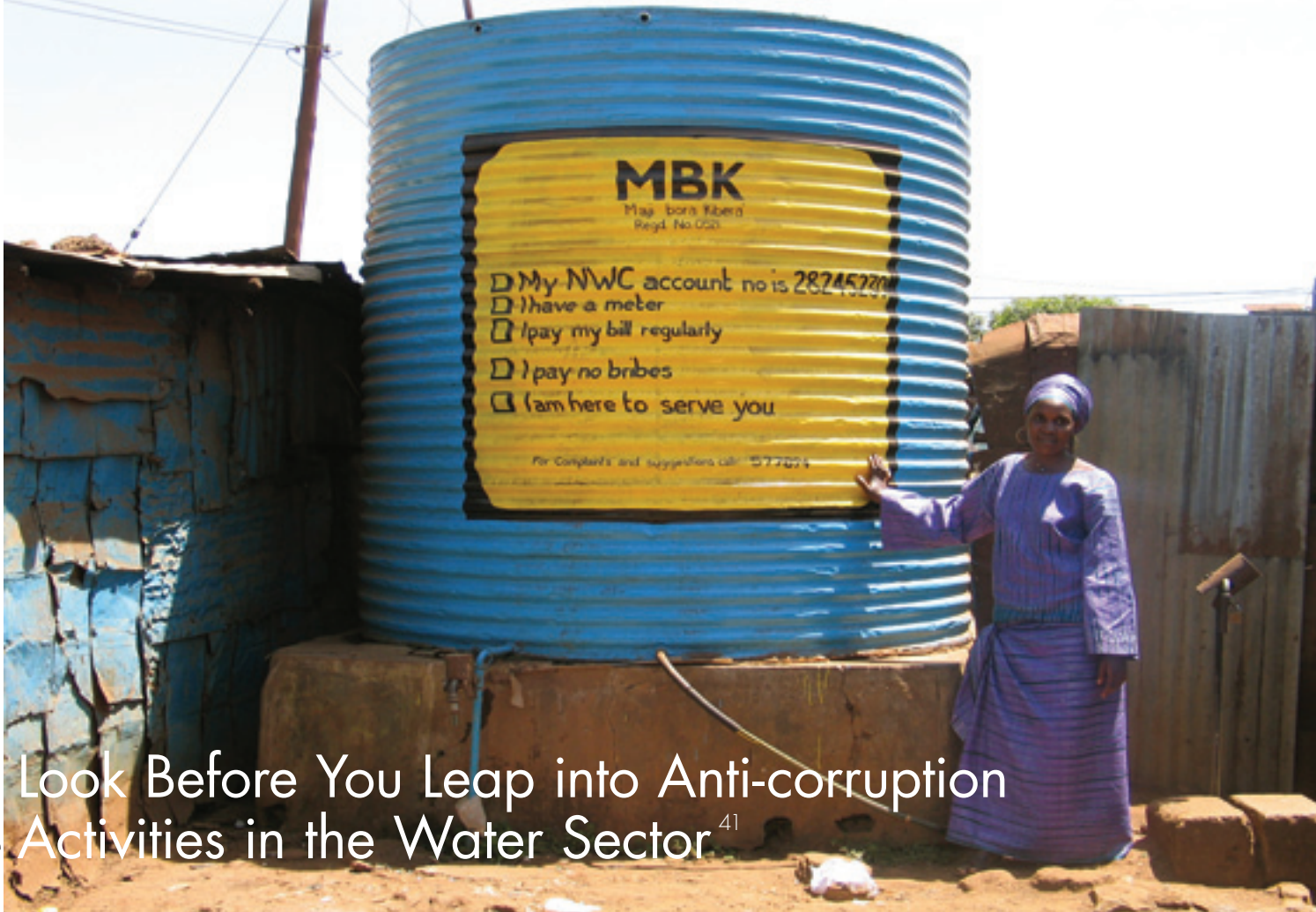




A powerful civil society can potentially thwart corrupt activities and mobilise discontent and rage against illicit practices, private-public collusion and poor water service delivery. The power of civil society primarily derives from the ability to publicise and socially disgrace actors involved in corruption and by raising public awareness of its consequences. Civil society in the water sector comprises water user groups, conservation organisations, local community groups, women's associations, religious organisations, academia, and last but not least, the media. Transparency International has spearheaded anti-corruption advocacy on a global scale and is currently stepping up its efforts within the water sector by hosting the Water Integrity Network, the only global network with the explicit objective of fighting corruption in the water sector on a global scale.

Civil society plays a key role in raising public awareness. Approaches include lobbying policy makers for legal reforms, media campaigns that highlight the diminished revenues and water service levels arising from corruption, and organising workshops for decision makers and water users groups. Moreover, public awareness can be raised by using humour, e.g. by producing anti-corruption angles in water comic books or calendars with scornful depictions

The role of civil society in fighting water corruption is closely linked to its capacity (monitoring, etc.) and the transparency of related public institutions, i.e., as research suggests, increased transparency equals decreased corruption. An obvious reason is the risk of legal or monetary retribution, but research has also pointed to the role of social shaming, where corruption is discouraged due to the risk of murky transactions being disclosed to the general public. Interestingly, social shaming can be a particularly powerful resource for poor people because of the high social shame of being engaged in corruption that directly hurts the already marginalised poor.<sup>40</sup>



## Look Before You Leap into Anti-corruption Activities in the Water Sector<sup>41</sup>

Even though a multitude of anti-corruption tools and measures exist, some of which were reviewed above, none of them have a particularly strong track record. Research out of the Quality of Government Institute at Göteborg University concludes that many anti-corruption initiatives are built on anecdotal data, good faith and weak aggregated correlations.<sup>42</sup> Similarly, Daniel Kaufmann at the World Bank Institute repeatedly calls for an “evidence-based approach” and for the systematic questioning of current anti-corruption policies and measures. Surely there are reported cases of successful usage of certain instruments in particular cases, but the possibility to transfer best practices across contexts has proven quite limited. This indicates the need to engage in diagnostics on how corruption varies in nature and scope throughout the water sector and within assorted governance structures.

Moreover, no matter how well intended a specific anti-corruption measure may be, there is a substantial risk that it can backfire and eventually increase corruption. As pointed out above, transparency can legitimise, and even increase, existing levels of corruption. This occurs if the disclosed activities are not condemned by the proper authorities and if the identified culprits’ punishment is perceived as negligible. Similarly, decentralisation may do little more than multiply the number of potentially corrupt officials, and increased salaries may simply raise the corruption value of a public office.

Adding to this complexity, successful anti-corruption measures can have unexpected and unwanted outcomes. Successful anti-corruption measures may stamp out corruption in one place only for it to reappear in other places where it is harder to detect and deter. In the short run, successful anti-corruption measures may also lead to lower levels of service provision. Disbanding illegal service providers in urban slums could, for example, have the short-term<sup>43</sup> effect of reducing the poor’s access to essential water supplies. In addition to the increased hardship, this decreased service delivery may further undermine trust in public institutions which itself is known to spur corruption.

These complexities emphasise the need to combine the implementation of preventive action and existing anti-corruption tools while at the same time engage in knowledge creation to get a better understanding of the nature of corruption in the water sector. Any strategy should thus include a strong focus on diagnostics with the aim to tailor measures to specific problems and to create a baseline for benchmarking.

Key questions in need of systematically developed answers are listed in Box 11. These questions should be addressed while recognizing variations across different sections of the water sector and across national systems of governance. The answers to these questions could help to bridge the current knowledge gap between problems and policy, and provide the basis for a systematic approach to corruption in the water sector.



## Box 11: Closing the Knowledge Gap on Corruption in the Water Sector: Some Key Questions

### 1. What does corruption in the water sector look like?

- a) What are the forms and scope of corruption in the water sector and how does it vary across different segments of the sector and between different systems of governance?
- b) How can precise empirical measurements of corruption in the water sector be developed to promote benchmarking and further policy development?

### 2. How does corruption affect the water sector?

- a) What is the impact of corruption on sustainable water development in terms of economic losses, social underdevelopment and environmental degradation?

- b) By what social, economic and political processes does corruption affect sustainable water use?

### 3. What are the solutions to corruption in the water sector?

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



## Elements of a Strategy for Breaking with Corruption in the Water Sector

Photo: Q

Breaking with corruption in the water sector is a gradual, long-term process that involves identifying and changing corrupt values and practices, retraining staff and restructuring institutions in the sector and beyond. This involves facing up to incumbent power holders whose main interest is maintaining the status quo. It also means working with weak institutions to improve accountability, transparency and water service delivery. Political support and leadership is vital to make this happen.

There is no one-size-fits-all strategy with a reasonable chance to curb corruption across the board. Any anti-corruption measure must be tailored to the specificities of production and service systems within that sector. It must also be linked to general governance structures and ongoing reform processes at national, regional and international levels. Shah and Schacter (2004) provide a helpful starting point for customising an anti-corruption strategy to existing circumstances in the water sector. They juxtapose “incidence of corruption” with “quality of governance” to arrive at a list of possible anti-corruption actions. See Box 12 for an application to the water sector.

Where corruption is low (and thus the quality of governance assumed to be good), evidence suggests a confrontational ap-

proach and the use of existing institutional structures. This includes setting up anti-corruption agencies targeting the water sector, strengthening financial oversight of procurement to detect collusion, and wider implementation of existing anti-corruption policies at all levels. Similarly, where corruption takes on “medium” proportions, training of technical staff in anti-corruption measures and decentralisation reforms are among the suitable measures.

Perhaps the most important conclusion from this analysis is that when corruption is high, it might be better to work around it than to work on it. The rule of thumb is: the more widespread the corruption, the more general the appropriate response. Where corruption takes on systemic proportions, it might prove most effective to approach it without even mentioning the “C” word, according to Shah and Schacter. In such instances, the appropriate response can include technical reforms to increase water service delivery, citizen empowerment, training of civil society, generic national economic and institutional reforms, and capacity building. The reason is that where corruption is high, it is part of the system on which incumbent power holders build their positions. This poses a problem as they can have a



## Box 12. One Size Does Not Fit All

Effective anti-corruption policies recognise the impact of the broader institutional environment of corruption in the water sector and the particularities of each country.

Incidence of corruption	Quality of governance	Possible anti-corruption efforts in the water sector
Low	Good	<ul style="list-style-type: none"> <li>• Establish anti-corruption agencies targeting the water sector</li> <li>• Strengthen financial accountability control of water sector procurement</li> <li>• Implement existing anti-corruption regulation</li> <li>• Develop diagnostics on corruption in the sector</li> <li>• Raise public and official awareness of the cost of corruption in the water sector</li> <li>• Initiate and support high profile anti-bribery pledges and prosecutions in the water sector</li> </ul>
Medium	Fair	<ul style="list-style-type: none"> <li>• Decentralise water sector governance</li> <li>• Reform economic policies to decrease level of monopolies in water sector</li> <li>• Raise public and official awareness of the cost of corruption in the water sector</li> <li>• Develop diagnostics on corruption in the water sector</li> <li>• Train and support water-related public officials</li> <li>• Strengthen financial accountability control of water sector procurement</li> </ul>
High	Low	<ul style="list-style-type: none"> <li>• Generic training and capacity building in legal institutions and water management departments</li> <li>• Economically and technically oriented reform to cut costs and identify leakages in the production of water services</li> <li>• Raise awareness of the cost of corruption in the water sector among civil society, public and private institutions</li> <li>• Strengthen stakeholder participation on water boards and basin institutions</li> <li>• Establish citizens' charters and increase awareness of rights to water and sanitation services</li> <li>• Support Corporate Social Responsibility with national and international companies</li> <li>• Develop Community Level Integrity Pacts</li> <li>• Develop diagnostics on corruption in the water sector</li> <li>• Strengthen financial accountability control of water sector procurement</li> <li>• Programme regulations and design (by governments and with donor agencies) should represent agreed best practice; programme designs should not stimulate corruption</li> </ul>

Source: Modified from Shah, Anwar & Mark Schacter (2004)

vested interest in the status quo rather than an interest in setting up and implementing anti-corruption measures which would undermine their power base.

Moreover, even if the political will for reform could be secured in places with systemic corruption, the existing legal and administrative institutions are typically degenerated to a level where they lack the ability to effectively implement and monitor. Tragically enough, highly corrupt societies typically lack the essential requirements for fighting corruption.

This dilemma is faced by international organisations engaged in support of curbing corruption in the water sector, such as the UNDP, World Bank and Transparency International. Finding national partners who can muster the capacity and commitment to channel financial and technical support in the water sector is as essential as it is difficult for these organisations. Where corruption is systemic, it is virtually impossible to reach high office without becoming part of the system. By utilising anti-corruption measures without being mindful that national and local partners may have

ulterior motives, one risks breeding, rather than breaking, corruption in the water sector.

Here it is important to note that empirical research quite conclusively rejects the argument that the increasing emphasis by international development agencies to stamp out corruption in the water sector does not correspond with the agenda of water users in developing countries. A recent survey by the Afrobarometer, based on a sample of some 25,000 people, concludes that corruption is generally rejected across all the seventeen countries involved.<sup>44</sup> This public rejection of corruption should be the point of departure for any strategy against corruption. Forming organisations and mutually reinforcing anti-corruption networks is essential to empower people to act forcefully and to share knowledge and experience on emerging lessons. Coupled with sound diagnostics to track developments and to compile evidence for advocating national and international decision makers, this public discontent can add to the current momentum for reform as actors get increasingly concerned and committed to change.

# Conclusion and Policy Implications

Corruption is draining the water sector by misappropriating water management resources and hindering the attainment of the MDG targets for water and sanitation. It contributes to the degradation of water resources by breeding inefficiency and discretion in public regulation and implementation of water policies and projects. Moreover, it undermines efficiency in infrastructure development, including hydropower production and irrigation systems, while adding on to the unjust social distribution of existing resources. It stunts rule of law and democratic rights in water policy making and implementation by turning public office into means for private benefits.

Despite this, corruption remains one of the least attended problems in the water sector. Much work remains to be done to investigate the scope and nature of corruption in various part of the sector and to tailor measures to the specific conditions of the sector.

Luckily, there are ways to get a head start in fighting corruption in the water sector. Concerned actors in the water sector can learn from other sectors' experiences as well as from a few successful reforms already undertaken in some countries and some parts of the water sector.

But breaking with corruption in the water sector will not be easy. From an outside perspective, corruption in the water sector can be seen as a breakdown of governance. Looked at from the inside, corruption is better described as a particular type of governance, albeit a very destructive and unpredictable type. Corruption in the water sector is typically quite tightly organised, internally stable along a logic of reciproc-



Photo: 2IEC ECHO Antoine Lemasson

ity, supported by and supporting weak political competition, dysfunctional public administration and a weak civil society.

Reforms should include (i) legal and financial reform, (ii) reform on public service delivery systems, (iii) reform in the private sector and (iv) public awareness and capacity building. Further delays to step up anti-corruption action will deepen the governance crisis in the water sector, with devastating effect for millions of people and for the environment. The subsequent list of recommendations provides guidance for action.

Anti-corruption measures must therefore typically be comprehensive, long term, and be developed on the five building blocks of the PACTIV-approach – Political leadership, Accountability, Capacity, Transparency, Implementation and Voice—which are further elaborated in Box 9 on page 15.

## Key Recommendations

- Align anti-corruption measures in the water sector with national governance reform
- Mobilise political support and engage leaders as constructive anti-corruption partners
- Diagnose anti-corruption measures. Rethink traditional one-size-fits-all responses to anti-corruption measures to make them more applicable to the water sector
- Corruption is the symptom: target the system. Corruption is not primarily driven by individuals trying to earn an extra buck, but is part of established social systems in need of reform
- Be preventive rather than reactive. Corruption has immediate negative effects and once corrupt systems are established, they tend to stick
- Don't stand alone. Build comprehensive networks of actors from the local, national, regional and international levels and from all spheres of society: private, public and civil society
- Recognise that no one is immune to corruption. Poor marginalised women, well-educated scientific experts and well-meaning international aid workers can all be part of the problem.
- Work around as well as on corruption. When corruption takes on systemic proportions, the requirements for targeted action may be absent, which calls for an indirect approach
- Anticipate unexpected consequences. Tackling corruption means moving in uncharted territory where targeted measures can result in unintended effects, and the intended consequences can be severely delayed. This calls for patience, resources and political and institutional reserves
- Focus on the needs of poor and marginalised people. They are often the most affected by corruption and can, in the short run, be disenfranchised by effective anti-corruption measures

# Notes

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- 5 United Nations 2005:27
- 6 Mehta, Fugelsnes & Virjee 2005.
- 7 Plummer & Cross 2006.
- 8 Kaufmann 2004.
- 9 Warren 2004.
- 10 United Nations 2004.
- 11 United Nations 2006:ch 2
- 12 Quality of Government Institute 2006.
- 13 Shah & Schacter 2004.
- 14 Andvig, Fjeldstad, Amundsen, Sissener & Soreide 2000; Svensson 2005.
- 15 Plummer & Cross 2006.

- 16 Klitgaard 1998.
- 17 Brown, Ngwala, Songo & Wande 2004.
- 18 Estache & Kouassi 2002.
- 19 Transparency International 2006.
- 20 One drawback of reduced contracts is loss of economies of scale. Moreover, contracts under a certain threshold typically are given less attention by public regulators, civil society and the media. While cutting the size of public contracts may reduce the incentives for corruption by lowering the sums involved, it may thus also reduce the chance of being caught and hence increase the incentive to take the risk. See Davis 2004.
- 21 Davis 2004.
- 22 Complex contracts can have the opposite effect as it calls on a large number of decisions by public officials susceptible to corrupt behaviour.
- 23 Kaufmann 1997; Rose-Ackerman 1999.
- 24 Kaufmann 2004.
- 25 Davis 2004.
- 26 Shah & Schacter 2004.
- 27 Stålgren 2006.
- 28 Tanzi 1995 cited in Kaufmann, Mehrez & Gurgur 2002.

- 29 Countering this process is the fact that an increase in wages ratchets up the loss endured if one loses the job for being involved in corruption.
- 30 Kaufmann, Mehrez & Gurgur 2002.
- 31 Davis 2004.
- 32 Davis 2004.
- 33 Kaufmann 2004.
- 34 Interview, Uganda June 2006.
- 35 Kaufmann 2006.
- 36 Numba UM 2006.
- 37 Earle & Turton 2005; World Bank 2006.
- 38 Transparency International Colombia 2005; Transparency International 2005.
- 39 This section draws heavily on O'leary 2006. See further Tegnhammar 2005.
- 40 Davis 2004.
- 41 Title inspired by Shah & Schacter 2004.
- 42 Quality of Government Institute 2006.
- 43 Plummer & Cross 2006.
- 44 For a closer analysis of the results, including some noteworthy variation, visit [www.afrobarometer.org](http://www.afrobarometer.org)

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# Corruption in the Water Sector

## Causes, Consequences and Potential Reform

### 10 Key Points

- The global water crisis is primarily a crisis of governance, and corruption affects the governance of water by affecting who gets what water when, where and how.
- Corruption drains the water sector by misappropriating water management resources and hindering the attainment of the MDG targets for water supply and sanitation.
- The World Bank suggests that 20% to 40% of water sector finances are being lost to dishonest and corrupt practices.
- The costs of corruption are disproportionately borne by the poor and by the environment.
- Corruption increases transaction costs and discourages investments in infrastructure.
- Diagnostics are a key in fighting corruption because they reveal its extent, map its breadth and enable the targeting of anti-corruption measures and reform.
- At the household level, corruption is felt in deficient water service delivery and practices, contributing to the 40 billion working hours lost annually at a global scale.
- Corruption thus keeps children out of school, as they are instead being occupied by the time-consuming burden of collecting household water – a burden that traditionally falls largely on females.
- Anti-corruption measures exist; concerned actors can learn from experiences in other sectors, as well as from a few successful reforms already undertaken in some countries and some parts of the water sector.
- Anti-corruption measures must be comprehensive and long term. The PACTIV-approach – Political leadership, Accountability, Capacity, Transparency, Implementation, and Voice – is a good building block.



### The Swedish Water House

The Swedish Water House is an initiative that stimulates co-operation and networking among Swedish-based, internationally oriented academic institutions, consultants, government agencies, NGOs, research institutes and other stakeholders. SWH is funded by the Ministry for Foreign Affairs and the Ministry of Sustainable Development and administered by the Stockholm International Water Institute (SIWI).

[www.swedishwaterhouse.se](http://www.swedishwaterhouse.se)



### The Stockholm International Water Institute

The Stockholm International Water Institute (SIWI) is a policy institute that contributes to international efforts to find solutions to the world's escalating water crisis. SIWI advocates future-oriented, knowledge-integrated water views in decision making, nationally and internationally, that lead to sustainable use of the world's water resources and sustainable development of societies.

[www.siwi.org](http://www.siwi.org)



### The Water Integrity Network

The Water Integrity Network (WIN) stimulates anti-corruption activities in the water sector worldwide. WIN welcomes organisations and individuals that view anti-corruption measures as central to equitable and sustainable development, economic efficiency and social equity. WIN is committed to accountability, transparency, integrity, honesty, mutual support and knowledge exchange among its members.

[www.waterintegritynetwork.net](http://www.waterintegritynetwork.net)



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