WATER INTEGRITY GLOBAL OUTLOOK: LATIN AMERICA

WIN Water Integrity Network

Integrity for water and sanitation finance in Latin America

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The Water Integrity Network (WIN)

The Water Integrity Network (WIN) is an international research organization working with a global network of partners in the water and anti-corruption sectors. WIN focuses on integrity training and risk prevention in water and sanitation programs and institutions around the world. The goal is to ensure that water and water governance are clean, fair and accessible to all.

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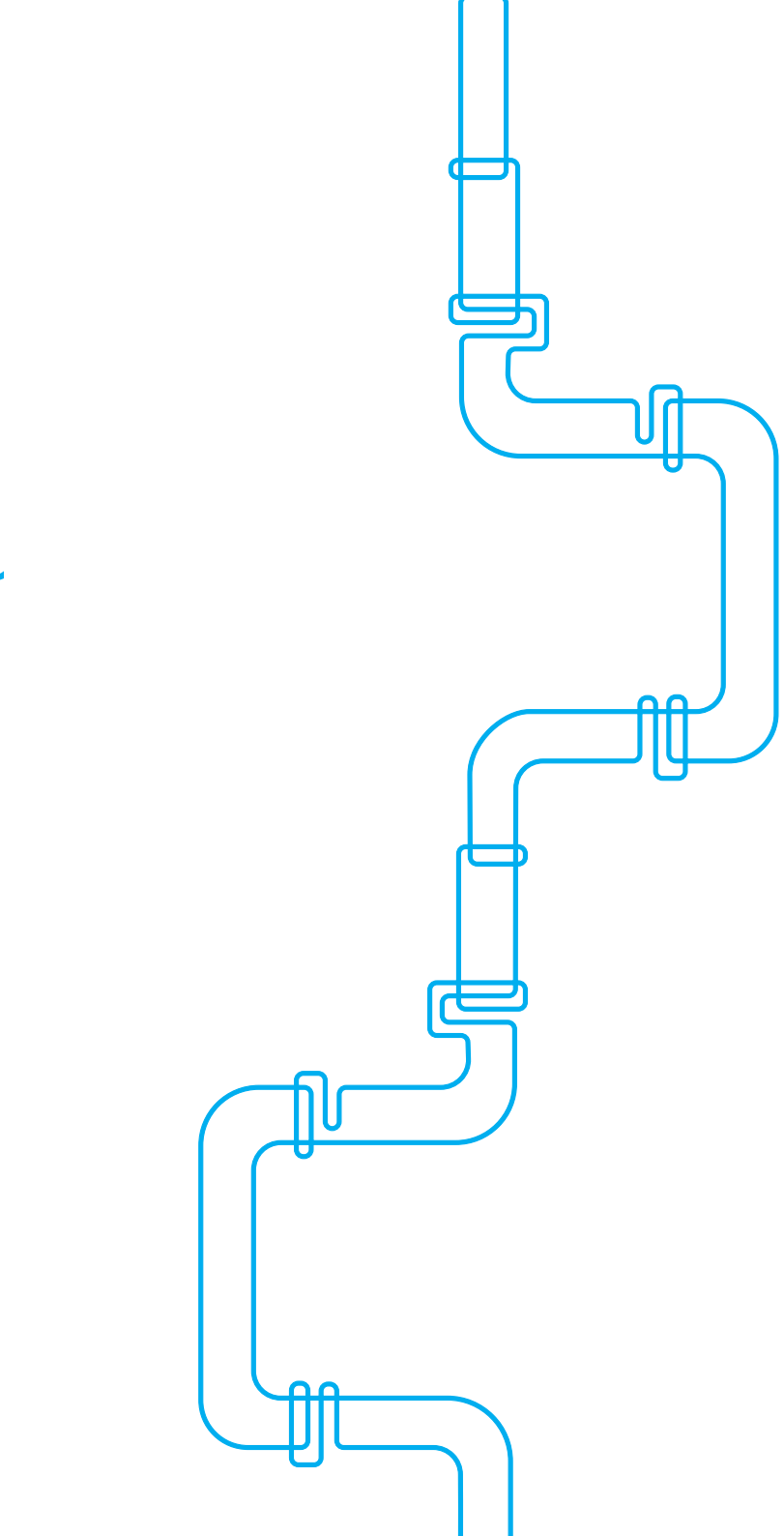


Table of Contents

PART 1

INTEGRITY IN THE FINANCING AND DELIVERY OF DRINKING WATER AND SANITATION SERVICES IN LATIN AMERICA

1.1 Introduction

Considerable progress has been made in improving access to drinking water and sanitation services (WSS) in the vast majority of countries in the Latin American region over the last decades, but the substantial investments from the public sector, along with contributions from international agencies and the private sector, must be accelerated to achieve the Human Right to Water and Sanitation and the 2030 Sustainable Development Goal 6.

Corruption, mismanagement and other integrity failures contribute significantly to the overall finance shortfall, wasting up to 26% of money invested in the water sector, according to the Water Integrity Network (WIN) and the Inter-American Development Bank (IDB) (IDB, 2020a). They undermine the effective use of funds, weaken sector institutions, drive significant financial losses in the sector, and misdirect and bias new investment away from key priorities and from those who need it most. Integrity failures in water and sanitation financing have devastating social, economic and environmental impacts and profoundly affect people's lives in a multitude of ways. And the impact falls disproportionately on the marginalised and powerless.

The water and sanitation sectors are particularly susceptible to corruption due to fragmented and complex institutional arrangements, natural monopolies, and high infrastructure capital, maintenance and refurbishment costs. The infrastructure sector, on which water and sanitation depend heavily, is one of the most corrupt sectors globally. The International Monetary Fund estimates that 30-50% of general infrastructure costs (not just water and sanitation) are lost due to poor management, including corruption (Schwartz et al., 2020).

While the cost of action to improve integrity is relatively low, the cost of inaction is unacceptably high, playing out in poor service delivery, elevated infrastructure costs, and deteriorating water quality—problems which are exacerbated by the impacts of climate change. We must change course. Unless we take action, corruption and integrity failures will continue to slow us down, drive up costs, and undermine the effectiveness of our work.

WIN developed this report to provide regional depth to its Water Integrity Global Outlook 3 (WIGO-3) on integrity in water and sanitation finance. Building on a review of relevant literature and three primary case studies conducted in Peru, Ecuador and Brazil, it seeks to answer the following questions:

- What are the overall situation and trends with regard to financing and service provision in the water and sanitation sector in Latin American countries?
- What are the main integrity risks in financing and service delivery in the water and sanitation sector in Latin American countries?
- What is being done and what can be done to improve integrity in financing and service delivery in the water and sanitation sector in the Latin American context?

Today's rapidly changing global context will have significant impacts on these financing challenges over the coming years. Perhaps the most looming challenge is the need for increased investments and policy changes to ensure water availability and security in response to climate change, and the potential corruption risks in these financial flows. Integrity may be particularly challenged in a context of "urgent actions" to replace or repair damaged water and sanitation, irrigation and hydropower infrastructure after climate change disasters. Accelerated decision-making, high-pressure situations and relaxed controls provide additional scope for corruption.

At the same time, there is a shrinking or closing of civic space in numerous countries across the region, such as Venezuela and Nicaragua, ranging from restrictions on press freedom to targeted attacks on opposition groups, along with an increase in narratives

that challenge democratic norms and strong posturing by authoritarian regimes (CIVICUS, 2024). It leads to whistleblowers, investigative journalists and environmental rights defenders being at best discouraged, at worst threatened or assassinated. At least 177 environmental leaders, including at least 155 from Latin America, were killed in 2022 (Global Witness, 2023). This disturbing trend hinders accountability, making it difficult to detect and address corruption.

Within this context, this report considers how challenges in water and sanitation finance and integrity that are identified in WIGO-3 play out in the context of Latin America, and explores cases that illustrate how interventions can be made at different levels to strengthen integrity. Its recommendations work hand in hand with those in WIGO-3.

Part 1 sets out challenges in delivery and financing of water and sanitation in Latin America as well as investment gaps in the sector at the regional level. Part 2 considers the nature of corruption in Latin America, particularly in water and sanitation finance. It considers the role of sector institutions and how they work together as a system. It concludes by considering different pathways that can be used to promote integrity in different institutions. Part 3 begins by providing an overview of case study research and then presents case studies carried out in Peru, Ecuador, and Brazil, each including context, findings and conclusions. Finally, Part 4 discusses the importance of context in understanding and responding to integrity risks. It then presents an analysis based on case studies and situated within the region as a whole. Finally it provides recommendations for strengthening integrity in water and sanitation finance in Latin America.

1.2 Challenges in delivering water and sanitation in Latin America

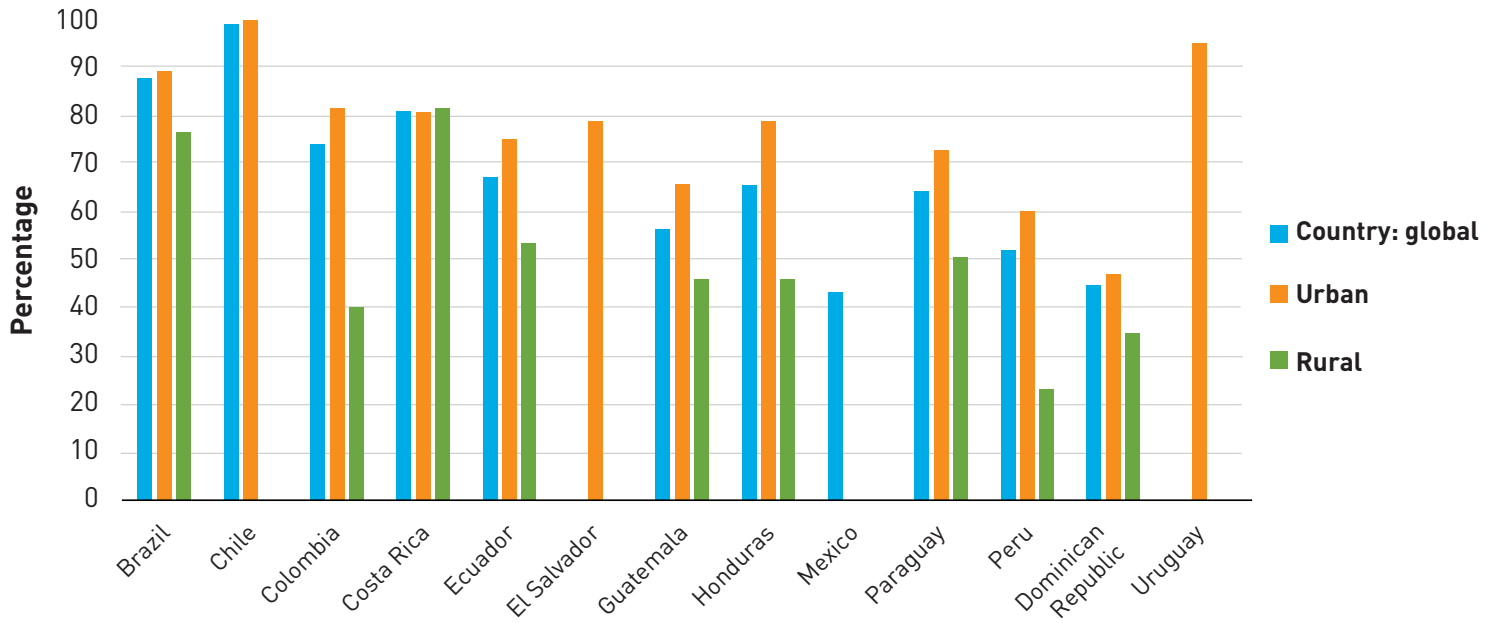
While obtaining reliable, consistent and comparable data remains a challenge in the region (IDB, 2021a; IDB, 2022), it is clear that there has been significant improvement in access to drinking WSS, as well as in the proportion of wastewater being treated, over the last two decades. While this report focuses on Latin America, it relies on available data, which often combines Latin American and Caribbean countries. According to CEPALSTAT (2024), drawing from the Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (2020) the access to safely managed water in Latin America and the Caribbean improved - on average - from 71% in 2000 to 75% in 2022. In the case of safely managed sanitation services, the improvement has been even more remarkable: on average, from 30% in 2000 to 49% in 2022. These achievements have undoubtedly required huge investments, as well as the implementation of other measures in the sector.

There is still a long way to go in meeting the Human Right to Water and Sanitation. In 2021, of a population of 648 million inhabitants in Latin American countries and 12 million in the Caribbean, more than 17 million people do not have access to basic services and approximately 160 million inhabitants lack access to safely managed drinking water (ECLAC, 2022). According to Saravia Matus et al. (2023) and the Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (2020), **in Latin America and the Caribbean 19% of the population in urban areas and 47% in rural areas lack access to safely managed water, and there are even wider gaps in sanitation, where over 444 million people**

or 68% of the region's total population lack access to safely managed sanitation; almost 10 million continue to practice open defecation. Only 40% of the urban population has safely managed sanitation. The rural population with safely managed sanitation is almost non-existent.

Overall statistics mask large differences between countries. In Chile and Uruguay over 90% of the population has access to safe drinking water, but in countries such as Guatemala, Mexico, Dominican Republic and Peru this percentage is below 60%. Provision of safely managed sanitation services also differs significantly between countries in Latin America, although the data is unreliable. The wide gap between urban and rural areas is also apparent. With the exception of Costa Rica, many countries have rural populations with half of the provision of urban areas.

FIGURE 1 PERCENTAGE OF POPULATION WITH SAFELY MANAGED DRINKING WATER IN LATIN AMERICAN COUNTRIES (2022)



Source: CEPALSTAT, 2024.

Interruptions in service and the proportion of the population that drink water from the tap are other important indicators that appeared in a 2019 survey by the Latin American Public Opinion Project. In 2018, households in Latin America reported having water on tap for an average of 18 hours per day; this rate ranged from almost uninterrupted service in the case of Costa Rica to an average of only 13 hours per day in Guatemala. And, even with drinking water coverage of around 80% in most countries, less than 60% of people choose to drink the water they receive from the tap (IDB, 2021b). Only 16% of surveyed Mexicans drink tap water, which reflects - among other things - the low confidence that they have in the quality of water provided.

1.3 Financing water and sanitation services in Latin America

1.3.1 Sources of finance

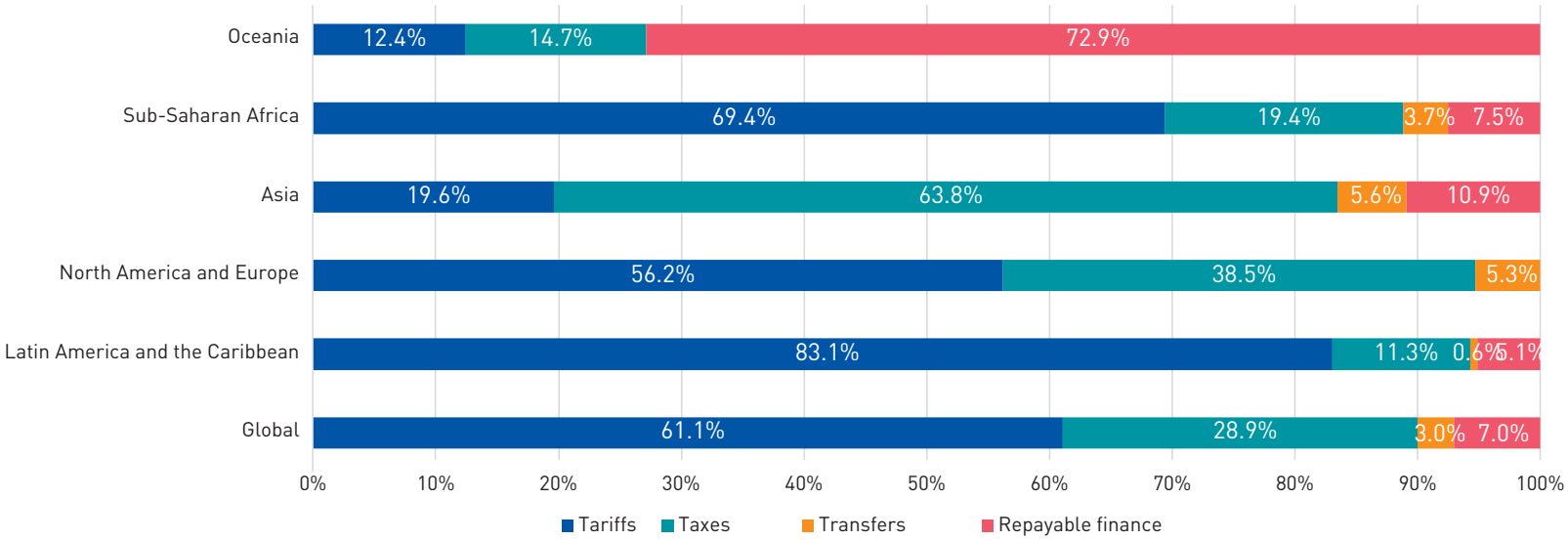
Finance is needed to improve and expand the provision of safe drinking water and safely managed sanitation to the population; at the same time, it is open to a range of corruption and integrity risks. Funding for water and sanitation comes from tariffs, taxes, and transfers, known as the 3Ts. Tariffs are levied by water and sanitation providers on end users and are directly related to service delivery. Taxes are levied by governments and allocated to sectors by national or sub-national budgeting processes. Transfers cover grants and donations, whether from international organisations, the private sector or philanthropic individuals, or transfers from national government to subnational governments. By far the greatest source of funding is from water users, followed by government, although there are significant regional variations.

There are two additional elements of the financial system, but neither increases the total amount of finance in national systems (WIN, 2024). Private sector investment usually takes the form of repayable loans to governments and water utilities, with interest (there are limited number of interest free loans). They are not considered "additional" sources of finance since they must be paid back. Private investment can be combined with public financing in the form of blended finance or by providing services through public-private partnerships. Self-supply is simply users spending resources from their households or enterprises to provide their own infrastructure or services. This reduces the need for public funding. Financing to expand service coverage depends heavily on public investment budgets allocated by governments (treasury funds from tax revenues) and on loans to finance capital costs of infrastructure.

According to the UN-Water Global Analysis and Assessment of Sanitation and Drinking Water (GLAAS) survey of countries in Latin America and the Caribbean, **about 83% of WSS are financed through tariffs, just over 11% is borne by governments and 5% comes from repayable loans.**

Sufficient funding for WSS continues to be a major challenge in many countries in the region. Most public providers are not financially sustainable (CAF, 2015). As seen above, the most widely

FIGURE 2. SOURCES OF FINANCING FOR DRINKING WATER AND SANITATION IN LATIN AMERICA AND THE CARIBBEAN



Source: WHO, 2022.

used model combines revenue from tariff collection together with government funding to cover the costs of operation, maintenance and management of water supply and sanitation systems. The proportions in which these two elements are combined vary greatly not only between countries, but also between provinces, states, municipalities and cities within the same country.

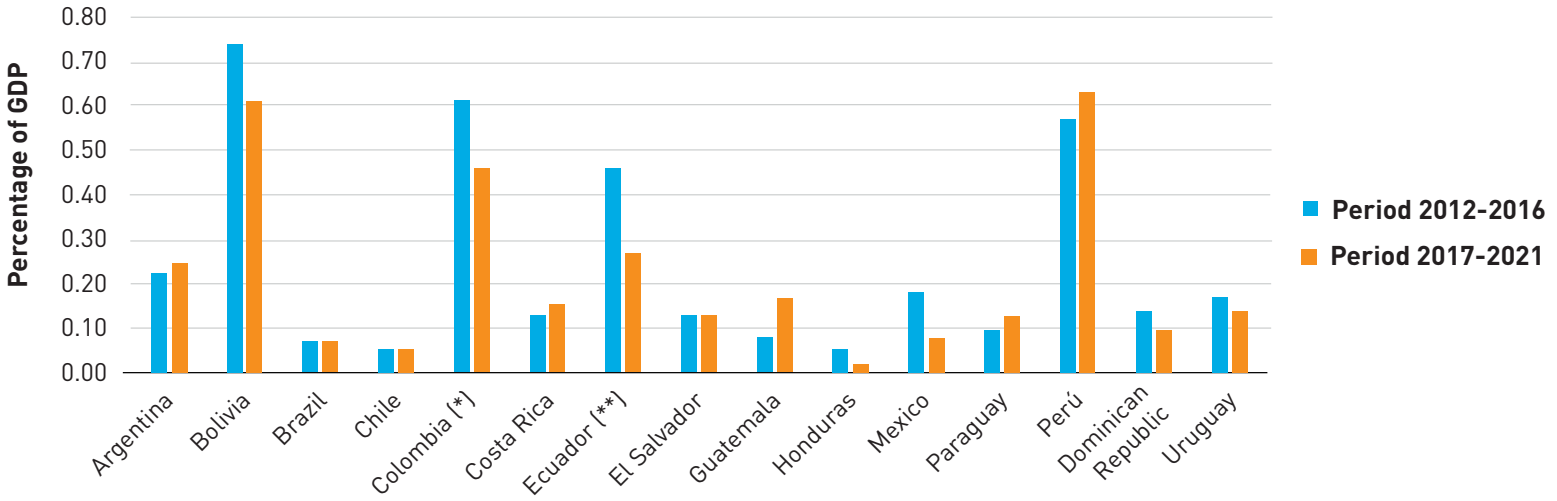
Regarding the tariff structure applied by operators to finance operating expenses and -barely- investment costs in the WSS sector, the most common model in the region consists of increasing tariff blocks, often complemented with cross-subsidies. Increasing tariff blocks is a practice used by almost all countries in the region. The application of cost-covering tariffs does not seem to be determined by the ownership structure (public or private) of the provider, but by the existence and effective implementation of economic regulation of these services (Fernández et al., 2021).

1.3.2 Public investment in water and sanitation as percentage of GDP

Annual public investment in drinking water and sanitation in 17 Latin American countries fell by almost 60% over an 11 year period, from a total of USD 11.3 million in 2010 to only USD 4.7 million in 2021, according to the Economic Commission for Latin America and the Caribbean (ECLAC), IDB and Development Bank of Latin America and the Caribbean (CAF, formerly: Corporación Andina de Fomento) data (Infralatam, 2024). This meant a 0.22% decrease in public investment as a percentage of gross domestic product (GDP) between 2017 and 2021.

It is important to move beyond this figure to understand the wide variation between countries. Wealthier countries in the region, such as Brazil and Chile, could invest significant resources, which appear as a small percentage of their GDP, and achieve relatively high coverage. Having achieved relative economic and fiscal stability, other countries increased public investment for WSS in recent years, like Costa Rica, Guatemala, Paraguay and Peru. Despite long lasting economic difficulties, even Argentina increased its investments. In contrast, public expenditure on WSS as a percentage of GDP fell significantly in Bolivia, Colombia, Ecuador, Honduras and Mexico. (Note that countries can have comparable GDPs and spend a comparable percentage of GDP on WSS, but if the size of the population and/ or levels of need vary significantly, the expected impact of investment will also vary considerably).

FIGURE 3. MEAN ANNUAL PUBLIC INVESTMENT IN WATER AND SANITATION AS PERCENTAGE OF GDP IN LATIN AMERICAN COUNTRIES; 5-YEAR PERIODS (2012-2016, 2017-2021 NOT INCLUDING COLOMBIA AND ECUADOR)



(*) Colombia: 2010-2014; 2015-2019
(**) Ecuador: 2008-2012; 2013-2017

Source: Infralatam, 2024.

Most Latin American countries rely on public funding for drinking water and sanitation infrastructure. The percentage of GDP spent on WSS is particularly high in countries not promoting private investment: Bolivia (0.75-0.61% of GDP), Ecuador (0.47-0.27% of GDP) and Peru (0.57-0.63% of GDP). In some cases, additional important flows of funds (credit or donation) are provided from international development entities, such as the IDB, the World Bank (WB) and CAF. The Spanish Cooperation Fund for Water and Sanitation in Latin American and the Caribbean is an alliance between the Spanish government and the IDB, and since 2009 it has generated over USD 1.5 billion in funding for water and sanitation projects across 13 countries (IDB, n.d.).

1.3.3 Contested role of the private sector

The economic and financial crisis of the 1990s led to drastic reforms in the water and sanitation sector in most countries of the region. Among others, private sector participation was considered as a way out of a vicious circle characterised by low quality services, low sustainability, and lack of state investment. However, in many cases this perspective was based on unrealistic expectations, numerous national and sub-national organisations responsible for regulation and a highly politicised environment, coupled with the mismanagement of some utilities. This made the sector unattractive to many private investors who are cautious about investing in what they consider a high-risk sector (Castro, 2007; Regoli Roa, 2008).

Popular resistance to the privatisation of water and sanitation utilities was particularly visible through civil society protests. The Cochabamba "water war" (Bolivia) in 2000 has become emblematic of populations forcing government to retract its decision to privatise services. It also sparked civil society resistance to water privatisation across the region, contributing significantly to bringing it to a halt (CAF, 2015).

In the last two decades several countries returned the responsibility for WSS to the public sector or strengthened its role. DeSince 2000, private participation in investment and provision of drinking WSS has declined significantly, to almost zero in the cases of Argentina, Bolivia and Uruguay. In fact, the Constitution limits or prohibits privatization of water supply and sanitation services in Ecuador, Bolivia and Uruguay.

In Brazil and several other countries, a corrupt relationship between the private sector and government officials became one of the region's most notorious cases-- Operation Car Wash (Operation Lava Jato). An anti-corruption probe beginning in 2014 uncovered a massive corruption scheme operated by the Odebrecht company in relation to the Brazilian federal government, particularly in state-owned companies, as well as involving authorities in several other countries. State-Owned Enterprises, often through political appointees, systematically extorted bribes from private-sector suppliers, particularly the oil giant, Petrobras. Over the last 10 years the private sector has introduced significant measures to address integrity risks in its operations. Now privatisation is being rapidly expanded in Brazil's water and sanitation sector and private companies now serve nearly a fourth of the population (ABCON SINDCON, 2023)

It appears that the private sector is being reintroduced into the sector in a number of countries, whether in very limited or far-reaching ways. In Bolivia, with a fully government-controlled market, private sector firms specialized in consulting, planning

and design, execution and supervision of works can bid for public projects (ICEX, 2021). In other countries, such as Colombia and Brazil, private companies increased their market share by 10% and 15%, respectively, and almost 100% in Chile, in the period 2000-2015 (CAF, 2015). According to Saravia Matus et al. (2023 citing Fay, 2017), the increase of private investment in Chile-- which much be repaid-- means that only 0.05 % of its GDP is spent on WSS investment. Most recently the almost exclusive public domain "paradigm" of WSS is being weakened or reversed in Brazil and Argentina.

In some places corporations are winning control over water resources, raising significant integrity issues, with consequences that can devastate the water supply of local populations. Most recently, with half of the world's lithium reserves (needed for cellphones to electric cars) in northern Chile, large mining companies have done irreparable damage to water resources. Local resistance has been moderated by sharing some profits with local communities. The role of corporations in extracting fossil fuels and damaging water supply-- to increasingly common 'water grabs'-- are new areas in water finance which pose integrity challenges (Bartlett, 2024).

Alternative ways of responding to inherent conflicts between water resources, finance and corporate interests have developed in Latin America, which play a leading role in climate action around water in particular. This ranges from the establishment of the constitutional Rights of Nature in Ecuador which is being applied in a key legal case to protect the Amazonian ecosystem in Yasuni National Park. Oil extraction brings profit to the country, at the expense of regular spills that irreparably damage water systems and the provision of water, and also threaten uncontacted people (International Rights of Nature Tribunal, 2024). Elsewhere, Water Funds have been introduced. These are organisations established to bring together public, private and civil society stakeholders to enhance water security through watershed management and nature-based solutions. Examples include the Rio de Janeiro Water Fund, Brazil, which brings together stakeholders to protect the Guandu Watershed which supplies 80% of the water used by the 10 million residents of Rio de Janeiro. Water funds access finance through several options, but key in many of them is payment from downstream water users, often industry and municipalities, for upstream actions to protect water resources on which they depend. Additional funding might come from public funding agencies or private foundations and donors (TNC, n.d.). Like many multi-stakeholder initiatives involving actors from different sectors with different power balances, they can face risks related to how they are structured and run (CEO Water Mandate & WIN, 2015).

1.3.4 Self-supply

In rural and peri-urban areas, where the government does not - or is unable to - provide drinking water and sanitation infrastructure and services, self-supply is a fairly common way of obtaining (drinking) water, either individually (family) or through a community organisation (neighbourhood or other). In these cases, the household, the community or a private entity pays for the infrastructure or management of water and sanitation from its own resources, either monetarily and/or through labour contributions. Few community organisations have access to bank credit (e.g., microfinance), and there are usually no private or mixed financing funds for them. There are community organisations that turn to the state - through the municipality in their jurisdiction or another entity - to achieve (co-)finance for constructing of drinking water and/or sanitation systems, through a public investment project or program. Typically per capita investment costs in rural and peri-urban areas are high due to factors such as the scattered location of houses, greater distances between

neighbourhoods or in relation to the water source, (very) rugged terrain, higher overhead costs.

Community water and sanitation service organisations (Organizaciones Comunitarias de Servicios de Agua y Saneamiento or OCSAS) are common in Latin America. The Latin American Confederation of Community Organisations of Water and Sanitation Services (CLOCSAS, for its name in Spanish) has identified at least 145,000 OCSASs in Latin America (Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Panama, Paraguay, Peru and Guatemala) (CLOCSAS, n.d.)

The huge number of OCSAS and their scattered nature makes engagement by the state with the OCSAS difficult. For example, in Peru, where approximately 10% of the population is not connected to the drinking water network, it is practically impossible for the state to attend fully to the approximately 95,000 population centres that have been recorded (INEI, 2017). There are already around 25,000 community organisations providing WSS in rural population centres, according to SUNASS data (SUNASS, n.d.)

Extrapolating from this data and taking Peru as a reference, self-supply is very important in (self-)financing access to (drinking) water and sanitation, particularly in rural and peri-urban areas. Yet not much is known about the magnitude of monetary and non-monetary contributions made in self-supply systems, and it is seldom included in financial assessments of service provision.

While the data presented above might suggest that self-supply is mainly achieved through community organisations, this is not necessarily the case. Many individuals and families must provide for themselves individually, e.g., by buying water from tanker trucks (widely used in peri-urban areas) or by collecting water from a natural source (in rural areas).

1.4 Water supply and sanitation investment gaps

A study by the IDB (2021b) estimates the total infrastructure investment needed in drinking water and sanitation from 2021 and 2030 to meet the Sustainable Development Goals (SDG) 6.1 and 6.2 in the region. Table 1 reflects the high end of required investment, depending on the investment scenario. Urban areas require more than two thirds of this investment.

TABLE 1. TOTAL INVESTMENT NEEDS BETWEEN 2021 AND 2030 IN THE DRINKING WATER AND SANITATION SECTOR IN THE LATIN AMERICA AND THE CARIBBEAN REGION, IN MILLIONS OF US DOLLARS AND AS A PERCENTAGE OF REGIONAL GDP (MAXIMUM INVESTMENT SCENARIO)

Investment concept	New Infrastructure (USD million)	Maintenance and replacement (USD million)	Total (USD million)	Annual investment as a percentage of regional GDP
Access to safely managed water	90.620	52.041	142.661	0,2%
Access to safely managed sanitation	148.503	65.878	214.381	0,3%
Domestic wastewater treatment (halving the gap)	16.848	NA	16.848	0,02%
Total (USD million)	**255.971**	**117.919**	**373.890**	**0,52%**

Source: IDB, 2021b.

While the IDB study indicates a need for 0.5% of regional GDP annually in Latin America and the Caribbean for water and sanitation infrastructure, a study by ECLAC (Saravia Matus et al., 2023) estimates that the rehabilitation and expansion of safely managed drinking water and sanitation in the region requires 1.38% of GDP in the region, or a total of USD 339,980 million investment for water and USD 357,760 million for safely managed sanitation (ECLAC, 2023). The study is based on data from ten countries in Latin America that account for 86% of regional GDP and 80% of its population.

Both analyses indicate that most countries in Latin America require astronomical investments to close the infrastructure gaps in their drinking water and sanitation services. And actual investment requirements may be considerably higher to adapt and respond to the impacts of climate change.

Countries with less infrastructure and/or low investment in water and sanitation need to increase the share of their GDP spent on water and sanitation to meet SDG 6.1 and 6.2. Honduras, El Salvador, Colombia, Peru and Mexico need to invest a larger proportion of their GDP than the regional average. Chile, Costa Rica and Argentina can invest less than the regional average to close their gaps (Saravia Matus et al., 2023), perhaps because of their earlier efforts to do so.

Investments tend to be heavily focused on creating new infrastructure, while neglecting investment in maintenance, even though public entities and companies are well aware of the technical importance of maintenance and its impact on the cost of assets throughout their life cycle. This lack of adequate maintenance has clear political and institutional roots (IDB, 2020b). The highest political returns are obtained when new assets are built and operationalised, making investing in maintenance relatively

unattractive. The tendency of governments to swing between right and left in many Latin American countries contributes even more to prioritizing (emblematic) new infrastructure, to the detriment of maintenance. Profit to be made from new infrastructure tends to be higher than for maintenance (IDB, 2020b). In addition, in the case of new construction, transparency tends to be lower and complexity higher, which leaves room for rent-seeking and corruption (IDB, 2020b). It should be noted that higher investment sums can "yield" increased kickbacks, as they are often fixed as a percentage of the investment amount.

These financial challenges take on an even greater dimension in the context of accelerated climate change, requiring entities providing WSS to broaden the scope of investments and operations. These measures can be of very diverse nature: from regulating hydrology of upper watersheds to measures to protect flood-prone urban areas. The incorporation of adaptation measures to climate change implies even larger investments, as well as operational and policy changes, to ensure water availability and security. This increase in financial flows - in many cases, around functions that until recently were unrelated to the sector - entails increased risks of corruption, particularly in cases of need for "urgent actions", accelerated decision-making and other pressure situations for which "exceptional measures" are being justified, in many cases applied outside the established technical-financial control systems or with flexible or relaxed controls.

PART 2

WATER AND INTEGRITY IN LATIN AMERICA

2.1 The nature of corruption in Latin America

As an endemic problem in many Latin American countries, corruption is present in almost all levels of society and state institutions, manifesting itself at multiple levels and scales.

In 2023, nearly 70% of leading anti-corruption experts in the region agreed that it was a top concern for most people in their respective countries, according to the Capacity to Combat Corruption Index's survey (CCC index). Perhaps more worryingly, only 39% of citizens surveyed across the Latin American region think their government is doing a good job in tackling corruption (TI, 2019) and more than half (53%) think corruption has increased the previous year and that most or all elected politicians and their officials are corrupt and favor private over public interests (Corporación Latinobarómetro, 2018, as cited in IDB, 2020b). More than one in five people who accessed public services paid a bribe in the previous year and either experienced or knew someone who experienced sextortion.

Covering 15 countries that together comprise 96% of the regional gross domestic product (GDP), the CCC Index does not attempt to measure corruption, but instead uses 14 key variables to evaluate and rank countries according to their effectiveness in combatting corruption. Countries with a higher score are deemed more likely to see corrupt actors prosecuted and punished, and continued impunity is more likely toward the bottom of the scale. Scores from the CCC index for 2023 are illustrated below. The country with the highest score in the 2023 CCC Index is Uruguay (6.99 out of 10). Uruguay was followed by Costa Rica (6.76), Chile (6.67), Peru (5.53), the Dominican Republic (5.42), Panama (5.39), Argentina (5.07), Brazil (4.83), Colombia (4.78), Ecuador (4.68), Paraguay (4.61), Mexico (3.87), Guatemala (2.86), Bolivia (2.56) and Venezuela (1.46) (Americas Quarterly, 2023). In addition to the CCC index, some countries have developed their own measures. For instance, the Comptroller General's Office in Peru has been measuring the "Index of Functional Corruption and Misconduct" in the country's public institutions since 2021.

Although not specifically focused on water and sanitation services (WSS), in terms of efforts to combat corruption and improve integrity in the provision of public services and sector finance, the vast majority of countries in Latin America have adopted three important international conventions:

- The Inter-American Convention against Corruption (IACAC) in 1996, now ratified by almost all member states of the Organisation of American States, and an important instrument in the fight against corruption.
- The United Nations Convention against Corruption (UNCAC) in 2003 (Resolution 58/4), now ratified by 191 countries, including all Latin American countries. It specifies the participation of society and ensuring the public has "effective access to information".
- The Organization for Economic Cooperation and Development (OECD) Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. As of 2018, 46 countries, including Argentina, Chile, Colombia and Costa Rica, have ratified or acceded to the convention.

Not only are governments legally committed to implement policies to reduce corruption and increase transparency, but they also

include prevention components such as transparency of public information, improvements to public procurement, and rules of conduct for public officials.

Each country has legislative, instrumental and institutional measures in compliance with the aforementioned conventions, for example:

- In Ecuador, the Organic Law on the Function of Transparency and Social Control (FTCS) was enacted in 2013, creating the FTCS Coordination Committee as an articulation and coordination body, which is responsible for formulating the National Plan for Public Integrity and Fight against Corruption.
- In Peru, the government approved the National Integrity and Anti-Corruption Policy in 2017 and presented the National Integrity and Anti-Corruption Plan 2018-2021 the following year.

These plans do not refer specifically to the water and sanitation sector but contain guidelines and measures to be implemented by the respective responsible public entities and financed from their own budgets.

While many Latin American governments joined the Open Government Partnership in 2011, agreeing to put fair access to public information into law, only two-thirds have approved legislation and of those, only ten included an enforcement mechanism—and it is rare for enforcement authorities to operate independently. There is also a need to consider digitization of public services and information to open a window onto government decision making (Gedan & Canton, 2022). This is important as to play a consistent role, independent journalists and other watchdogs require enforceable access to public information.

Although most Latin American countries have passed important anti-corruption laws, this does not mean that the political will to control and combat corruption in a meaningful way follows.

In countries where good governance practices are weak, many anti-corruption actions may have a "cosmetic" effect of commitment. This phenomenon can transform the fight against corruption into an empty discourse with no real impact (Indij & Hantke Domas, 2013). According to Grindle (2021), there is a persistent tension between law and reality; in a recent study, she found that "implementation, not law, determines the persistence of patronage and shapes the characteristics of emergent career services. So, it is not surprising to find contradictory and competing legal developments and contradictory and competing practices." For example, while Peru has one of the strongest legal frameworks, flaws in its procedural rules and a lack of political will undermine its implementation (Chávez Alor, 2021).

Important reforms and changes have been made in government institutions and processes over the last 20 years, in large part due to transitions to democracy in much of the region. Improvements in governance have had important ramifications in diminishing spaces for corruption. At the same time, some prevalent characteristics presented by Parker et al. (2004) have taken a different shape but continued to pose challenges and undermine integrity in the water sector and beyond. These include a lack of political will, patronage and other practices that undermine the professionalism of the public service, weak control and oversight institutions and ineffective judicial systems:

Political will to control corruption is lacking or inconsistent.

Political will is needed to implement and sustain anti-corruption reform efforts. While most politicians promise to fight corruption, few deliver on their promises. Showing real and effective political will is difficult for many leaders, for reasons such as: opposition from those with an interest in maintaining the status quo; overly high expectations regarding corruption reduction; no practical and immediate consequences for failing to deliver on election promises; and leaders' inability to cooperate with the opposition, build consensus and mobilise support.

Patronage, clientelism and capture undermine the professionalism of public service.

Career progression and appointments are often based on patronage, political favours, cronyism and ordinary bribes instead of merit. Whether in Brazil, Chile and Colombia, there is extensive patronage, especially at lower levels and coexisting with efforts to professionalise the civil service (Echebarría, 2006; Hernández, 2005; Longo, 2005; Longo & Ramió, 2008 as cited in Peters et al., 2021).

Control and oversight institutions need strengthening.

There have been efforts to strengthen governmental and non-governmental institutions in charge of mitigating corruption and promoting integrity. These include anti-corruption commissions, agencies, ombuds and justice system watchdogs, implementation of anti-corruption laws, and efforts of the international donor community. Most of these bodies and mechanisms remain weak, particularly due to a lack of sufficient funding and staff to carry out their functions effectively.

Ineffective judicial systems that lack independence.

Despite reforms, in many Latin American countries corrupt officials are seldom prosecuted or sanctioned. Judges retain enormous discretion and money can buy unduly favourable rulings. In many countries in the region, judicial systems are being actively undermined (Woolston, 2024). "The vast majority of the countries across Latin America, among them Mexico and Peru, report that the anti-corruption authorities do not have the necessary autonomy and independence to prevent, investigate, and sanction acts of corruption." (Garduño Sandoval et al., 2023; Chávez Alor, 2021).

The Inter-American Court of Human Rights took action to uphold the right to access public information in 2006, when it ruled against the Chilean government for failing to uphold its obligation to allow public access to government records requested by an environmental group fighting a forestry project (Gedan & Canton, 2022).

Civil society is considered by many analysts as key to anti- corruption in the region, pointing to its demonstrated capacity to take action against corruption.

Often this has been action to remove or protest against high level leaders. For example, in 2015 tens of thousands of Guatemalan protestors chased President Otto Pérez Molina out of office amid corruption allegations; or when waves of anti-corruption protests

in Brazil led to President Dilma Rousseff's 2016 impeachment. Investigative journalists have been central to action in response to revelations in the Panama, Paradise and Pandora Papers, which leaked over 36 million confidential legal and financial records. The leaks revealed the extensive offshore holdings of public figures worldwide and the tactics they employ to avoid tax liabilities. This reverberated across the region (Gedan & Canton, 2022).

38 civil society organisations (CSOs) from 11 countries participate in the Anti-Corruption Platform for Latin America, which allows CSOs working on anti-corruption to share their activities related to UNCAC and its review process. They exchange best practice approaches, coordinate advocacy activities, and provide updates on relevant developments (UNCAC Coalition, n.d.).

Civil society has also worked with other stakeholders to encourage integrity. The Basel Institute on Governance (2023) has mapped over 60 collective action initiatives in twelve Latin American countries, across sectors. They include joint declarations, anti-corruption certification schemes, and tools to safeguard public procurement such as Integrity Pacts and high level reporting mechanisms (Basel Institute on Governance, 2023). In terms of companies, the Instituto Ethos of Brazil (a CSO) collaborated with the country's Comptroller General to develop a system that publicly recognises companies with a *Pro-Ética* (Pro-Ethics) seal for their implementation of integrity and compliance programmes (Basel Institute on Governance, 2023).

2.2 Corruption in the water and sanitation sector in Latin America

Because it is so demanding in terms of capital and financing, the water value chain is exposed to numerous corruption risks, ranging from policy formulation and regulation of the sector to contracting processes, operations and at the points where service delivery takes place (TI, 2021; TI, 2008). Investment in the provision of infrastructure and public services for drinking water and sanitation is considered highly prone to corruption (Kenny, 2007, as cited in IDB, 2020a).

Drinking water supply and sanitation services normally have the character of a natural monopoly, which requires regulation and control by the state, whether the service provider is private or public (Boehm & Bohórquez Suárez, 2011; TI, 2008). The risks of corruption and integrity failures are present throughout the entire service chain, from the highest levels where policy decisions are made, through regulatory and control bodies, water and sanitation service providers, contractors for building infrastructure, delivery of equipment and/or maintenance, outsourced services for meter reading and collection, to even water users "buying" favours (clandestine connections, etc.).

The greatest risk of corruption and other types of integrity failures occur in those spheres where decisions relate directly to the prioritisation, preparation, contracting processes, execution and supervision of water and sanitation projects. It is here that decisions on the allocation of investments are concentrated, as well as the activation of procedures and operations related to money flows. It is "close to the money" where the greatest temptations to use public funds for personal gain occur.

The limited literature on corruption in the water and sanitation sector in Latin America, often based on perception indices (IDB, 2020a), indicates significant corruption in the sector. Recently, the Inter-American Development Bank (IDB) presented a study quantifying the effects of corruption in the water and sanitation sector in six countries in Latin America and the Caribbean (IDB, 2020a). It establishes a Corruption Risk Index (CRI) composed of risk factors for each country as a basis to measure corruption risks in WSS compared to other sectors.

The most basic and easily detectable CRI-composite risk indicator is the percentage of "single bidders" in contracts. In Uruguay, Colombia, Jamaica, and Ecuador, the percentage of single-bidder procurements in the WSS sector is between 7-28% lower than those recorded over the total public contracts in the country. In the case of Mexico and Paraguay, the percentage of single-bidder tenders in the water and sanitation sector is only 2-4% above the national averages. If this measure is used as an indicator of possible corruption, the water and sanitation sector has a somewhat lower corruption risk percentage than in other sectors. Even so, worryingly, more than half of the contracts in the water and sanitation sectors in Colombia, Paraguay and Ecuador had only one bidder in the period studied (2006 - 2018) (IDB, 2020a). Single bidder contracts do not necessarily indicate corruption, but they are a red-flag for the possibility of corruption being present.

Significant corruption revolves around concession processes and the contracting of investment projects. A study commissioned by the United Nations Development Programme (UNDP, 2011) shows how the negotiation and renegotiation processes of private drinking water concession contracts are an open space for corrupt practices, with 76 percent of renegotiations initiated on average only 1.6 years after the original contract was signed. One study pointed to a strong correlation between a country's corruption perception index and the percentage of renegotiations initiated by the operating company, suggesting that certain "revenues" are shared with government officials (Guasch & Straub, 2009).

2.3 Sector institutions and finance related integrity risks

2.3.1 Institutional Arrangements

In order to understand the integrity risks in finance for water and sanitation it is important to understand the roles and responsibilities of the different actors in the sector, recognising that they vary considerably from one country to another. One key aspect is that these sectors are largely natural monopolies, given the high fixed costs associated with sourcing and delivering water and removing sewerage via built infrastructure. Monopolistic conditions create opportunities for capture, where public boards and commissions may be influenced by individuals with interests.

Sector fragmentation and decentralisation complicate the institutional landscape. There are often a large number of institutions responsible for the delivery of water and sanitation from national to local level, sometimes with conflicting or overlapping mandates. The lack of clear roles and responsibilities makes accountability a challenge.

Decentralisation can localise service provision, but it does not inherently increase accountability and can instead shift corruption or poor accountability from national to local levels. It can also create inefficiencies in public financial management, increasing the complexity of financial flows and the difficulty of tracking funds. These complex institutional arrangements necessitate robust regulatory frameworks to ensure efficient use of available funds and fair user charges.

The following table outlines the main institutional arrangements for water and sanitation in selected Latin American countries, reflecting the institutional and legal heterogeneity in the region, and showing how institutional characteristics shape the scope for wrong-doing of actors. Each country varies considerably in terms of providers, level of regulation and independence and main funding sources. This illustrates the importance of country specific analysis of integrity risks in water and sanitation finance.

TABLE 2: SUMMARY OF THE MAIN INSTITUTIONAL FUNCTIONS IN THE WATER AND SANITATION SECTOR IN SELECTED LATIN AMERICAN COUNTRIES

Argentina (2017-2021) USD 5,661 million; 0.25% of GDP	After the model of private participation in the 1990s went into crisis, the so-called **re-statisation of services** took place, reorganising water and sanitation companies as state-owned corporations or state-owned companies. Within the Ministry of Infrastructure, the Secretariat of Infrastructure and Water Policy is responsible for national policy and planning of WSS, and decides on financial resource allocation within the sector (through the National Directorate of Drinking Water and Sanitation). The Water and Sanitation Regulatory Body is responsible for regulating WSS provided by the public company Agua y Saneamientos Argentinos SA to the capital of Buenos Aires and 26 municipalities of Greater Buenos Aires. Provincial companies generally provide WSS at the sub-national level, **and their share capital is owned by the provinces, municipalities and unions.** At provincial level there is a body responsible for sectoral planning and approval of tariffs (provincial ministry, secretariat or undersecretariat) **and a regulatory body**. When there is no economic regulator, as is the case in 8 of the 23 provinces, **regulatory functions are carried out by the provincial administration** (OECD, 2020).

TABLE 2 (cont.)

Bolivia (2017-2021) USD 1,236 million; mean 0.61% of GDP	The 2009 Constitution **prohibits privatization** of water supply and sanitation services. **Municipal governments are responsible for supplying** drinking water and basic sanitation to all inhabitants of their jurisdiction, either directly or through third parties, called Public Social Water and Sanitation Company. The Ministry of Environment and Water, through the Vice Ministry of Drinking Water and Basic Sanitation, defines the policies for the sector. The Authority for Supervision and Social Control of Drinking Water and Basic Sanitation is the **national regulator** that controls and oversees the sector; it regulates sector activities of natural and legal persons, private, community, public, mixed and cooperatives related to water supply and sanitation. The Environment and Water Executing Entity is the entity dedicated to the execution, monitoring and evaluation of most large drinking water and supply projects in the country. Investment in the sector **depends heavily on finance (mostly loans)** provided by international agencies (IDB, World Bank-WB, Development Bank of Latin America and the Caribbean-CAF, Japan International Cooperation Agency, KfW-Germany).
Brazil (2017-2021) USD 5,637 million; mean 0.07% of GDP	The 2007 Sanitation Law defined national guidelines for water supply, sanitation, urban hygiene, solid waste management and urban storm drainage services to be met by all sectoral actors at federal, state and municipal levels. In 2020, a new Sanitation Law was enacted, with a number of modifications to the legal and institutional framework of the sector. The new law promotes a **growing role of private companies to invest in -and operate**- water and sanitation services. A tendering process is set out in the new legislation for municipalities to delegate responsibility for providing services to other public entities or private companies. The **National Water Agency is the national regulator** for the water and sanitation sector, responsible for setting reference standards. An estimated 89 **sub-national regulators** are responsible for establishing specific standards for the social, economic and technical dimensions of water and sanitation service provision in each locality and for monitoring compliance with these standards by water and sanitation service providers.

TABLE 2 (cont.)

Chile (2017-2021) USD 739 million; 0.05% of GDP	The majority of urban water and sanitation companies are **privately owned or operated by private actors**. The Chilean WSS model includes a system of subsidies for low-income families against excessively high rates in relation to their ability to pay. At the urban level, the **regulatory body is the Superintendency of Sanitation Services (SISS)**, having functions for setting tariffs, granting concessions and supervising service providers. The SISS is subject to the supervision of the President, through the Ministry of Public Works (MOP). In the rural areas, cooperatives and drinking water committees are in charge of supplying WSS. The MOP is the governing entity in charge of sectoral legislation. The Ministry of Health oversees drinking water quality standards. In 2020, the Law Nº 20998 on Rural Sanitation Services came into force, creating within MOPs´ Directorate of Hydraulic Works the Subdirectorate for Rural Sanitation Services (SSSR). The SSSR's functions include promoting and assisting social organizations and providing training, support and advice to rural sanitation services.
Colombia (2015-2019) USD 6,850 million; mean 0.46% of GDP (2015-2019)	Drinking WSS are provided in Colombia under **responsibility of the districts and municipalities**. The Vice-Ministry of Water and Basic Sanitation - part of the Ministry of Housing, City and Territory - is in charge of setting sectoral policy. The Commission for the Regulation of Drinking Water and Basic Sanitation (CRA) is the **national sector regulator** that defines the criteria for service provision and establishes tariff setting rules. CRA promotes actively transparency and anti-corruption measures (through Anti-Corruption and Citizen Attention Plan). Design and monitoring of regulations is split between CRA and the Superintendency of Household Public Utilities. The last is responsible for monitoring and implementing sanctions as part of the regulatory cycle. The sector is characterized by **high levels of investment and cost recovery, the existence of some large efficient public companies and a strong and stable participation of local and international private sector.**

TABLE 2 (cont.)

Ecuador (2015-2019) USD 1,364 million; mean 0.27% of GDP (2015-2019)	The provision of WSS in Ecuador is **only public or community-based**, and only by exception may it be provided by private companies (Guayaquil, the city with the largest number of inhabitants in Ecuador) The country's 221 municipalities are responsible for the delivery of services in municipal urban areas, either directly or through autonomous municipal companies. In rural areas more than **7,000 Drinking Water Management Boards, known as Community Water and Sanitation Services Organisations** provide WSS. The Vice-Ministry of Water, through its Directorate of Drinking Water and Sanitation - both part of the Ministry of Environment, Water and Ecological Transition - is in charge of sectoral policy. The **Water Regulation and Control Agency** (ARCA), established in 2014, is also attached to that ministry. A considerable part of **public investment in WSS is channelled through the Development Bank of Ecuador.**
Peru (2017-2021) USD 6,834 million; mean 0.63% of GDP	The **provincial municipalities are responsible for** drinking WSS in the urban areas, **through 50 service providing companies** (EPS) that are almost all public. In rural areas there are almost **25,000 community WSS providers** (sanitation services organisations, or otherwise). The Vice-Ministry of Construction and Sanitation sets policy for the drinking water and sanitation sector. The National Superintendency of Sanitation Services (SUNASS), **attached to the Presidency Council of Ministers, regulates the** EPS, with powers for approval of rates, supervision, inspection and sanction, as well as resolution in the second administrative instance of user complaints. It also has competencies related to rural areas. The Technical Agency for the Administration of Sanitation Services, attached to the Ministry of Housing, Construction and Sanitation, has broad powers to intervene in those EPS that do not comply certain minimum indicators, through the so-called Transitional Support Regime. In 2024, the Universal Access to Drinking Water Law was approved, **to invest in measures to universalize access** to drinking water, specifically aimed at the 3.15 million people in the country who still do not have this basic service.

TABLE 2 (cont.)

Uruguay (2017-2021) USD 426 million; mean 0.14% of GDP	The Constitution of Uruguay establishes that the public sanitation service and the public water supply for human consumption will be provided **exclusively and directly by state legal entities** (IDB, 2020c). Created in 2010, the National Water Directorate, part of the actual Ministry of Environment, is in charge of formulating policies on drinking water, sanitation and water resources. The provision of drinking water and sanitation through networks throughout the country is the responsibility of the state-owned company Administration of State Sanitary Works del Estado, with the exception of Montevideo, where sanitation is provided by the city's mayor's office. The Energy and Water Regulatory Unit is the **national regulator** for the energy, gas and fuel sector, as well as for drinking water and sanitation. The largest financier of investments in the water and sanitation sector is the **public sector, from own funds and/or loans** with sovereign guarantee, in particular through external financing from multilateral organizations..

Source: Rojas Ortuste, 2014; Infralatam, 2024.

What emerges clearly in this review is the need to consider country contexts as a complex system, in which there are integrity risks in the work of each actor—and that they act and interact within parameters that have emerged through wider histories of change. The case studies in this report illustrate this further.

Corruption and integrity risks can be analysed at different levels and types of institutional actors (IDB, 2019b): policymakers, regulators, service providers and users / user communities.

2.3.2 Policy makers

Undue political interference at high levels - executive branch, legislators, electoral candidates, senior civil servants – may be related to seeking votes and electoral advantage.

This may include pushing for tariffs in WSS to be kept low, interfere on how subsidies are designed and awarded; defining priority areas of focus, or influencing on major projects; decreased revenue can undermine delivery to already underserved populations (WIN, 2024). High level actors are typically shielded and corruption allegations tend to not be investigated or fully pursued.

Where the main responsibility for WSS is located at a lower level (municipalities, federal states), corruption may involve subnational and local authorities or officials.

One type of corruption that is highly prevalent in Latin American countries is the tendency to allocate public positions or contracts in favour of family members (nepotism), close friends or associates (cronyism). For example, in Peru, there are indications that in 2021 members of the President's family were involved in favouritism in a prioritised list of drinking water and sanitation works (Amerise, 2022). Such favouritism leads to a high turnover in public office, and often the persons assigned do not have the experience or skills required for the position. It usually has serious effects on institutional stability and performance and undermines the quality of decision-making about public services.

Many public water service providers have government-friendly boards of directors appointed by the relevant Minister, bringing risks of undue political interference. Municipal and inter-municipal providers tend to have local government hegemony, and therefore tend to be more exposed to political interference locally, even though some countries have reformed their composition by incorporating members of civil society and limiting the scope of the board to strategic aspects, separate from managerial and operational functions (Rojas Ortuste, 2014).

Increased integrity risks - through favouritism, undue political interference, or direct corruption - are found in emergency situations, such as droughts or floods. Emergencies related with climate change, especially the alternating presence of El Niño and La Niña phenomena, has led to a series of declarations of water emergency - either due to water scarcity or excessive rainfall with (risk of) flooding - leading to extraordinary powers for rapid contracting and execution of investments in water protection infrastructure and other immediate action measures.

Declarations of water emergency in Latin American countries are becoming more frequent. They have occurred in countries such as Argentina, Brazil, Chile, Colombia, Ecuador, Uruguay and - with much recurrence - Peru. The public entities involved can make use of extraordinary powers granted through emergency declarations, with all the additional risks of misconduct that this implies. Normally, in these cases procurement does not necessarily need to be conducted through the regular procedures established in the respective public investment systems, but rather through shortened processes or even outside the established systems. Clearly, this considerably increases the decision-making discretion of (political) authorities and officials at national and sub-national levels, bringing with it major integrity risks. For example,

in May 2024, the National Unit for Disaster Risk Management in Colombia faced strong allegations of longstanding and widespread corruption. The El País newspaper affirms that corruption of this office is facilitated by its design: billions of Colombian pesos seem to be easily transferred without any type of control (Osorio, 2024).

2.3.3 Regulators

It is useful to consider trends in regulation that are common to several countries in the region (see Table 2):

- Over the last decades efforts have been made to ensure greater separation of the functions of developing sectoral policies, economic regulation and service provision (Rojas Ortuste, 2014).
- Most countries have established sectoral regulatory agencies at the national level, although some, such as Uruguay, have embedded WSS regulation in a multi-sectoral regulator.
- Some countries have a consolidated and long-standing national regulatory body (e.g., Chile, Peru, Colombia), while in other cases the national body is still fragile and of recent creation (Brazil, for example.
- In federal countries like Brazil and Argentina, subnational regulators or supervising entities exist at the level of states, provinces and even (big) municipalities.

Water and sanitation regulators, whether independent or within ministries, are not immune from corruption and integrity failures in their varying roles and responsibilities that may include tariff approval, competition regulation, regionalization of services, design of providers´ management instruments targeting areas such as procurement and financial management, oversight of investments plans and/or economic and technical standards, monitoring water and sanitation providers (WSP) performance, regulating incentives, and imposing sanctions on non-compliant WSPs.

One of the major integrity risks that regulators face is capture by powerful interest groups: the entities that they regulate, political figures aiming to manipulate regulations for personal gain, or the private sector. For example, in Peru, in December 2023 the SUNASS -the sector regulator- warned in a public statement that there was a risk of political interference by the Ministry of Housing in setting water tariffs. In this case, there is no proof of direct misconduct or corruption from the highest political levels, but it certainly can affect the integrity of the regulation system or at least of pricing with sufficient technical and economic criteria (SUNASS, 2023a).

Ensuring financial independence of regulators can help to reduce the risks of political interference, such as restraining regulators´ budgets. Chile's SISS has its own budget from the National Treasury, unlike many other regulators in Latin America that obtain their revenues through a rate pay by the WSPs they regulate.

Sub-national regulatory agencies are often more exposed to regulatory capture, due to their lesser autonomy from (local) government authorities and political actors (e.g., from subnational states). This situation can be aggravated by insufficient articulation between the national regulator and subnational (local) regulating bodies, and/or when the national regulator lacks capacity to exert sufficient control on the latter.

Regulators face internal integrity risks that may include nepotism or procurement corruption, as well as external integrity risks such as being influenced for approving biased methodologies for stablishing tariffs or approving subsidies. Regulators can embed integrity measures into regulatory frameworks, in terms of minimizing risks of corruption and integrity failures, as well as promoting transparency, accountability and participation. By adopting internal integrity practices, they set an example to the entities that they regulate as well as reducing the risks of corruption in their work internally and externally.

2.3.4 Water and sanitation service providers

Prior to considering financial integrity risks, it is useful to consider the overall characteristics of service providers in the region (see Table 2):

- Popular protest and changes in governments have resulted in many countries restricting private sector provision of services through law or policy. This has implications for a country's commitment to public sector funding or transfers. At the same time, the sector has become less attractive to the private sector in many places.
- A common feature in many Latin American countries is that WSS are the responsibility of subnational governments, such as provinces, districts and/or municipalities, performed either directly or through third parties. They tend to have quite high levels of autonomy, and at the same time low technical and managerial capacities. Combined with weak oversight from national sector authorities, this broadens the space for undue influence and corruption.
- There are often extremely high numbers of rural service providers, which require community involvement. While this has received attention in specific cases, it is an area requiring further work.

Although in Latin America a considerable part of the investments in drinking water and sanitation infrastructure are channelled through national or subnational authorities, **in almost all countries WSPs (public, private or mixed) are also involved in procurement processes, with the consequent integrity risks in the preparation, contracting, execution and supervision of the**

Photo: Alejandro Pernia Paredes, 2021 WIN photography contest

respective projects. As is well known, the construction sector is one of the most prone to corruption, and water infrastructure projects are at particular risk for corrupt practices, such as favouritism in the appointment of service providers and leniency in acting on financial wrong-doing. There are integrity risks in the range of activities carried out by service providers delivering WSS, including operation and maintenance and commercial management.

Some service providers often subcontract activities to other technical and business actors (outsourcing of services), while maintaining direct control over its core management. Due to the range of activities that can be outsourced, a service provider may negotiate and contract considerable amounts of outsourcing at the same time (even simultaneously awarding contracts to several companies for a same type of activity, such as network maintenance). These subcontracts may be relatively once-off and short term or have the character of a "concession" for a longer period of time and involving larger contractual amounts and periodic payments. Each of these sub-contracting processes can involve integrity risks and direct corruption, which in total can be very considerable and seriously affect the finances of the utility.

Both within the service provider itself and in subcontracted companies, there are margins for integrity risks and corruption, also on a smaller scale (petty corruption type), including officials of a certain rank or operating employees "turning a blind eye" to clandestine connections in exchange for a certain payment from the offender, or extorting money or sexual favours from the user for not carrying out a disconnection ordered by the company.

Although this type of small-scale corruption usually involves small amounts of money "leakage" individually, when it adds up to a large number of corrupt acts over time and committed by multiple employees, it can result in a significant reduction in the revenue of the service provider and undermine its financial sustainability (WIN, 2024). In turn, this reduction may impact the quality of service of the WSP, thus affecting a considerable number of consumers served and/or the (financial) capacity to expand the network and service to new users.

WSP revenues may also be significantly undermined by corruption, fraud, and theft in tariff collection, manifesting through practices such as meter tampering and accepting bribes for tariff exemptions. Non-revenue water presents a critical challenge to the financial sustainability of water services, with corruption and integrity issues often inadequately addressed within non-revenue water reduction programs. Technical losses and leaks may indicate poor infrastructure quality or biased planning, while commercial losses stem from integrity problems in billing and financial systems. Furthermore, while non-payment for water is frequently attributed to low-income users and illegal connections, many large users—such as industrial clients, government entities, and influential individuals—often evade payment. This reality prompts necessary discussions on the affordability of tariffs and the effectiveness of subsidies and utility affordability programs.

Integrity risks can also arise in remote rural areas where there are no regulatory frameworks, or institutionalised technical and financial support or control, for local service providers.

In a number of countries measures have been introduced to depoliticise the administration of services by incorporating more technical and commercial management criteria. However, many public service providers still have corporate governance that is highly dependent on the central or sub-national level of government, which reduces their autonomy (Rojas Ortuste, 2014) and increases financial dependency.

2.3.5 Users and user communitie

At the level of drinking water consumers (users and/or communities of users), similar small-scale corruption and lack of integrity behaviours may occur. **This can be related to integrity issues of a WSP; for example, there is a possible link between user actions and underlying issues such as needing a connection to access water, being unable to pay high tariffs or receiving extremely poor service but being charged.** Whatever the case, aggregating individual misconduct over time, by a number of users, can result in a significant reduction in revenues of the utility.

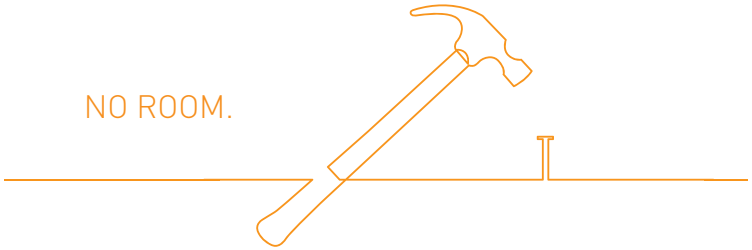
This may occur between a user and an official in collusion, as in an informal win-win arrangement agreed by both parties or by the user alone. For example, the user may pay to maintain a clandestine (illegal) connection, in exchange for the employee not reporting it to the company. This could also mean paying the employee not to execute a domestic disconnection ordered because of non-payment of debt. Or, without the knowledge or complicity of any operator of the utility, a user may manipulate meter functioning or install an additional connection. In Chile, this type of clandestine connections has a popular name of its own: "arranque brujo".

2.4 Pathways to Promote Integrity in Water and Sanitation Finance

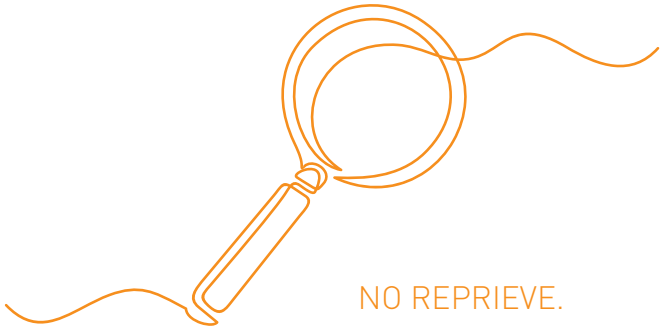
In recent decades, the understanding of corruption and strategies to combat it have evolved significantly. Between 1990 and 2010, the emphasis was on technical solutions such as implementing new laws, regulations or monitoring systems. The tendency was to treat corruption as a series of isolated incidents and to neglect how it was facilitated by underlying political and social phenomena within varying contexts, **over time, however, evidence mounted to suggest that narrow 'technocratic' interventions also require strategies in terms of organisation, transparency, and influencing social norms** (Jackson & Köbis, 2018).

Building on all of these, the Water Integrity Global Outlook (WIGO) **3 provides a comprehensive framework for tackling the integrity challenges in water and sanitation finance. Through the 'no reason', 'no room', and 'no reprieve' pathways, 3 Rs,** for its acronym in English, stakeholders can develop tailored strategies that address the root causes of corruption and integrity failures.

The 'no reason' pathway emphasises the use of social norms strategies and social responsibility approaches to challenge the prevailing mindset around corruption and integrity failures. This path seeks how to influence social norms to reduce pressures and weaken the rationalisation of wrongdoing, by challenging it.



The "no room" pathway relies on structural or managerial interventions to reduce the space of opportunity for corrupt actors. Controls and oversight mechanisms will limit opportunities for misconduct, reducing the scope for corruption in general while increasing the likelihood of detecting any misconduct. Similarly, minimizing discretion or when institutional reforms change the focus of investments, may reduce the benefits obtained through undue influence on decision-making.



The "no reprieve" pathway recognises the importance of being consistent in both detection and punishment. This path focuses on deterrence and sends a clear message that unethical actions will not go unnoticed or unpunished. Countering the belief that an individual can cheat or steal and "get away with it" is a relevant factor in preventing corruption. By placing emphasis first on detection and then on sanctioning, potential corrupt actors can be deterred. Essential elements of this pathway are (a) increasing the chances of detecting errant behaviour, and (b) applying effective sanctions to the perpetrators of such behaviour.

The application of these pathways is discussed in the conclusion and recommendations following each of the case studies in the next section.

PART 3

OPPORTUNITIES FOR INTEGRITY: CASE STUDIES

3.1 Introduction

The challenges of funding the water and sanitation sector in Peru, Ecuador, and Brazil – the case studies of this report—differ significantly. According to CEPALSTAT (2024), Brazil provides 87% of its population with safe drinking water services, although high disparities exist within the country with coverage rates in the north much lower than in more prosperous south. Ecuador has achieved 75% safe drinking water coverage in urban areas and 53% in rural areas. In contrast, in Peru, the percentages of coverage - urban, rural, overall - are well below the average for the Latin American region—52% total (with 23% in rural areas). It is important to note that these percentages are below those reported by countries, since they are based on 'safely managed' water provision.

Given the embedded nature of integrity risks in the region, this study was designed to consider interventions at different levels: the micro, meso and macro levels. At the micro level, in Peru, having a direct impact on integrity risks and finance within one utility, we are able to point to and review specific interventions and their impact. While these can be replicated elsewhere, there are wider institutional choices, such as at the meso level in Ecuador, that can be adopted so that the amelioration of integrity risks is set within the nature of relations and can have a broader impact through widespread introduction. There are possible positive implications for integrity risks within new institutional relations set out to improve delivery. Finally, at the macro level in Brazil, with significance implications for integrity, are how governments can make radical legislative and policy choices and take steps to implement them.

The **Peru** case focuses on a local activity: the free distribution of drinking water by tanker trucks, managed by the state-owned company Lima Potable Water and Sanitation Service (SEDAPAL, by its acronyms in Spanish) to informal settlements in metropolitan Lima. It shows how innovative controls can prevent corruption.

The **Ecuador** case study focuses on water and sanitation services (WSS) provided by community organisations and their relationship with municipalities. It looks at how this institutional form can ensure that limited funds assist effectively with rural service delivery.

The **Brazil** case focuses on the regulatory and institutional changes brought about by the new Sanitation Law (2020), with special interest in the growing role of the private sector that it promotes. This case illustrates how choices made to attract finance and improve delivery offer promise, and how a strong system of regulation needs to be implemented as part of that change.

TABLE 3: INTEGRITY RISKS AND IMPACTS AT DIFFERENT LEVELS: MICRO, MESO, MACRO

Peru	Improving integrity of free drinking water distribution by tanker trucks in informal settlements in Lima.	Level: service provider	micro
Ecuador	Lessons on integrity from municipal-community alliances in the water and sanitation sector in Ecuador.	Level: institutional-organisational	meso
Brazil	Integrity risks in the growing role of private companies in water and sanitation services.	Level: legal/political framework	macro

Source: Elaborated by the author.

Case studies were conducted by local researchers in each country, with experience and expertise in working on these issues. Between 2023 and 2024, these researchers sought to answer case specific research questions (Annexure 3) that together supported the wider enquiry of this report. The findings are based on a review of country specific primary and secondary documents as well as key informant interviews with officials involved and individuals familiar with each case study. Informed consent was gained from all interviewees and proper procedures in protecting anonymity were adhered to (Annexure 5). Analysis was led by the senior researcher based in Peru, through active engagement with local researcher on their findings.

The case studies that follow provide country background to challenges of financing water and sanitation; research findings; and case-specific conclusions and recommendations. They are followed by aggregate and higher-level conclusions and recommendations for WIGO LA as a whole.

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3.2 Peru: improving integrity in free drinking water distribution in informal settlements in Lima

This case study shows how the Peruvian state made financial resources available to subsidise water delivery in informal settlements (referred to as human settlements in Peru), starting during the COVID-19 quarantine, which undoubtedly benefited inhabitants, but at the same time opened new spaces for corrupt practices and integrity failures, affecting people in need as well as the proper use of public finance. It also shows how SEDAPAL implemented control measures to overcome these problems.

In Peru, the COVID-19 pandemic highlighted the precariousness and inequality that exists not only in terms of health, but also in economic, social, nutritional status, and specifically in access to basic services (IDB, 2022a). While the Peruvian government publicly communicated the World Health Organisation's recommendation (WHO, 2020) on the need to wash hands to avoid contracting the virus, approximately 10% of the country's population had difficulty applying it without a connection to the drinking water network (SUNASS, 2023b).

To address this, the Peruvian government instituted a series of direct transfers of resources to the population and public financing measures, including the free distribution of drinking water by tanker trucks in informal settlements. According to the Ministry of Housing, Construction and Sanitation (MVCS), in 2020 the free distribution of drinking water through tanker trucks made it possible to serve 1.8 million people, of which 1.3 million were served by the Lima Water and Sanitation Service (SEDAPAL) in Lima and Callao (El Peruano, 2021b).

The Ministry of Economy and Finance (MEF) transferred large sums of money so that water and sanitation service providers could urgently hire private water tankers. A few months after this measure was initiated, the first cases of malpractice became evident, as SEDAPAL detected the diversion of trucks to sell water to restaurants, construction sites, recreational facilities and country clubs for filling swimming pools, among other private buyers. In response SEDAPAL introduced a series of control measures to monitor and ensure the correct distribution of free water by tanker trucks in informal settlements, ensuring that the public resources made available by the Peruvian State were used appropriately. This is particularly important as the free water services continue to September 2024.

This case study seeks to answer the question: what control measures did SEDAPAL implement and what was their impact on the free distribution of drinking water by tanker trucks in informal settlements in Lima to address the integrity failures detected? It begins by reviewing the context, then sets out developments with free water in Lima, and finally, it considers this case in terms of the three pathways proposed to improve integrity in WSS: no reason, no room and no reprieve.

3.2.1 Context: access to water and sanitation in Lima

Peru is among the top 20 countries with the highest amount of renewable water resources per capita (Burgueño Salas, 2023). However, the availability of freshwater is unevenly distributed due to geographical and climatic characteristics; only 1.8% is available in the Peruvian coastal areas (ANA, 2013), where the city of Lima is located. Lima is home to more than 10 million inhabitants -- one third of the country's total population (INEI, 2023). Supplying

water to the inhabitants of Lima is a continuous challenge in the context of the local water scarcity.

SEDAPAL is one of the 50 urban water and sanitation service providers operating in Peru, and its main objective is to provide drinking water, sanitation, wastewater treatment, and reuse services to the 43 districts of Lima city and the seven districts of the Constitutional Province of Callao, which together form the metropolitan area of Lima. SEDAPAL is a state-owned company attached to the MVCS and is regulated by the National Superintendency of Sanitation Services - SUNASS (SEDAPAL, 2021). SEDAPAL's operating revenues come mainly from the provision of drinking WSS by network (87.6%), totalling approximately USD 750 million in 2022.

Although SEDAPAL has 93% coverage in access to water and 90% coverage for sanitation (SUNASS, 2020), many residents of Lima are not connected to water and sanitation networks, especially those living in informal settlements. Informal settlements in Lima emerged mainly since the 1950´s and became the rule for the expansion of the city under the motto: first occupy a piece of land, apply to the Peruvian State for its regularisation through proof of possession, and finally apply for access to basic services. The rapid growth of informal settlements in peri-urban and difficult accessible areas, in addition to the lack of coordination between key entities for urban planning, mean that SEDAPAL has been unable to expand its networks at the rate of growth of informal settlements (IDB, 2022a).

Water is delivered to residents of informal settlements through public pylons, (standpipes) which requires expanding networks to new water points, or through tanker trucks. Tanker trucks, which are a more immediate and less costly means (in the short term) of expanding service coverage, particularly distant areas, are most widely used.

SEDAPAL do not control prices or subsidize costs and is not involved in tanker service provision. Distribution of water by tanker is subject to the market in which each truck driver set the price according to supply and demand, taking into account -for example- the costs of fuel consumption, the distance of the delivery route, the difficulties of road access and the time invested. A SEDAPAL official said that even before the pandemic, SEDAPAL held a registry of private tanker trucks. Tickets were sold at a social rate to fill these vehicles at one of the 22 SEDAPAL water points located at various spots throughout the capital city. SEDAPAL's only role is to sell water to the truckers and to maintain the quality of the drinking water for human consumption. Once filled, each truck establishes its own route, frequency and the selling price to the end user. A survey by SUNASS (2015) found that households in Lima supplied by private water tankers paid around USD 5 per cubic metre of drinking water, up to six times more than a home connected to the grid.

3.2.2 Free water supply in informal settlements

People whose income came mainly from informal economic activities saw their livelihoods severely affected by the COVID-19 quarantine set in March 2020. The government issued a series of emergency decrees and economic subsidies to enable compliance with the restrictions and sanitary measures dictated (IDB, 2022a), one of them being the free distribution of drinking water by tanker trucks in informal settlements. With the emergency decrees approved by the President in response to the extraordinary and unforeseeable situations direct contracting, without public bidding, was allowed to shorten the procurement processes for goods and services. Emergency regulations like this can create greater space and "reason" for integrity failures.

To implement the free water supply through tanker trucks, the MEF made money available to water and sanitation service providers. Money was transferred by the MEF to the MVCS, which in turn transferred it to the state-owned company SEDAPAL, with return of unexecuted balances to that Ministry. The table below sets out the amounts of money that SEDAPAL received in 2022 and 2023 to provide free water to informal settlements.

TABLE 4. AMOUNTS RECEIVED AND EXECUTED BY SEDAPAL FOR THE SERVICE OF FREE DISTRIBUTION OF DRINKING WATER BY TANKER TRUCKS IN INFORMAL SETTLEMENTS IN LIMA, YEARS 2022 AND 2023 (EQUIVALENTS IN MILLIONS OF USD, APPROX.)

Year	Amount received	Amount executed	Amount returned to the MVCS	Cubic metres of water registered
2022	USD 33 million (approx.)	USD 27 million (approx.)	USD 6 millon (approx.)	5,3 millon m3
2023	USD 30 million (approx.)	USD 19 million (approx.)	USD 11 millon (approx.)	4,7 millon m3

Source: SEDAPAL, 2024a.

The table shows that in two consecutive years SEDAPAL spent less than the amount transferred by the MEF through the MVCS. There may be multiple reasons for that.

It is not unusual for Peruvian public entities to underspend the budget allocated to them. While this does not necessarily relate to integrity failures, it is relevant to PFM and mismanagement. There may be over-projection, deficient management of contracting by state entities and finally, contracting processes not concluded due to contractual incompliance or bad practices (Videnza, 2023). Once the injection of resources had taken place and after having carried out the respective market inquiries, SEDAPAL executed direct contracting, exempt from the regular public bidding process due to the sanitary emergency, to hire tanker trucks from the private sector. Approximately 350 trucks were assigned to the 25 drinking water supply points in Lima and Callao, to serve about 2.500 informal settlements in 28 districts (El Peruano, 2021).

In order to achieve the free distribution of water in informal settlements, it was necessary to coordinate and sign agreements with the district municipalities of the city of Lima about where the service would be provided, with the aim of being able to measure the real demand for the resource, establish specific areas and detailed distribution schedules. In contrast to SEDAPAL, which has information mainly on its water and sanitation networks, the municipalities have a more precise cadastre that includes areas

that are not connected to basic services. A first difficulty for the free distribution of drinking water was the coordination with the municipalities, since in some cases these tried to prioritise certain areas for their (personal) interests by intervening in the distribution, despite the fact that SEDAPAL was the entity in charge of the organisation and management of free water distribution.

From the beginning of the free distribution, SEDAPAL established lists and/or registers that the beneficiaries had to sign as proof of each distribution, as a control measure to ensure that the water reached all the people identified as legitimate recipients of the service. The registers had to be signed by the municipality as well, guaranteeing the veracity of their content. These documents were subjected to random checks by SEDAPAL in order to verify the information and the proper provision of the service. One of the difficulties in carrying out these verification controls was that the beneficiary signing per household was not always the same person, generating difficulties in comparing the information (SEDAPAL, 2024c).

As of 2021, almost a year after the start of the free water distribution and as a result of individual complaints, mainly from residents of informal settlements, and random checks carried out by SEDAPAL, it was identified that the delivery of water was not reaching all beneficiaries, nor was it always free of charge (among others things, because drivers continued to ask for payments). A certain portion of the water was being sold to restaurants, private schools and universities, companies and civil construction sites, private swimming pools, and other agents and establishments outside the social distribution programme. In some cases, these integrity failures were committed directly by the tanker trucks drivers and their assistants. In other cases, municipal officials, instead of supervising the correct distribution, falsified the signatures of beneficiaries and allowed the water deliveries to go to private establishments; in other words, they colluded with these corrupt practices, despite their role as public servants. This fraud meant a double profit for the truck drivers, since they were paid by SEDAPAL them for the delivery of the water, while also being paid by the individuals and enterprises to whom they were selling the water.

Another issue was how tanker truck drivers declared the capacity of their trucks to SEDAPAL. The payment was directly related to the volume of water transported. After a control action carried out by SEDAPAL, it was found that many of the owners declared and received money for a larger tank capacity than the truck actually had. In the case of the tanker truck service to informal settlements in two municipal districts of Lima, between March 2020 and July 2021, the tanker truck service was contracted for an amount of 31 million soles (equivalent to approx. 8.2 million USD) for the delivery of 1,771,770 m3 of water. However, as a result of random control actions, 123 cases of tanker trucks were identified that showed a difference between the real water payload and the load valued and paid by SEDAPAL, resulting in an over-payment of 7 million soles (approx. USD 1.8 million). This refers to random detections in only two districts, so it can be assumed that the losses due to overvaluation were actually much higher for the total fleet of tankers. This fraud was possible because the owners of tanker trucks colluded with the employees of an electronic weighing scale company that issued adulterated certificates regarding the net capacity of the trucks.

3.2.3 SEDAPAL's control measures on integrity failures

Having identified the integrity failures in the distribution of free water by tanker trucks, SEDAPAL's Regulatory Compliance and Institutional Integrity Team -within the implementation framework of ISO 37001:2016 standard: Anti-bribery Management System- proposed multiple actions to anticipate, detect and mitigate acts of fraud and corruption in the free distribution of drinking water in informal settlements. This SEDAPAL team played an important role in bringing about positive changes based on the integrity failures identified. However, in an ideal scenario, control

measures should be proposed before integrity failures occur, so that the "no room" strategy takes effect from the beginning. It is important to highlight that in Peru, the Office of the Comptroller General of the Republic is the entity responsible for overseeing how state institutions, including SEDAPAL, manage their funds. In relation to the free distribution of drinking water by tanker trucks, it is not known whether the Comptroller General's Office has carried out prior, concurrent or subsequent control actions within the framework of its functions. However, in other cases the Comptroller General of the Republic has issued reports auditing the use of resources and actions of SEDAPAL.

The first control measure implemented by SEDAPAL was to require the owners of tanker trucks to install geolocation devices (GPS) in their trucks, so that their route could be monitored in real time by SEDAPAL, and thus verify compliance with pre-established delivery routes. This measure was given force by the modification of the Contractual Terms of Reference, including the placement of these devices as a mandatory requirement. Although it was not possible to obtain direct information from companies that distribute water by tanker trucks regarding the cost of installing these GPS devices, referential data reviewed in the Peruvian market indicate an average cost of approx. USD 110 per device, depending on the model and network technology used.

Two additional technological measures were designed and implemented. The first was the creation of an online application called "Tancadas", which allows for the uploading of photographic images of the deliveries made at each point. This application was designed and managed by SEDAPAL's Information Technology Team. Secondly, massive use was made of WhatsApp as an internal communication tool, through which the different actors in the process, the truck drivers, their assistants and SEDAPAL supervisory personnel, coordinate and interact, thereby ensuring that the service is carried out in the manner and time as planned, overcoming operational problems and controlling the effective delivery of water.

As noted above, in some cases the carrying capacity of some tanker trucks did not match the cubic metres reported in their documentation to SEDAPAL. As part of the control actions arranged by SEDAPAL, all tanker trucks contracted to provide the service had to undergo a compulsory weighing process at a weighing station installed by SEDAPAL, to verify the real load capacity. This measure was a prerequisite to continue with the service and process future payments.

Finally, other control measures were carried out, such as random and unannounced inspections at water supply points to verify that water was delivered correctly and to registered trucks, as well as the establishment of clear contractual penalties for acts of

Photo: Marcela Lopez, 2024. Human settlement of San Juan de Lurigancho, Lima

fraud and breaches of integrity, including the eventual permanent withdrawal of any tanker truck involved in this type of dishonest behaviour by the truck driver or his company.

In sum, these measures ensured that households without connection to the drinking water network in informal settlements did not receive less free drinking water than stipulated, and that they were not obliged to buy water from other tankers at prices up to six times higher than the rate charged by SEDAPAL for water delivered through the network.

3.2.4 Analysis of control measures applied by SEDAPAL

The control measures implemented by SEDAPAL to ensure the correct distribution of free drinking water in informal settlements can be differentiated in two ways: on the one hand, those carried out directly by SEDAPAL, with its personnel, within the framework of pre-established functions and the existing institutional budget, and on the other hand, those referring to third parties, such as the case of the owners of tanker trucks and the implementation of GPS devices.

The General Manager of SEDAPAL between 2022 and 2023 noted that there was a lot of interest and willingness on the part of the entity's senior management to implement control measures for the correct distribution of free water by tanker trucks (Víctor Alarcón, 2023). In his opinion, the main challenges for the design and implementation of these measures were the coordination between the different teams and organisational units of SEDAPAL. SEDAPAL is organised by Service Managements that operate according to their location in the capital (north, south and centre), which are in charge of coordinating the distribution of water in informal settlements by zones. At the same time there are transversal support management units with which they had to coordinate, such as the Finance, Information Technology and Supply Managements (in charge of contracting processes). In addition, SEDAPAL had to co-ordinate with the municipalities and with workers at the water supply points throughout the city.

The cost of implementing the GPS devices, was assumed by the owners of the tanker trucks. This meant that SEDAPAL did not bear the cost of the control measure, but benefited by ensuring that the service of free water delivery to informal settlements was provided without major financial losses. The installation of the GPS indirectly benefited the contractors since they could ensure that their workers were complying with the agreed service standards, thus avoiding penalties, higher transaction costs and a possible negative reputational impact. According to SEDAPAL, since the introduction of the GPS monitoring system, no diversion of tanker trucks has been reported, which has a positive impact on both the delivery of water resources to beneficiaries and the use of financial resources (SEDAPAL, 2024b).

However, a resident from an informal settlement pointed out that according to the contracted capacity and established routes, each household obtains free water from the tankers approximately every 15 days (Resident of the informal settlement "Ciudad Pyme" (District Ancón), 2024). This is insufficient, especially for large families. For this reason, many residents have to buy additional water from other private suppliers who operate independently of SEDAPAL, at a price of around USD 5 per cubic metre.

Another informal settlement resident reported that there was a time during the pandemic in which the water was effectively distributed free of charge, but later cases have been identified in which water truck drivers colluded with leaders of informal settlements to request payment from residents to cover certain operating costs (Resident of the informal settlement "Laderas del Mirador", 2023).

2.2.5 Conclusions an

d recommendations

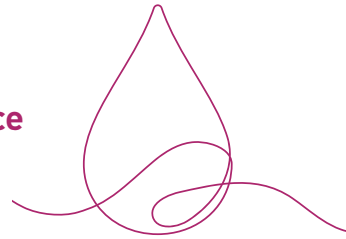
In the distribution of free water in informal settlements in Lima by tanker trucks, established within the framework of emergency measures in the context of the COVID-19 pandemic, the following integrity failures were identified:

- Route diversion of tanker trucks, to sell the ¨free water" to companies, commercial establishments, private swimming pools owners, etc.
- Signature falsification in compliance forms while registering delivery of drinking water.
- Falsified weighing to over-claim the loading capacity of trucks to charge for more water than is actually delivered and.
- Illegal charging of residents for "free water" by certain settlement leaders.

To ensure the free and full delivery of the contracted tanker volumes, SEDAPAL implemented the following control measures:

- Contractually require truck owners to place GPS equipment in each unit used for free delivery, in order to be able to monitor the distribution route in real time.
- Carry out supervised weighing to verify the actual water carrying capacity of the trucks.
- Design, implement and standardise the active use of a specific application (called "Tancadas") on the mobile phones of tanker drivers to facilitate timely communications and coordination with other actors and controllers involved in the system.
- Conduct random checks and spot checks at water tanker loading points.

The above shows the importance of addressing control and management improvement measures in a comprehensive manner, considering the entire service delivery chain, since control gaps in one or more aspects of the process increase the risk of integrity failures.



Five recommendations arise from this case. The first recommendation is the most evident. Where (free) water delivery by trucks is used, it is recommended to put in place controls measures such as those adopted by SEDAPAL. Where appropriate, this can be developed into a comprehensive monitoring system run by a specialised team. It would undertake "in the field" data collection, analysis, processing and reporting relevant information as well as other oversight measures. This would enable them to quantify (population) coverage, costs and impacts, detect inefficiencies and misconduct, and improve the integrity practices around this activity. Utilities should take

advantage of new technologies, data sources and digital tools, since as proven in this case study, they help to reduce integrity failures and improve the effective use of limited financial resources.

Second, utilities should analyse integrity risks in advance and increase their monitoring of potentially risky transactions, particularly in the case of emergency water distribution. This may include the types of approaches that were successful in this case, as well as establishing a resources integrity team within the utility to support their implementation. Utilities should also establish standards to verify reliable suppliers as well as developing a "blacklist" of non-compliant suppliers.

Third, coordinated actions and collaboration between different units within a utility, as well as outside, is important. In SEDAPAL this was possible when the regulatory compliance and institutional integrity team plays a prominent role and when its institutional policy approach is used. In terms of the later, SEDAPAL's control actions are carried out at different levels, places and times, responding to an institutional policy based on transversal integrity approach, with coordinated actions between the different management units and teams, including unannounced control actions during the delivery of water "in the field". Expanding coordination outside the utilities should also be undertaken, in this case with the Comptroller General of the Republic, with regard to both current and new measures.

Fourth, it is recommended to make financing more transparent in relation to the public services provided by utilities and how the utility seeks to improve its (financial) efficiency, especially in emergency contexts where conventional bidding processes are not used and therefore are more susceptible to integrity failures. In this case the fraudulent actions of the tanker owners did not directly affect SEDAPAL's budget, since the financial resources were provided by the MEF for this purpose. However, the effective use of scarce public financial resources was directly impacted on, and the residents of informal settlements were forced to purchase more water from private suppliers. The cost of implementing the above measures to prevent corruption can also be significant.

Finally, this case study demonstrates that technical solutions, while critical, can only go so far if the underlying norms justifying corruption have not been addressed. This is a long term project that requires campaigns to change the norms that enable corruption and fraud, not only for utility staff but also for contractors, tanker drivers, municipality staff, informal settlements leaders and the population in general. This may include the recognition of integrity champions.

3.3 Ecuador: lessons on integrity from public-community alliances in the water and sanitation sector

Ecuador's 2022 Census revealed that 82.4% of the population had access to drinking water through the public network and 65.8% to sanitation through the sewerage public network. Water access figures, which show significant disparities between urban and rural areas (93.9% and 66.9%, respectively), underline the need to take decisive steps towards guaranteeing the human right to water according to Ecuador's 2008 Constitution and the 2010 United Nations declaration (United Nations General Assembly, 2010). This situation has profound implications for the health of individuals and ecosystems. Waterborne diseases remain a significant public health problem in Ecuador, with 15.4% of its urban and 31.8% of its rural population consuming water contaminated with faecal coliforms (Larrea & Greene, 2018; Ortiz-Prado et al., 2022). Heavy metals are affecting ecosystems due to industrial discharges into water bodies (Vinueza et al., 2021). Effective and ethical financial management is crucial to close the gaps in service coverage and quality. However, available resources are not always used effectively or efficiently.

This case study examines the progress, impacts and main obstacles in promoting integrity in the provision of drinking water and sanitation services (WSS) by municipalities and in alliance with community water and sanitation organisations (OCSAS, by its acronym in Spanish) since 2019. The first part addresses the situation and trends in financing in Ecuador's water and sanitation sector. The second part gives an overview of the main risks and integrity failures in WSS in Ecuador. Then, the case study deals with the central issue: the progress and difficulties in promoting integrity in the water and sanitation sector through public-community alliances

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3.3.1 Context

The legal framework for WSS in Ecuador decentralizes service provision to municipalities and community organisations, retaining policy and regulatory responsibilities at the national level. In 1992, the Decentralisation Law was enacted, assigning responsibility for service provision to the country's 221 municipalities covering urban and rural areas; this is under the supervision of the Ministry of Urban Development and Housing, which merged with the Instituto Ecuatoriano de Obras Sanitarias. For the most part, municipalities were not prepared to assume this responsibility (Rojas Ortuste, 2014). In rural areas, despite the responsibility resting with municipalities, services are, in effect, provided by community organisations, resulting from an approach that favoured urban growth to the detriment of rural populations (Ramos, 2017).

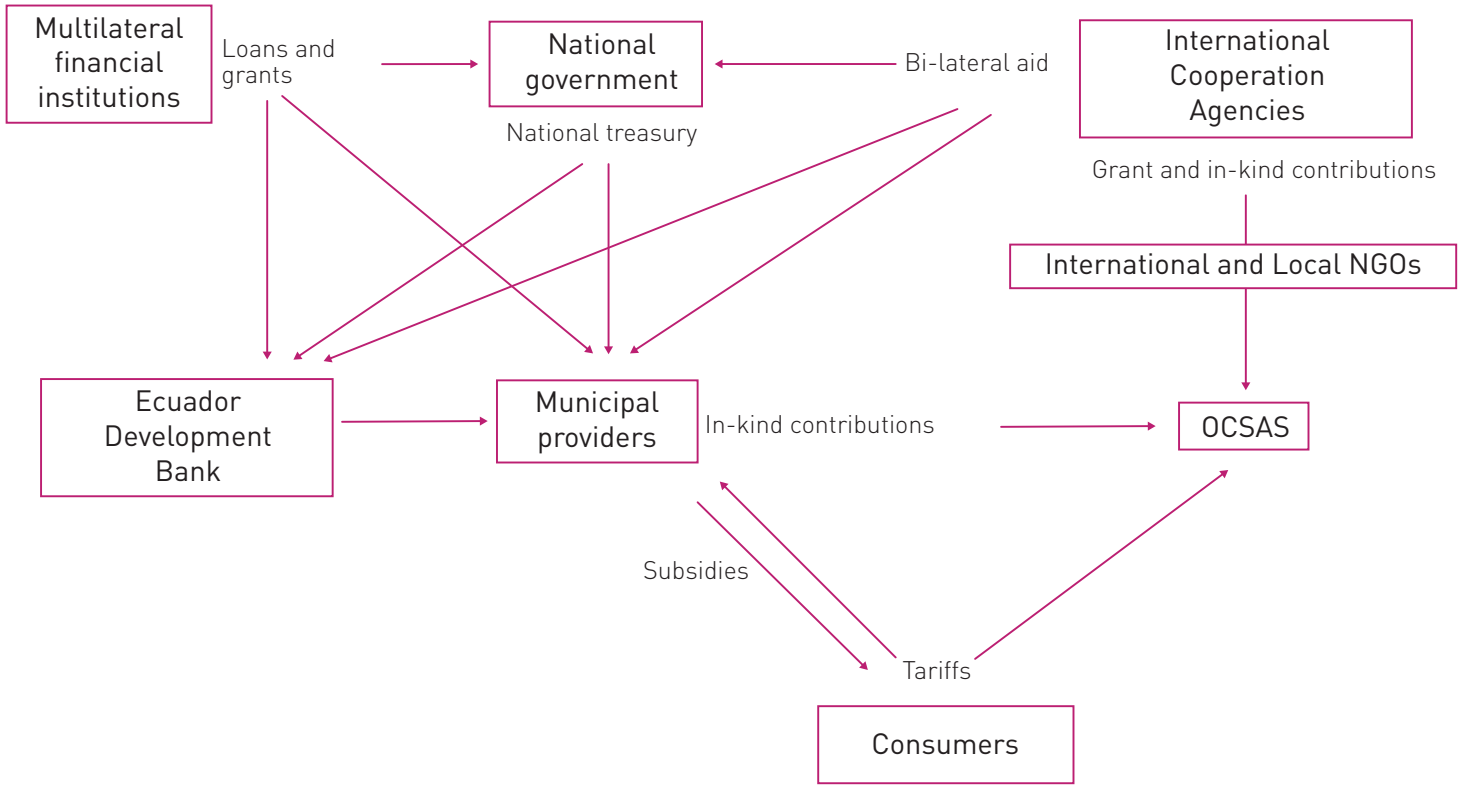
Since 2008, the National Water Secretariat (SENAGUA) has served as the National Water Authority, overseeing water resources and directing their management through policies, regulations, control and decentralised management. The Water Regulation and Control Agency (ARCA), established in 2014 as an entity attached to SENAGUA, exercises oversight of drinking WSS, including OCSAS. In 2020, SENAGUA merged with the Ministry of Environment to form the Ministry of Environment and Water, to which ARCA was attached with all its competences and powers. Since 2021, the Ministry of Environment and Water is known as the Ministry of Environment, Water and Ecological Transition, assuming, amongst other things, the constitutionally mandated functions of the National Water Authority.

The 2008 Constitution established that the State is in charge of strengthening the management and operations of community initiatives related to water management and the provision of public services by enhancing public-community alliances. According to the Water Law (2014), it was the responsibility of the National Water Authority, within a period of up to two years, to inventory

water and sewerage boards and irrigation boards to assess their technical and financial performance and compliance with the services provided to their users. This information would be used to design public programs to strengthen OCSAS. However, in the National Water Quality Strategy 2016-2030 (Ministry of Environment of Ecuador, 2016) it was recognised that SENAGUA did not accomplish this task. To date, the inventory has not yet been carried out, but it is estimated that Ecuador has approximately 7,000 rural water systems.

The relationship between OCSASs and municipalities in Ecuador has been marked by both collaboration and conflict. As urban

FIGURE 4. FINANCE FLOWS IN ECUADOR'S WATER AND SANITATION SECTOR



Source: Elaborated by the author.

areas expand, the service areas of municipalities or their public companies often overlap with those served by OCSAS (Cisneros, 2019). Managing this growing complexity requires collaborative efforts to sustain and improve service delivery systems in urban and rural areas.

3.3.2 Financing the water and sanitation sector

WSS in urban areas in Ecuador are provided through three management models: (i) directly by municipal governments, (ii) through municipal companies (which can be formed by two or more municipal governments in the form of a "mancomunidad") and (iii) by private providers (used in only one city, Guayaquil). In December 2021, the National Institute of Statistics and Census reported that 26% of the country's 221 municipalities were using the municipal company model in 2020. Only 72.4% of the municipalities provide water services in rural areas (INEC, 2016). 90% of the municipalities have drinking water treatment plants, while only 74% have wastewater treatment plants, which treat approximately 24% of the total water distributed, and only 48.9% of the municipalities have differentiated sewerage systems (specialized wastewater management systems that separate domestic wastewater from stormwater runoff for more effective treatment and disposal).

As Figure 4 shows, finance for the operation, maintenance and expansion of water supply and sanitation systems depends on the collection of tariffs, taxes and external resources that come in various forms: bilateral and multilateral aid, grants and donations. Currently, there are no official public figures on the precise breakdown of finances for the water and sanitation sector. However, although service provision is one of the most significant items in municipal budgets, it is estimated that they invoice only 44.7% of the distributed volume (INEC, 2021b). This drives the significant dependence of municipalities on financial transfers from national government (Dávila et al., 2018) and reduces the availability of finances to maintain and expand existing systems.

Most of the funds used to expand or improve water and sanitation systems are distributed to the municipalities from the national government, the Development Bank of Ecuador (BDE is the acronym in Spanish) or multilateral financial institutions. The rest of the investments and operating expenses are covered mainly by national subsidies, some of which are also covered by the BDE and the municipalities. Between 2007 and 2015, the BDE approved finance for a total of USD 4,845 million and disbursed USD 4,086 million, with water and sanitation projects accounting for 48% and 30%, respectively (Nieto Jara, 2017).

Between 2007 and 2015, the amounts allocated by BDE for water and sanitation through subsidies (non-repayable financial assistance) were higher than those allocated through loans (larger sums of money that must be repaid). This distribution is partly due to the low capacity of small municipalities to develop technical proposals to access resources and low billing of water users, as mentioned above. Tariffs also do not cover service costs, and some subsidies are not well targeted (Martínez Moscoso, 2015), resulting in many municipal utilities providing WSS not being financially sustainable.

According to the BDE's Strategic Plan 2020-2025, there are plans to double funding for drinking water and sanitation at the level of municipalities, their public enterprises, and joint ventures. However, due to the reduction in public spending resulting from the COVID-19 pandemic, investments in the water and sanitation sector did not increase at the same rate as the demand for water

services. As a result, households with access to the public water network fluctuated from 79.6% in 2018, 80.7% in 2019 and 79.4% in 2021 (INEC, 2021a).

Currently, the BDE's programmes related to water and sanitation provision receive funding from, respectively, the Inter-American Development Bank (IDB), the Development Bank of Latin America (CAF), the French Development Agency, the European Investment Bank and the Ministry of Finance. The BDE also provides finance using its own resources.

Following guidelines issued by the National Planning Secretariat for municipal autonomous governments to prioritise public investment in drinking water and sanitation, the BDE negotiated several credit lines to meet the objectives set by the government. According to the BDE, the government allocated USD 725 million to municipalities for water and sanitation projects between 2021 and 2023. In addition, in January 2022, the BDE secured a EUR 100 million loan from the European Investment Bank to improve water supply and sanitation systems in various regions of the country, with the objective of reaching 500,000 beneficiaries. In October 2023, the IDB approved a USD 120 million investment loan for water and sanitation and solid waste management that aims to reach 340,000 beneficiaries.

In rural areas, OCSAS are the main model through which communities ensure water services. They provide services following the logic and procedures of community-based organisations and sector-specific regulations for their management area. The OCSAS receive most of their funds from the tariffs they charge directly to their users. Occasionally, they receive additional resources channelled through grants and in-kind contributions from international cooperation agencies or municipalities (See Figure 4).

Most OCSAS only provide drinking water services, while individual solutions such as septic tanks and latrines are predominantly used for sanitation (Rojas Ortuste, 2014). However, as of Ministerial Agreement 2015-1136, OCSAS will progressively provide drinking water and assume responsibility for sanitation in areas where municipalities do not provide the service. This situation challenges community systems as they lack mechanisms to access financial resources. The National Water and Sanitation Strategy, published by SENAGUA in 2016, indicates that, as non-public legal entities, OCSAS cannot manage public funds or, in the hypothetical case of having credit capacity, access loans from the BDE. Thus, the regulatory framework creates incentives to maintain informality in OCSAS and hinders their interaction with municipalities because informality discourages the state from supporting OCSAS.

3.3.3 Integrity risks and failures in state entities

Public procurement by all levels of government and state-owned companies is regulated by the Organic Law of the National Public Procurement System and is carried out through the National Public Procurement Service (SERCOP). The Comptroller General of the State (CGE) is the autonomous entity responsible for overseeing the use of public funds and private entities that use public funds.

According to the Sixth Public Control Report, the CGE identified several problems in contracts for water and sanitation projects executed by 32 public entities between 2011 and 2021. These entities include SERCOP, the former National Water Secretariat SENAGUA and the public company Ecuador Estratégico, at the national level. Deficiencies were also found in municipalities, municipal public water companies and municipal water companies owned by commonwealths (CGE, 2022).

The CGE found indications of civil and criminal liability for the misuse of public resources, mainly due to non-compliance by builders and inspectors with contractual terms, such as deadlines and technical specifications. This resulted in

unjustified delays in starting operations and infrastructure failures. The CGE reports also revealed errors in the transfer and recovery of funds, as advances were transferred in amounts exceeding legal limits, and contractual clauses on amortisation were not observed. In addition, the reports showed payments without supporting documentation for work performed, double disbursements or payments for equipment and accessories that were not used. The Comptroller's Office also found the absence of studies, plans and designs for some adjudicated projects.

While the CGE report does not precisely identify the source of these failures to determine whether they were due to unintentional errors, incompetence, fraud, collusion or corruption, the findings validate what users of the SERCOP and civil society organisations (CSOs) have been pointing out for years. In large part, these problems are either intentionally created by procurement officials to solicit bribes and facilitate payments to contractors or result from collusion between the two parties. Since municipalities are the largest recipients and users of public funds for WSS, it can be assumed that significant integrity risks in the WSS sector are concentrated at this level of government.

Efforts to mitigate identified risks, such as proactively publishing real-time contract data on an open portal and providing training for SERCOP users, may generate significant improvements in the long term, but the "disorganisation" in investment decisions stemming from the absence of municipal water and sanitation plans also needs to be addressed (Interviewee no 4, 15-02-2024). The lack of medium and long-term strategic planning, coupled with inadequate monitoring and evaluation of project planning and cost projections, increases the discretion of officials, and consequently increases the risks of breaches of integrity, including favouritism in project prioritisation, corruption and political patronage.

The lack of strategic plans for water and sanitation in most municipalities responds to the convergence of two elements. On the one hand, the low operational capacity and lack of resources of municipalities, especially the small ones that constitute the majority in Ecuador, limit the development of these plans. On the other hand, this lack of plans creates opportunities to maintain a high level of discretion in public procurement processes and contracts declared as emergencies – thus opening the door to corruption.

Moreover, where such municipal plans exist, OCSAS are rarely involved in the planning processes and inappropriate technological solutions are often proposed for rural areas, making it difficult for municipal companies to access financing from national and multilateral lending institutions, as this increases per capita costs and reduces economic returns (SENAGUA, 2016). Inadequate solutions stem, amongst other things, from a lack of knowledge of technological alternatives, such as nature-based solutions, and regulations designed for urban areas that encourage the use of specific technologies. It should be noted that over-dimensioned systems are also a red flag for corruption.

An essential but still marginal aspect of promoting integrity in WSS is the ISO 37001:2016 anti-bribery standard adopted by the BDE. The BDE received the Anti-Bribery Management System certification in September 2020. In 2019, the BDE signed an agreement with the Association of Municipalities of Ecuador to adopt this certification. However, to date, there has been little progress. EPMAPS, the municipal utility of the capital city of Quito, received its certification in 2022. ETAPA EP, the municipal company of the city of Cuenca, started the process in the same year and established an anti-bribery system in 2023 but has not yet received certification. In Guayaquil, Interagua Ecuador and Veolia Ecuador are in the process of achieving certification.

Given the recentness of the above initiatives, as well as high turnover of staff in the sector, the effects of these measures taken to reduce integrity risks in water and sanitation finance still need to be studied (Interviewee No. 6, 2024). Only companies in larger cities have been proactive in seeking certification. However, its adoption is expected to improve existing corruption control mechanisms in public entities at the municipal level, as they complement the efforts made by SERCOP (Interviewee No. 7, 2024).

3.3.4 Risks and integrity failures in community providers

Integrity risks and failures related to WSS provided by community-based organisations are linked to the availability, use and management of financial resources contributed by their members and received from customers as payment for their services.

The first aspect to consider regarding OCSAS is that not all of them are established as legal entities. Many operate as de facto organisations, and this informality limits their accountability to enforcement entities and sometimes also to their customers (Interviewee No. 1, 2024). Informality also creates conditions for non-compliance with labour rights and a lack of transparency in the use of resources collected by community system administrators (SENAGUA, 2016), which are often used for projects unrelated to the operation of the systems (e.g., sports fields), reinforcing local clientelist structures.

Administrators of community systems are typically reluctant to formalise their structures and to provide information on their operations to the regulator and municipalities. This is due to the costs of formalization, a lack of comprehensive understanding of the role of regulation as a first step to strengthen management and because of a distrust of municipalities, which are perceived as competitors in service provision. In addition, customers in rural areas fear that municipalities will increase tariffs if they take over service provision (Interviewee No. 2, 2024).

According to ARCA, most community providers face difficulties in setting tariffs that cover the costs of the service (ARCA, 2022). In some cases, this is related to the low number of customers (between 10 and 30), which makes it impossible to achieve economies of scale. However, even community providers with more customers (between 5 and 6 thousand) struggle to determine tariffs that allow them to provide WSS. Poverty and low incomes in rural areas drastically influence this outcome. In 2022, income poverty and extreme poverty reached 42.2% and 23.7% in rural areas, respectively (INEC, 2021a). As decisions on tariffs in community systems are made by voting in assemblies, tariffs are kept low (Interviewee No. 2, 2024).

While some tariff schemes consider administrative, operational and maintenance costs, they do not incorporate the investment needs required to expand coverage, improve quality and ensure continuity of service. Administrators often seek support from municipalities to address these deficiencies. The political and regulatory contexts in which community systems operate influence these decisions.

From a political point of view, it is common throughout the country for people who have assumed some administrative or managerial role in a community system to move into political careers. These administrators cultivate connections with politicians, local governments and various stakeholders throughout their tenure. They also gain direct insight into the challenges of local populations while establishing trust within communities (Vásconez-Gavilanes, 2018). Some interviewees alleged that some managers often allocate water and sanitation system resources received from municipalities to projects unrelated to system operations, but beneficial to strengthening their political ambitions.

Moreover, existing regulations exacerbate this problem. Both members and users of community systems contribute financially and non-financially, mainly through labour (Cañizares et al., 2017). However, non-monetary contributions are not reported to regulators as part of water provision efforts in community systems. Consequently, this configuration deters community systems from increasing tariffs, as they perceive that system operation is more conveniently covered through non-monetary contributions (Interviewee No. 3, 2024; Interviewee No. 8, 2024).

Another element that represents a risk in the services provided by OCSAS is the lack of macro and micro metering (Martínez Moscoso, 2015), which allows administrators to measure the volume entering the community system and the volume consumed by each user, respectively. Among users and members of community systems, there is still resistance to the installation of this type of technology, which could serve as a basis for improving the financial performance of community systems. This reluctance is due to the fear of higher payments, as users commonly use water not only for human consumption, but also for irrigation of crops and commercial purposes (Interviewee No. 2, 2024).

3.3.5 Promoting integrity in collaborations between municipalities and community organisations.

According to the Organic Code of Territorial Organisation, Autonomies and Decentralisation, municipal governments can delegate the provision of WSS to community organisations or, in turn, establish public-community associations with OCSAS.

The most emblematic case in Ecuador of a public-community alliance is the "Centro de Apoyo a la Gestión Rural del Agua Potable" (CENAGRAP) in the canton Cañar. Since 2002, CENAGRAP has served as a co-management space for water supply services to rural populations in the canton. Its main objective is to provide support and advice to the OCSAS. The Centre is based on a public-community alliance between the Intercultural Decentralised Autonomous Government of the Cañar Canton and the OCSAS of the canton. A municipal ordinance approved in 2011 (Decentralised Autonomous Government of the Canton Cañar, 2011) formalised and regularised CENAGRAP's operation, covering 60% of its total budget. The budget is further financed by 22% monthly contributions from the OCSAS, 9% from the sale of laboratory materials and services, and 9% contributions from international cooperation agencies. The monthly contributions from the OCSAS are allocated to a solidarity fund created to financially support community systems (Fundación AVINA - CLOCSAS, 2017).

CENAGRAP has successfully strengthened the organisation and operational capacity of community systems, reduced the costs of materials and services such as chlorine and water quality testing, and promoted the protection of water catchment areas. Part of CENAGRAP's success lies in the sustained interest of the municipality of Cañar in the water and sanitation sector since

2009, achieved through interactions with indigenous communities and community systems through the development of participatory budgets and with the assistance of CENAGRAP. These budgets allow for better identification and prioritisation of water and sanitation investments and contribute to institutionalising accountability and transparency between the municipal government and rural communities (Interviewee No. 3, 2024).

However, this is a very particular experience in the Ecuadorian context. Several attempts to replicate CENAGRAP have failed, leading support organisations to promote multiple other forms of public-community partnerships (Interviewee No. 4, 2024). Public-community alliances in the rest of the country have been less institutionalised, corresponding to smaller initiatives and weaker support relationships from municipalities to OCSAS.

One of the factors that restrict sustained public-community partnerships is the limited operationalisation of the legal mandate for the state to support OCSAS. Although general mechanisms exist for local governments to invest in public infrastructure, until 2022, municipalities lacked specific legal incentives to invest in water and sanitation in coordination with OCSAS (Interviewee No. 5, 2024) In Cañar, this incentive was created through the political weight of community representatives in the municipality through elections.

Another factor is the need for human resources to implement this mandate. For example, in 2024 ARCA had only one specialised technician to strengthen the OCSAS. Recurrent budget cuts in the public sector threaten to further reduce operational capacity. In the case of CENAGRAP, sustained NGO support provided the technical expertise needed to build the partnership.

Another element that constrains the creation of municipal-community alliances relates to the commercial interest that certain municipalities and their companies have in expanding their customer base at the expense of OCSAS. This is particularly relevant for peri-urban areas where population density makes service delivery more viable. Falconí (2020) highlights how municipal officials exploit this interest by actively seeking the dissolution of specific OCSAS. They take advantage of contradictory mandates outlined in the Water Law: while one mandate prohibits the formation of OCSAS in areas served by municipalities, others encourage interactions. This inconsistency weakens relations between municipalities and OCSAS, in contrast to the mandate to provide technical support.

Finally, political incentives create a barrier, as rural areas tend to have a sparse and dispersed population, which is why this "electoral universe" tends to receive less political interest in allocating resources and strengthening OCSAS (Falconí, 2020).

Despite these limitations, there has been some progress in recent years. According to some interviewees, the recent regulatory development of ARCA has enabled progress in the formation of public-community partnerships and could contribute to improving the integrity of drinking WSS. Resolution No. 011-2022-DIR-ARCA of January 2022 requires municipalities to report on the status of water supply services in urban and rural areas, including information on monetary contributions made by users of community systems (in 2018, the Consejo Nacional de Competencias, the agency that supports capacity development in subnational governments, published a guide promoting coordination and transparency among municipalities, municipal associations and OCSAS).

The aforementioned resolution has encouraged municipalities to initiate more structured activities to support OCSAS, producing more detailed and reliable reports (Interviewee No. 1, 2024). As a complement, ARCA developed the "Guide for the Formation of Public-Community and Community-Community Partnerships", approved by Resolution ARCA- DE-008-2023 of June 2023 (ARCA, 2023). This guide includes several management models that contemplate, in addition to alliances between municipalities and community systems, the possibility for the latter to associate and thus achieve greater bargaining power with municipalities, save certain administrative and legal costs, and better coordinate the expansion of their systems and conservation activities.

3.3.6 Conclusions and recommendations

Progress in adopting measures that promote integrity in Ecuador's drinking water and sanitation sector has been slow and is far from meeting legal and social expectations. Multiple factors ranging from contradictory or underdeveloped legislation to institutional instability and clientelist structures contribute to this situation. In a context of growing concerns about corruption, several initiatives could contribute to reducing the space for integrity risks in the sector's finances. These include structural legislative and managerial initiatives for municipal operators and community water systems.

While not a silver bullet to address all integrity risks in water and sanitation finance at the municipal level, actions taken by SERCOP to promote transparency, accountability, participation, and combat corruption can reduce some of the risks associated with discretion in the management of information and public resources within municipal operators. Complemented by measures such as performance-based contracting to minimise water losses and management interventions through the adoption of ISO 370001, these initiatives could reduce the risk of corrupt practices in public procurement.

Integrity risks in community systems stem mainly from (i) the highly political nature of community organisations, and (ii) lack of awareness of regulations and insufficient technical capacities, which deepen clientelism and reduce transparency in financial management. Addressing these risks requires multi-sectoral policies that create conditions to increase incomes in rural areas, improve the availability of technologies other than costly centralised systems, and raising the educational level of the rural population. These changes could make integrity-focused solutions, such as building local capacity to adopt transparency, accountability, participation and anti-corruption measures, sustainable.

While the state is trying to improve transparency in resource management through regulations on reporting requirements for municipalities and strengthening the technical capacities of community providers, these initiatives need to be more extensive and receive more resources to expand coverage. In addition, clear guidance is needed for entities that support municipalities and community-based organisations, such as international aid agencies, to improve the impact of their interventions.

The alliances that emerge between municipalities and community organisations vary and pose challenges to the integrity of the WSS sector's finances. A key focus needs to be on dismantling clientelism between municipalities and community leaders by improving long-term planning and reinforcing prevention and control mechanisms exercised by competent entities. CENEGRAP's experience has been successful as an alliance between OCSAS and the municipality of Cañar, although the particular context of

its founding and functioning means that this model has not been able to be replicated in other parts of the country. However, it is considered necessary to continue exploring similar and alternative models, since the general approach is promising for reaching rural areas.

Regarding planning and accountability in community organisations, the assemblies held in them could generate more trust between the OCSAS and the municipalities; especially if this is accompanied by facilitation to reduce existing power asymmetries and information gaps. Community assemblies could complement constitutionally recognised forms of citizen participation operating at the municipal level, such as participatory budgeting and the "empty chair" (a seat or seats at City Council meetings reserved for representatives of community organisations or interest groups who are invited to participate in discussions and provide input on relevant issues), even though they generally pose significant entry barriers for citizens. Community assemblies provide a space for dialogue that, if used well, could build trust between water and sanitation service actors and based on this trust, develop strategic WSS plans that are tailored to the needs and capacities of community organisations.

These mechanisms should be complemented by capacity building measures for project design and facilitating participatory processes in small municipalities that often lack access to resources to finance WSS, yet have a large rural population to serve. Likewise, preventive and specialised control measures by the CGE on public procurement and budget execution processes in the water and sanitation sector could help to reduce integrity risks and failures. E-procurement and open data have shown considerable promise in other countries.

Finally, the current process of drafting a new water law in Ecuador provides an opportunity to promote integrity pacts in the water and sanitation sector. There is no shortage of organisations that can act as promoters or leaders ("champions") of such pacts. However, coalitions at the national level are still relatively weak and lack professional cadres and resources to launch and sustain campaigns towards the establishment of such compacts. The multidimensional nature of the causes behind the lack of integrity in the WSS sector certainly complicates this task. However, sustained social pressure can help institutionalise and accelerate the implementation of mechanisms to reduce integrity risks with regard to financial management and service delivery in the sector.

3.4 Brazil: integrity risks in the growing role of private companies in water and sanitation services

Brazil has experienced profound transformations in its water and sanitation sector in recent years. New legislation has facilitated greater involvement of private companies in the provision of these services. While there is potential for this transformation to improve services, it also leads to new corruption risks, especially in relation to overall deficiencies in Brazil's anti-corruption legislation, such as political financing rules and the absence of lobbying regulations.

Although there have been many corruption scandals in the water and sanitation sector in recent years, it seems that this concern needs to be given greater prominence. An example of this is the risk matrix for water and sanitation service contracts published by the National Water Agency (ANA) in Resolution No. 178 of 2024. The matrix lists foreseeable events that could impact the implementation of water and sanitation service contracts, with the objective of identifying possible risks, attributing them to the private company, the public administration or both, and designing measures to mitigate them. It refers to a delay or revocation of tariff revisions as a "political risk", but makes no mention of corruption or integrity risks. This shows that the risks associated with abuse of power have not been fully understood or recognised in the sector (WIN, 2021).

There are few studies that attempt to connect some of the underlying issues that increase corruption risks in Brazil with the dynamics of water and sanitation services (WSS) provision, particularly focused on finance. This case study focuses on the scope for corruption in new policy and institutional aspects, which set the parameters for the source and use of finances. It is structured in five sections: (i) a general presentation of the WSS in Brazil; (ii) a description of the legal framework, focusing on the scope for corruption under the new Sanitation Law; (iii) an analysis of the current institutional framework, detailing decentralisation processes, regulation and integrity risks; (iv) an analysis of integrity issues in private sector finance; and (v) a discussion of the role of water and sanitation policies and corruption risks.

3.4.1 Water and sanitation services in Brazil

Brazil still has significant challenges in achieving the 2030 Sustainable Development Goals related to water and sanitation. In 2022, 87.3 per cent of the population was using safely managed drinking water services, which is above the Latin American average (75.2 per cent). A substantially smaller proportion of the population (49.6 per cent) uses safely managed sanitation services. While the latter figure has improved somewhat since 2015 (43.9 per cent), it is still far from the universalisation target (CEPALSTAT, 2024). This improvement is also offset by an increase in the amount of untreated wastewater returned to the environment (4.86 million m^3) (GT Sociedade Civil 2030, 2023).

Among Brazil's 74 million households, 9 million do not have access to piped water and another 17 million receive insufficient or intermittent drinking water. 22 million households, 30 per cent, are not connected to the sanitation network. The North and Northeast states have the worst rates of WSS (Instituto Trata Brasil, 2023). The consequences of deficiencies in WSS are varied and disproportionately affect the poor and the Afro-descendant population. Among people without access to sanitation, 47 per cent are Afro-descendant or indigenous, almost double the proportion of white and Asian-Americans (29.7 per cent) (GT Sociedade Civil 2030, 2023).

The lack of adequate WSS has profound social, economic and environmental impacts. Between 2008 and 2019, approximately 11,000 people died each year in Brazil due to inadequate sanitation, equivalent to 1 per cent of all deaths in the period (Madeiro, 2021).

The government's ambitious goal is to achieve universal access to potable water by 2033, targeting 99% coverage, and it is seeking

USD 100 billion investment to overhaul the water and sewage infrastructure (Smart Water Magazine, 2024).

3.4.2 The scope for corruption under the Sanitation Law

In July 2020, a new Sanitation Law (Law No. 14.026) was enacted, which brought radical changes to the legal and institutional framework of both the water and sanitation sector in Brazil (despite its name, the law cover both). One of its main innovations was the extinction of the "programmatic contract" model. Under this model, municipalities, which are legally responsible for providing citizens with WSS, normally transferred to other public entities, mainly state-level public companies, the responsibility for providing these services (and charging users for them) without a bidding process. There were few requirements for these contracts and few targets for improving services or expanding coverage.

Under this previous legal framework, private companies were allowed to provide these services, but their participation was small, given the few incentives and substantial legal uncertainty. Between 2008 and 2017, their market share actually fell from covering 4.5 per cent of municipalities to 3.6 per cent, or 200 municipalities (Instituto Brasileiro de Geografia e Estatística, 2020).

The new legislation requires a tendering process for municipalities to delegate responsibility for providing these services to other public entities or private companies, which effectively reduces the level of discretion of local officials to decide how and by whom they are provided. The new Sanitation Law has also established specific targets for companies with current and future contracts. They must provide drinking water to 99 per cent of residents in the coverage area, as well as collect and treat 90 per cent of wastewater by the end of 2033. Additional targets related to uninterrupted supply of WSS, reduction of losses and improvements in wastewater treatment are also considered.

The role of private companies in the provision of WSS has grown significantly since the enactment of the 2020 Sanitation Law. This has occurred mainly in two ways: (i) municipalities and states have increasingly contracted the provision of these services to private companies, and (ii) state-owned water and sanitation utilities have been sold to private companies. In the first case, concessions can be decided based on three criteria: the best technical proposal (including the amount to be invested), the lowest tariff charged to consumers, or the highest payment to the government entity delegating the services (or a combination of these criteria). In the second case, the state-owned company, along with the right to provide WSS in a given region, is sold to the highest bidder. In both cases, requirements are set for the companies, including universalisation targets.

Between 2020 and 2022, 28 auctions were held in Brazil, as the new Law aims to close the gaps towards adequate provision of WSS with universal coverage, considering the limited investment capacities of local governments. The National Confederation of Industry estimated that Brazil needs to invest approximately USD 4 billion annually between 2018 and 2033 to reach the goal of universalisation of both drinking water supply and wastewater collection. This is more than double the amount invested in 2017 (Confederação Nacional da Indústria, 2019).

Currently, private companies provide drinking WSS to 15.3 percent of Brazil's municipalities (850 municipalities) and cover almost a quarter of the country's population (24.2 percent) (ABCON SINDCON, 2023). This proportion is expected to increase in the coming years as more auctions are announced and considering that several state-owned companies, especially in the northern region of the country, have failed to demonstrate - as required by the Sanitation Law - their capacity to effectively advance towards universalisation targets (Exame, 2022).

Civil society organisations have pointed to previous failed privatisation processes as a warning about their risks. For example, in Tocantins, the takeover of WSS did not lead to a

significant expansion of coverage. Elsewhere, it has been pointed out that - even after the privatisation of state-owned companies and the concession of WSS to private companies - public investments continue to be the main source of funding for expanding services in the poorest neighbourhoods (Instituto Mais Democracia, 2018).

3.4.3 Decentralisation, regulation and integrity risks

It has been observed that decentralisation policies have often been hampered by a lack of local government capacity and financing (WIN, 2021). While the diversity of needs and scenarios across Brazil justifies decentralisation, the risks of poor policy coordination are aggravating and perpetuating inequality of access to water and sanitation. The quality of regulation varies greatly from state to state and municipality to municipality, as state and local regulators are extremely different from each other in terms of technical and financial capacities, institutional development and governance practices (Soares, 2024).

The Sanitation Law addresses the institutional structure responsible for ensuring that its provisions are implemented. It entrusted ANA with numerous responsibilities related to WSS. ANA is a regulatory agency created in 2000, which was originally responsible for water resources management. It progressively saw its functions grow to include the regulation of raw water services and dam safety.

With the Sanitation Law, in 2020, ANA became responsible for setting reference standards on (i) quality and efficiency in the provision of WSS; (ii) tariff regulation; (iii) standardisation of contracts between public and private entities; (iv) universalisation targets for WSS; (v) regulatory accounting criteria, among other functions. These norms are designed to serve as parameters for bidding processes and contracts to be signed, as well as for subnational regulators, who are responsible for establishing specific standards for the social, economic and technical dimensions of water and sanitation service provision in each locality and for monitoring compliance with these standards by water and sanitation service providers.

According to a non-exhaustive list of sub-national regulators, there are 89 municipal, inter-municipal and state regulators, who are responsible for setting specific standards for the provision of WSS and monitoring compliance. The large number of registered entities does not yet include the entire universe of sub-national regulators of basic sanitation services, as there are still unregistered agencies, which demonstrates the challenges that exist in ensuring harmonisation in the interpretation and application of standards (ANA, n.d.). According to multiple stakeholders, there is a great variation in the level of institutional development of these entities, particularly with regard to governance, transparency and social accountability (Soares, 2024; Whately, 2024).

Resistance to federal regulation from municipal and state-level stakeholders has already manifested itself. Both the National Association of State Water and Sanitation Companies and the National Association of Municipal Water and Sanitation Utilities petitioned the Supreme Court, in 2020 and 2021, to declare parts of the Sanitation Law unconstitutional because it allegedly violated the federal pact and local autonomy. The Supreme Court, by a majority vote, did not follow this motivation, but these lawsuits demonstrate a high level of discomfort with the federal government having substantial regulatory powers in this sector (Rodas, 2021). These facts demonstrate the limits and resistances faced by federal harmonisation efforts (Pretto, 2024).

Following what some have attributed to an expected learning curve (Soares, 2024), but others to the limited financial and human resources given to the agency (Whately, 2024; Marinho, 2024), ANA published in January 2024 the Resolution No. 177, containing the so-called Reference Standard No. 4.

It sets out a wide range of good governance policies and practices to be implemented by sub-national regulators. Among them, it prohibits people who have worked, in the previous three years, in a political party, in an electoral campaign or in a union in the water and sanitation sector, from serving on the governing body of regulators. Concerns about conflicts of interest are also evident, as similar restrictions are imposed on individuals who have a stake in companies or entities in the sector.

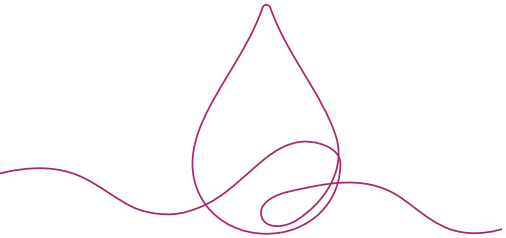
The regulation also mandates the creation of internal control bodies, as well as the position of an independent ombudsman and the development of integrity programmes, including codes of ethics. It also mentions as institutional improvements that sub-national regulators must implement: the establishment of open data plans, greater civil society participation, and risk management policies. At a minimum, ANA has required sub-national regulators to develop and implement transparency plans, as well as to publish calendars, agendas and minutes of meetings held by their governing body, and to establish protocols to ensure the participation of society in their decision-making processes through public consultations and hearings, among other measures. Given the novelty of these reference standards, there is little or no information on compliance with these terms.

The ANA also instituted a 'Pró-Saneamento' Program (ANA Resolution No. 179, 2024), which aims to strengthen the governance practices of sub-national regulators by conducting annual assessments, providing technical assistance, as well as encouraging the development of institutional strengthening plans. The ANA would also provide financial and non-financial incentives to sub-national regulators that adhere to its standards. Non-financial incentives include publication of best practices identified in evaluations by the ANA.

According to the Sanitation Law, access to federal funds should be conditional on sub-national regulators respecting the baseline standards set by the ANA. The federal regulation should determine the process for periodically verifying compliance with these standards. However, the usefulness of such conditionalities is constrained by limited federal funding that is under the direct control of the ANA, since Parliamentarians often direct federal funds to specific projects. It is also constrained by varying levels of interest in municipalities, as direct service providers, seeking such funds (Water and Sanitation company lawyer, 2024); it is not clear whether this is due to being unwilling or unable to comply with standards set by sub-national regulators, following ANA's baseline. National regulators have been known to be well positioned to be leaders in establishing anti-corruption policies, but their authority to do so may be questioned, as happened in Zambia, for example (WIN, 2021).

In Brazil, given previous resistance that interfered in the reform that the 2020 Sanitation Law entailed, and its impact on states and municipalities, there is some degree of uncertainty regarding the ANA's ability to promote integrity and governance standards for subnational regulators. Determined efforts to include subnational regulators in the policy-making process, with public and direct consultations as well as more open communication, have, for the

most part, alleviated resistance to federal regulation (Marinho, 2024; Soares, 2024; Whately, 2024). However, resistance is manifested fiercely, when regulations touch on sensitive governance issues, such as the establishment of term limits for directors of these subnational entities (Marinho, 2024). The level of openness to societal participation in this benchmarking process has been a source of controversy, with some acknowledging the open consultation procedures (Pretto, 2024; Soares, 2024), while others criticise not only the limited space for participation of a plurality of actors, but also the prioritisation of the standards to be developed (Whately, 2024).



Improving the governance of sub-national regulators is essential not only to reduce corruption risks, to protect them from political interference and to reduce legal uncertainty. The weaker the governance rules of sub-national regulators, the more subject they are to political capture.

There seems to be a correlation between the size of the federal entity and the level of institutional maturity of the regulator: small municipalities with their own regulator are more subject to political pressure from local authorities than regulators for regional consortia or for the entire subnational state. In these cases, rather than curbing political interference towards companies in charge of providing water and sanitation, these regulators may serve as a vehicle for such interference (Water and Sanitation company lawyer, 2024).

This perception is consistent with national assessments that point to significant deficiencies in anti-corruption policies and practices in smaller municipalities (Conselho Nacional de Controle Interno, 2022). However, companies have seen recent improvements in several municipalities, including the implementation of the Anti-Corruption Law that institutes corporate liability for corruption (Compliance Officer C, 2024).

In theory, better governance and greater legal certainty would lead to better services (and lower costs), while weak governance rules could translate into higher costs for private firms and consumers and lower service delivery (Pretto, 2024). However, it is unclear to what extent companies scrutinise the governance rules of these regulators. If ANA goes ahead with its plans to assess the implementation of its governance benchmark, this will provide a roadmap for companies and serve as an explicit stimulus for regulators to improve their policies and practices.

Governance rules are, of course, not the only aspect relevant to reducing the risks of corruption and political interference in sub-national regulators. A well-resourced organisation, with well-paid and technically competent staff, is also more resistant to political interference (Marinho, 2024; Pretto, 2024).

The ANA itself is not immune to fraud and corruption, as demonstrated by the National Audit Office's 2018 Integrated Governance and Management Index for Federal Institutions. On a scale of 0 to 1, with 1 being the frailest, ANA's control fragility index scored 0.56. The most critical problems observed by the National Court of Accounts (TCU) were the lack of an established integrity program, deficiencies in the annual audit plan, insufficient risk management procedures and the handling of conflict-of-interest cases (National Audit Court, 2018). Institutionally, there are signs

of ANA's intention to act on these problems through the Resolution No 176/2024, which deals with the integrity programme "ANA Íntegra" and the activities of the Agency's Integrity Management Unit (ANA, 2024).

There are also concerns about the level of political interference in regulatory agencies as a whole in Brazil. Recent press reports have indicated that more than 1,000 positions within these agencies may be filled by political appointees, without any official selection process (Borges, 2023a). Estimates indicate that around 70 percent of high-level positions within these agencies are filled by political appointees; meanwhile general vacancies, reaching almost a third of existing posts, threatened the capacity to perform legal functions within Brazilian regulatory agencies (Borges, 2023b). ANA was also, at the beginning of the Lula administration, subject to a tug-of-war between the government – which wanted it to be under the purview of the Ministry of Environment, – and a majority of centrist parliamentarians who managed to keep ANA under the Ministry of Regional Development (Folha de São Paulo, 2023).

In recent years, the role of regulatory agencies, including the ANA, has become a topic of debate, especially regarding their role and autonomy, which has generated regulatory uncertainty. In early 2023, the House of Representatives considered a provision that would return powers to government ministries, which would have the final say in technical decisions made by regulatory agencies (Borges, 2023c). Undue political interference can affect the quality of the regulatory framework, which depends on transparent and accountable regulatory agencies (WIN, 2021). Uncertainty about its budget also negatively affects the ANA's ability to plan and promote regulatory measures, and it is also put in a precarious position since it has a non-permanent staff of public servants, many of whom are "on loan" to the ANA from other federal entities (Marinho, 2024).

The regulatory framework around water and sanitation also includes internal and external control bodies, such as comptroller generals and courts of auditors, which have among their priorities the fight against corruption. It has been observed, however, that overlapping control institutions can lead to regulatory uncertainty. These institutions are also not immune to corruption per se and can serve as a tool for political interference in contract management, for example, when magistrates of the courts of audit are appointed directly by the executive branch. **Corruption is also found in these anti-corruption institutions. One interviewee mentioned the case of a water and sanitation utility that bribed a judge of accounts to obtain a favourable ruling; in this case, the company itself drafted the decision to be handed down by the judge (Dall'Ara, 2024).**

Ultimately, disputes over water and sanitation service contracts reach the judiciary, so it is relevant to point out their vulnerabilities. Weak conflict of interest rules for judges increases the risks that undue influence may play a role in the resolution of these disputes (UOL, 2023). Economic or financial interests may play a role in preventing courts from interfering in disputes involving powerful companies and small municipalities. Local courts are especially subject to political pressures (Water and Sanitation company lawyer, 2024). In this scenario, courts may be unwilling to authorise investigations into corrupt dealings involving water and sanitation service providers and public officials, or to reverse decisions affecting WSS that may have resulted from bribes from private companies or individuals.

According to civil society representatives, the 2020 Sanitation Law represents a setback in terms of social participation and accountability in the design and implementation of water and sanitation policies (Whately, 2024). For example, an Inter-Ministerial Committee on Water and Sanitation was established to ensure the implementation of the federal water and sanitation policy and to coordinate government entities with regard to the allocation of funds. The full scope of its work is still unclear, as it has only started meeting regularly since 2023 (Ministério da Cidade, n.d.). However, one point of concern about this committee is that it does not include any civil society representatives. In the beginning there were even restrictions on the transparency of the committee's debates, although these were revoked by the current government.

3.4.4 Integrity in private sector finance

The Anti-Corruption Law, enacted in 2014, which provides incentives for companies to implement integrity programmes, has gained wide acceptance in the private sector, and this is no different in the water and sanitation sector. In this regard, the Operation "Lava Jato" served to demonstrate the varied and profoundly negative consequences of corruption (Water and Sanitation company lawyer, 2024). There is consensus on the important role of anti-corruption measures and for encouraging companies to invest in integrity programs; however, the recent slowdown in these efforts may jeopardise this progress and reduce the ability of the private sector to mitigate corruption risks (Transparency International Brazil, 2023).

Another potential driver for investments in integrity programmes is the entry of international investment funds into the ownership and management structures of water and sanitation companies (Soares, 2024). Several of these companies are subject to international regulations, including US laws, which require strong integrity and transparency policies. This is also the case for the State Water and Sanitation Company of São Paulo (SABESP), responsible for providing WSS to more than 370 municipalities; it is listed on the New York Stock Exchange and subject to its rules (SABESP, n.d.).

According to Pretto (2024), executive director of the Instituto Trata Brasil, the increased participation of private companies with a national or international profile in local WSS may, in this sense, break the collusion between government officials and companies that have been used to a monopoly scenario and no bidding processes.

According to a survey conducted by the Brazilian Association of Private Water and Sanitation Utilities (ABCON SINDCON, by its acronym in Portuguese), private water and sanitation service providers have relatively mature integrity programs. Some indicators are shown below:

- 95 percent have a Code of Ethics or Code of Conduct and, for 80 percent, it applies to suppliers and third parties;
- 89 percent have whistleblower channels for external stakeholders;
- 88 percent conduct compliance and integrity-related training;
- 73 percent conduct external audits of their integrity programs;
- 72 percent have received some form of external recognition for their compliance programs (ISO 37001, Selo Pró-Ética, etc.) (ABCON SINDCON, 2023).

It should be noted that this survey is a voluntary, self-reported study and does not assess the level of transparency within these companies or the effectiveness of these integrity programs.

The survey also does not address relevant issues such as - for example - the level of protection afforded to whistle-blowers or rules of interaction between companies and public officials. These are particularly relevant issues, given the lack of national legislation on these topics, leaving them subject to self-regulation. However, it has been recognised that recording meetings with public officials and monitoring these records turns out to be a relevant measure to mitigate corruption risks in some water and sanitation companies. There is also interest in training employees on how to interact with public officials, especially during election seasons (Compliance Officer A, 2024).

Supply chain due diligence is also an important tool to mitigate these risks. This is especially relevant when a public official suggests or requires a private company to be a supplier of a certain good or service to a water and sanitation company (Compliance Officer A, 2024). This is a scenario in which the likelihood of that official receiving a bribe from the supplier should be of serious concern. In general, procurement procedures in relation to these private companies are a major source of corruption risks (Carillo, 2024).

As private companies increasingly take over WSS, there is a challenge to maintain or improve the level of transparency provided (or that should have been provided) by the public bodies that previously provided these services. Since private companies are not subject to the Freedom of Information Act, legislators have passed new laws (e.g. Law No. 13.673, 2018) requiring companies providing basic services to deliver information on the tariffs charged for these services. However, more detailed information on other aspects of service provision is needed to facilitate effective social accountability.

The "revolving door" between the public sector and private companies has also raised concerns (Instituto Mais Democracia, 2018). The Sanitation Law introduced provisions prohibiting ANA directors from having direct or indirect interests in private companies in the water services sector; however, this restriction does not apply to sub-national regulators. Furthermore, the restrictions imposed on ANA directors by the Conflict-of-Interest Law (Law No. 12.813, 2013), including a six-month abstention period, are also limited to the federal level only.

The level of market concentration in the water and sanitation market raises concerns about cartels and reduced competition. According to a 2018 study by the Mais Democracia Institute, five corporate holdings held 85 per cent of the contracts and provided WSS for 88 per cent of the municipalities that had contracted private companies to provide these services. Some of these holdings were found to have been involved in wide-ranging corruption schemes, as demonstrated by the Operation "Lava Jato" investigations (Instituto Mais Democracia, 2018). De facto, these investigations showed that a group of construction and engineering companies formed a cartel and decided among themselves who would win which public contract in "dispute", and on the (over)price to be charged to the public administration. This is one of the biggest corruption risks in procurement processes. They would pay bribes to ensure that these contracts would be signed and implemented in their best interests (Petrarca, 2020).

3.4.5 Water and sanitation policies and corruption risks

As Luana Pretto (2024), executive director of the Instituto Trata Brasil, explaied that "water is used politically", and the dynamics of such uses have changed in recent years. The increased involvement of private companies requires a detailed analysis of past practices to identify where the main corruption risks can be found.

According to Soares (2024), Executive Director of ABCON SINDCON, under the previous legal framework, without stipulated procurement processes, it was not unusual for decisions on arrangements to provide WSS to be influenced by political ties between elected officials. For example, mayors were subject to pressure from the state government, which might want to expand the coverage area of the state company, or maintain or establish a municipal company to exercise control over this crucial public service and expand the local bureaucracy (i.e. jobs and resources), and could serve as a bargaining chip in local political disputes, as explained by Carillo (2024).

Where and how much a state water and sanitation company would invest could also be affected by political disputes and party affiliations, rather than universalisation or efficiency objectives (Pretto, 2024). These companies often developed unrelated construction works, such as building public squares and resurfacing roads, to benefit local politicians, especially at election time (Marinho, 2024).

A long-standing concern in Brazil is how money can be used during electoral processes to buy influence over elected officials. Whether through legal or illegal campaign donations, there are numerous cases where this has affected the water and sanitation sector.

Illegal donations from companies in this sector have been identified in high-profile corruption investigations over the past 10 years, including in Operation Car Wash. Odebrecht executives, for example, admitted paying bribes to a candidate and afterwards to the governor of Santa Catarina in exchange for the privatisation of the state sanitation company CASAN. These bribes, which amounted to approximately USD 2 million, were paid as unregistered campaign donations (slush funds, or in Portuguese terms, "Caixa 2") between 2010 and 2014 (Diário Catarinense, 2018). The governor was later acquitted of these charges by the electoral courts, arguing that there is no concrete evidence that the governor omitted to receive donations in his accounting (G1 Santa Catarina, 2020).

In other Operation "Lava Jato" investigations, documentation provided by Odebrecht executives pointed to unregistered campaign donations paid to the governor and a congressman of São Paulo amounting to USD 300,000 and USD 60,000, respectively, in exchange for contracts worth USD 62 million with the state-owned water and sanitation company SABESP (Leite & Serapião, 2017). The case against the former governor of São Paulo was later overturned by the Supreme Court, following questions about the validity of the evidence in the context of the Odebrecht leniency agreement (Poder360, 2022).

Sometimes, legal donations are used to circumvent restrictions or avoid direct identification between donors' interests and politicians. Even before 2015, private concession companies were

Photo: Transparency International, accountability for water in Santo Antônio de Pádua, 2013.

not allowed to make campaign donations. This led to manoeuvres whereby other companies within the holding company or associated with that company made campaign donations instead (Dall'Ara, 2024). Alternatively, and this is still legal after the Supreme Court banned all campaign donations to legal persons in 2015, businessmen, shareholders or high-ranking employees can still make campaign donations. There are press reports claiming that donations from individuals replaced donations previously made by companies (Rebello & Martins, 2018). (The limits for such donations are proportional to the income of the natural person in the previous year: 10 percent, according to art. 23, §1º, law no. 9.504, which does not necessarily translate into an impediment to exert substantial, possibly irresistible financial influence on an election campaign).

In these cases, integrity deficiencies not only impact the outcomes of water and sanitation service provision but can also affect electoral outcomes. By benefiting a particular candidate, these practices hinder the right of voters to choose freely, which is a political right of every citizen.

The way in which privatisation and delegation processes have been structured, with the National Bank for Economic and Social Development playing an important role, mitigates corruption risks (Pretto, 2024). However, the decision to privatise state-owned water and sanitation utilities or to concession these services to a private company is eminently political and, as the example of Operation Car Wash shows, it is difficult to guarantee that it will not be affected by undue influence. Limited transparency and a closed space for social participation in these procedures increase these risks, something that has been criticised by civil society (Whately, 2024).

Other ways for water and sanitation companies to interfere in elections and benefit one candidate over others include the construction of public works, such as paving a road or building a plaza, may be requested to companies, formally or informally, in order to help politicians with specific electoral public to benefit from them and attribute the results to the local official.

Local authorities may refuse to authorise companies to adjust tariffs to avoid political backlash from voters on the eve of an election (Marinho, 2024; Water and Sanitation Company Lawyer, 2024) or charge bribes to authorise them (Dall'Ara, 2024). Officials may refrain from or create obstacles to authorising necessary construction works because of temporary dissatisfaction they would create for voters during the election campaign (Water and Sanitation Company Lawyer, 2024; Dall'Ara, 2024). In short, politicians can sometimes create obstacles for private water and sanitation companies and at the same time demand bribes to resolve them.

Weak governance rules for sub-national regulators leave them vulnerable to political capture, which may manifest in the form of nepotism or cronyism (Pretto, 2024). Strong governance rules tend to improve the protection of regulators from economic interests. One consideration is whether outside organisations, such as civil society or the private sector, can wield influence that deters local officials from wrongdoing, compromising their ability to negotiate advantageous terms or conditions (Whately, 2024).

3.4.6 Conclusions and recommendations

The 2020 Sanitation Law paved the way for private companies to increase their market share and they now provide drinking WSS to almost a quarter of the Brazilian population. The growing role of private companies in the sector in Brazil is seen as the only realistic alternative to close the investment gap, needed for the country to reach its universalisation goals. However, corruption can hamper these efforts by distorting competition, diverting funds and disrupting much-needed better regulation in the sector.

Integrity-related practices in Brazil's private sector have improved significantly, especially for larger companies, over the last 10 years. However, there are still doubts about the effectiveness of integrity programs. The slowdown in anti-corruption law enforcement may lead companies to reduce their investment in these programs, increasing corruption risks.

In the public sector, decentralisation also presents challenges as sub-national states and especially municipalities have weaker transparency and integrity practices and policies than the federal government. Privatisation and delegation processes carried out by these local entities are subject to corruption risks, as demonstrated the Operation Car Wash. Weak or absent governance compromises the ability of local regulators to effectively oversee contract implementation and increases the potential for political capture and undue influence.

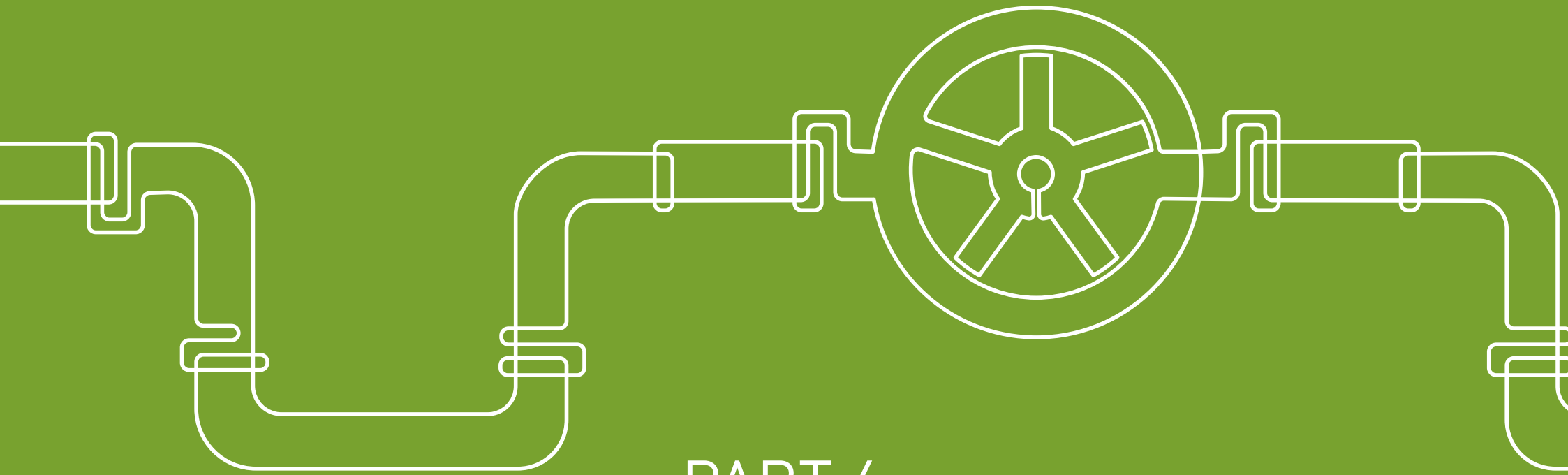
While ANA has been tasked with setting benchmark standards for sub-national states and municipalities on several fronts, including governance practices, it is not yet entirely clear how much weight it can exert in these matters.

Given the additional powers conferred on the ANA, it needs to be provided with the necessary resources to handle them. More clarity is needed on the institutional arrangements of ANA, and - in general - about the powers of regulatory agencies in the country. ANA also needs to keep improving its integrity program to mitigate corruption risks and increase transparency and social accountability in relation to its decision-making processes, see ANA Resolution 176/2024.

Three sets of general recommendations emerge from this case study. First, ANA needs to be given the necessary resources to strengthen its regulatory capacity to fully comply with its role established by the 2020 Sanitation Law. ANA should fully assess the governance practices of sub-national regulators, publish these assessments, and enact policies to encourage improvement of these practices. Sub-national states and municipalities should implement reforms to strengthen integrity and transparency policies in sub-national regulators.

Second, privatisation and delegation processes must be open to civil society participation at all stages. Incentives should be provided to private companies to invest in their integrity programs. In addition, integrity pacts and sectoral collective actions should be used to create public-private relations as a means of mitigating corruption risks.

Finally, independent mechanisms to continuously evaluate the implementation of the 2020 Sanitation Law need to be strengthened, especially regarding the increased participation of private companies in the water and sanitation sector. In addition, legislation is needed to address long-standing deficiencies in Brazil's anti-corruption framework, such as the absence of lobbying regulation and weak conflict of interest rules. To implement legislation, anti-corruption law enforcement agencies need to be safeguarded from political interference and their operational autonomy needs to be ensured.



PART 4

CONCLUSIONS AND RECOMMENDATIONS

4.1 Context and interwoven integrity challenges

The case studies each address scenarios of very different nature and magnitude in terms of corruption and integrity risks: from a relatively small and focused scale (as illustrated in the Peru case study), through a broad spectrum of intermediate levels (e.g., municipalities), to high institutional and national policy spheres (as shown in the Brazil case). **The case studies show that there are multiple ways, at multiple levels, that risks of corruption and integrity failures play out in the sector.**

Misconduct exercised at different levels, in parallel at the same time or acting as a kind of "chain", can accumulate a leakage of huge amounts of money, wasting valuable funds intended for the provision of water and sanitation services (WSS) to society. This multi-actor and multi-level nature of corruption and integrity failures makes the problem extremely broad and complex, thus requiring highly integrated strategies to simultaneously influence the different levels (micro, meso, macro), "tailor-made" for each level, each type of activity and each circumstance. Relations between levels can reinforce integrity risks, or provide openings for positive change through, for example, asserting the "no reprieve" pathway through strong measures. The macro level has an impact on all other levels, through norms, leadership, and legislative frameworks. But incremental changes at the micro level can, over time, impact on more significant shifts and challenges upward.

In the case of Peru, digital innovation measures (e.g., GPS surveillance) combined with comprehensive monitoring from the utility showed a positive effect on the use of public funds and the provision of free water to informal settlements.

In Ecuador, reporting requirements by the national water regulation and control agency for municipalities and community organisations seem to reduce the space for integrity failures. Although rather particular, a service and training platform in the province of Cañar succeeded in enhancing a more integrated collaboration between community providers and the municipality; public assemblies offer important opportunities to improve transparency.

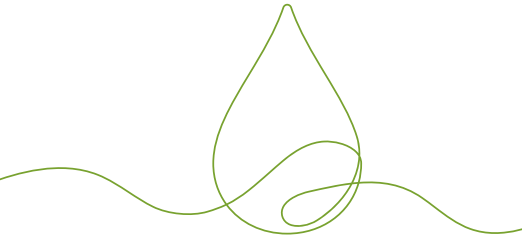
In the case of Brazil, efforts to include sub-national regulators in the policy-making process alleviated to some extent resistance to federal regulation. This kind of articulation has the potential to improve the governance of sub-national regulators, which is essential not only to reduce internal corruption risks, but also to protect them from political interference and to reduce legal uncertainty.

Stronger sub-national regulatory environments in key aspects such as the independence and capacity of regulators, as well as higher levels of transparency and participation, can be beneficial for strengthening internal integrity practices, and at the same time developing and implementing a comprehensive set of regulatory mechanisms (including financial mechanisms) at the most local level. These regulatory mechanisms can cascade integrity down to water and sanitation service operators.

4.2 Regional conclusions

4.2.1 The impact of political, institutional, and social instabilities and change

It should be noted that in many Latin American countries the political, institutional and social contexts have experienced quite profound changes in recent decades, as a consequence of changes - back and forth - in political orientation of governments, power struggles and other factors. This phenomenon tends to generate a considerable degree of instability in institutional, regulatory and budgetary frameworks, as well as in capacities and resources deployed. Although not fully confirmed by investigations, it seems to have also a negative impact on the design, application and continuity of strategies focused on reducing risks of corruption and integrity failures, jeopardising funds desperately needed for WSS to be provided and expanded to all in a sustainable manner.



The case studies indicate that corruption risks and integrity failures may exist in any political, institutional and social context - national and sub-national - of a country, and that their forms and manifestations easily adapt to changes occurring in these contexts.

For example:

- In the case of **Peru**, the introduction of free distribution of drinking water in informal settlements by tanker trucks brought new forms of corruption and integrity failures that "accompanied" this initiative.
- In the case of **Ecuador**, the 2008 Constitution mandates the state to strengthen community management and operation of WSS, but as bureaucratic barriers that hinder administrative and legal management remain unresolved, many of the community organisations maintain high levels of informality, and with it, greater margins for lack of transparency, misuse of resources and (political) clientelism.
- In the case of **Brazil**, the Sanitation Law (2020) attempts to address some of the issues in the previous law that created legal uncertainty and opened paths for political interference and bribery in contract management. However, reduced incentives for companies to invest in integrity programs as well as longstanding governance deficiencies in sub-national regulators, lead to high risks of corruption in this new scenario..

In short, the forms in which acts of corruption and breaches of integrity are committed - or can be committed - configure according to each political, institutional, social and cultural context, with a great capacity to adapt to changes in these contexts.

4.2.2 Financiamiento de los servicios de agua y saneamiento

It is a common feature that WSS are financed with a combination of resources; the three case studies demonstrate this, although each country develops its own arrangements. In the Peruvian case the national treasury provides emergency funding to water and sanitation utilities (e.g., Lima Potable Water and Sanitation Service – SEDAPAL, by its acronym in English) to implement relief measures for the provision of drinking water to vulnerable populations. In the case of Ecuador, self-supply - individually or

through community organisations - appears to be an important source of (self) financing in rural areas. In Brazil, the sector is seeking more financing through private investment.

In most cases, service providers operate at the municipal level, either directly by municipal governments, through municipal companies, community organisations or private companies. Typically, municipalities and local operators have very limited resources of their own to invest in expanding the coverage of water distribution networks, upgrading sewerage or other costly interventions (e.g., network rehabilitation, wastewater treatment plants, etc.). Thus, most of the financing for these investments comes from the national or state treasury (tax revenues of the country), as well as often concessionary loans from international agencies (sector support and/or specific projects and programs), which will ultimately have to be repaid, generally with interest. **There are considerable integrity risks related to the distribution, allocation and spending of national or state investment funds at local levels, whether implemented directly by sector entities or by municipalities.**

Financing for the operation, maintenance and management of water distribution and sanitation systems should -in theory- be at least partly covered from tariffs charged to consumers by the service provider. In practice, it is common that tariffs - and the collection efficiency - are not sufficient to cover all the service costs involved, let alone to invest in the improvement or expansion of the networks. This is due to various causes, related to socio-economic and cultural contexts, inadequate ability to calculate costs, deficient regulations, (local) political clientelism, etc. Corruption and integrity failures in the setting, collection and use of tariffs pose a threat to the quality and continuity of service delivery, as any misconduct further jeopardises the already often fragile financial situation of the service provider. Leakage of funds has a direct impact on the performance of these providers and the state of the infrastructure, since there is no financial margin to compensate for these losses. As a result, despite costly investments made in water and sanitation, poor operation and maintenance of systems can stagnate or even reduce the coverage and quality of service delivery.

It is clear from the three case studies that in recent decades important reforms are being promoted at the national level to improve control over the procurement and execution of public investments, such as the institutional strengthening of internal and external control bodies, as well as increased monitoring within the sector itself. International conventions and standards (IACAC, UNCAC, ISO 37001), multilateral donor safeguards and other standards certainly contribute to this (IDB, 2019a). However, it appears that political pressures and other undue (high-level) influences persist strongly.

On the other hand, the case studies reveal serious challenges in addressing corruption and integrity failures at the more local levels and in public investments of smaller amounts each, mostly in institutional contexts of weaker planning, existence of more space for official discretion, as well as lesser presence and intervention by control entities. In these cases, greater local participation and other transparency measures should be the priority, apart from improving (other) institutional controls.

4.2.3 Private investment in water and sanitation provision

The international wave of privatisation of public services that characterised the 1990s also had an echo in several Latin American governments, although encountering strong social resistance. Until very recently, in most countries in the region, the water and sanitation sector remained mainly in the hands of the public sector (exception: Chile), with municipalities usually having an important role, either directly or through providers that mostly maintain the character of a public entity. The legal framework in some countries prohibits the private sector from investing in and managing drinking WSS (as is the case in Ecuador), although private and mixed (public-private) providers are present in almost all countries in the region.

In recent decades, several governments, states and municipalities in Latin America have been considering a greater role for the private sector in the provision of WSS (see: Brazil case), either through concessions, subcontracting part of the operations or selling state-owned companies to private owners. Several multinational companies have stake in the water and sanitation sector in the region, including Suez Group, Vivendi Water, Idrica, Veolia, Acciona, Aguas de Barcelona, Grupo Águas de Portugal. This shift appears to be mainly motivated by two assumptions: (i) that private operators provide more efficient services than public entities, and (ii) that private companies can provide the necessary capital to improve the systems and expand the coverage of services, needed to achieve the Sustainable Development Goals (SDG) 6.

In some cases, private companies have struggled to meet the targets set in the contracts, especially in the extension of water distribution and sewerage networks. For example, Rivas (2012) describes the case of non-compliance of contract by the former private drinking water & sanitation operator in Tumbes city, Perú.

In addition, resistance from social groups and trade unions has played a role in slowing down decision-making on privatisation, motivated by fears of rising water tariffs and job losses. But perhaps the main reason for the slow pace of privatisation can be found in the cautiousness of companies to invest in an (ever-changing) context of political and economic instability, as well as institutional and regulatory change.

In addition, as in other regions, private companies prefer to invest in more densely populated and prosperous areas (typically larger urban settings), where water consumption rates, consumers' ability to pay, per capita investment costs and other factors are more favourable in terms of profits, compared to rural and peri-urban areas. In the Brazil case, reference is made that sometimes - even after the privatisation of state-owned companies and the concession of WSS to private companies - public investments continued to retain the main responsibility for expanding services in the poorest neighbourhoods. Some delegation schemes do, however, have requirements for private investments in poorer areas.

One issue to be taken into account is the level of market concentration that can occur when privatising (part of) the water and sanitation sector, which can raise concerns about the formation of cartels and - in general - the reduction of competition when not adequately regulated and controlled. According to the Brazil case study, in 2018, five corporate holding companies accounted for 85% of the water service contracts with municipalities.

Corruption and integrity failures occur in both the public and private sectors. The Brazilian case shows how the private sector can be encouraged to reduce corruption; but, if the State does not have the capacity to design, implement and enforce sound regulations, there is no guarantee that the private sector will not be as or more inefficient and corrupt than the public sector.

After emblematic corruption cases caused commotion in several Latin American countries in the last decade (particularly the "Lava Jato" case), it seems that (larger) private companies operating in the water and sanitation sector are increasingly aware of the risks and consequences related to corruption and integrity failures. In Brazil, a high percentage of private providers have introduced measures such as codes of conduct, external audits, and integrity-related training. The increased attention paid to integrity issues by private companies is also likely to be a response to increased demands for transparency and accountability from civil society and state actors (the press, the public, regulators, etc.), to increasingly stringent legislation and to the need to project a positive corporate image.

However, hand in hand with privatisation processes, more open participation, greater transparency and stronger regulatory frameworks will be of fundamental importance to improve integrity in the investments and operations of private providers, as it is for the public sector.

4.2.4 The need for sound regulatory frameworks

Regardless of the range of options in terms of management models - public, private or mixed - the existence of a consistent and strong regulatory framework, as well as regulatory entities with clear roles and responsibilities, and sufficient independence and capacity are of utmost importance for the sector, especially in assuring competitiveness, strengthening tariff policies, ensuring coverage and quality of service, consumer rights, public health and environmental protection. It is here that the case studies reveal large differences between countries, as well as a number of problems.

In the case of Ecuador, the Water Regulation and Control Agency (ARCA) was created in 2014, attached to the National Water Secretariat (SENAGUA), and has been "dragged along" by a series of changes in that institutional environment, currently forming part of the Ministry of Environment, Water and Ecological Transition. In the case of Brazil, the National Water Agency (ANA) was created in 2000 and, with the new Sanitation Law (2020), it gained clearer regulatory powers over the water and sanitation sector (tariff regulation, quality and efficiency standards, standardisation of contracts, etc.), but it is still struggling to gain greater authority over the more than 89 sub-national regulators (municipal, inter-municipal and state). In this sense, a better alignment between the national authority (ANA) and the sub-national regulators is essential to configure a clear, coherent and well-articulated regulatory framework across the different levels of government.

Certainly, the changing political and institutional contexts in the case of Ecuador and Brazil have not been the most appropriate for building a stable and firm regulatory framework, capable of building and implementing a clear and transparent anti-corruption and accountability policy, ensuring that funds are spent with integrity. In Peru, the regulatory framework apparently experienced a more stable evolution. In 1992, the Superintendencia Nacional de Servicios Sanitarios (SUNASS) was created in Peru as the regulatory body for the water and sanitation sector. Despite periods of considerable political turbulence, SUNASS managed to follow a relatively stable consolidation path during its three decades of existence and to adapt to regulatory changes in the sector. Since the enactment of the Framework Law for the Management and Provision of Sanitation Services (2016), it has undergone a planned transformation process to respond to the challenges of this law. SUNASS advises, approves and supervises two main management instruments of the 50 water and sanitation service providers in the country: the Optimised Master Plans and the Management Target Resolutions. The compliance requirements with respect to these instruments significantly reduce the scope for undue discretion on the part of service providers. However, the Peru case study shows

how insufficient service provision and lack of controls around a state of emergency can open up spaces for corruption.

The importance of a consistent, firm and stable regulatory framework is also noted in an Economic Commission for Latin America and the Caribbean (ECLAC) publication (Rojas Ortuste, 2014), in reference to Chile: "The institutional framework and sustainability of the regulatory model has allowed the Superintendency of Sanitation Services (SISS) to have a database with records of nearly two decades and of all urban water and sanitation companies, which allows for the monitoring and evaluation of their management".

4.2.5 Rural and peri-urban areas: difficult to integrate into regulatory frameworks and integrity measures

The case studies from Ecuador and Brazil show the relative fragility of the entities responsible for WSS services (mostly municipalities and community organisations) in rural and peri urban areas. In these areas and smaller cities services often remain in the hands of public or community entities. One form of 'subsidised self-supply' is when community groups manage their own supply and seek subsidies from government. However self-supply can also refer to poor households having to fend for themselves with no outside support. (There is not much money to be raised in high-poverty settings, as they are unattractive scenarios for private companies to manage.)

Due to the dispersed nature of the population and institutions, community organisations often play a critical role in services provision. Since it is unlikely that these circumstances will change anytime soon, there is a need for the state to actively provide technical support, capacity building, and resources for infrastructure to community organisations

.

The case studies also detailed difficulties in the regulation and supervision of community run schemes. In small local municipalities with little capacity and weak strategic planning, and without sufficient monitoring, evaluation and supervision, there is an increased risk of corruption, nepotism, political patronage and other integrity failures, especially in local officials' management of small funds. State regulators and supervisors find it daunting to carry out their functions in the usual way in these areas.

By ignoring these areas at the highest levels of government, corrupt practices and lack of integrity remain "invisible" to the state—as do the needs of community organisations and local municipalities for support to improve local provision. The adverse conditions in rural and peri-urban areas -together with the lack of attention from higher political levels- are significant barriers to extending WSS. Much more attention and support is needed from governments and national institutions to improve the coverage, quality and integrity of WSS in rural and peri-urban areas, especially given the high vulnerability of the population in these locations.

Social transparency and accountability measures, such as well-conducted community assemblies, can make a difference, both in terms of local improvements in integrity and quality of service, and in terms of demanding government attention.

4.2.6 Slow local adoption of international norms and conventions

Many countries in the region have adopted instrumental and institutional measures in the framework of the Inter-American Convention against Corruption (IACAC) and the United Nations Convention against Corruption (UNCAC), establishing or

strengthening internal control bodies in public entities and strengthening external control bodies (State Comptroller's Office, etc.). In this framework, several entities - public and private - have sought ISO 37001 Anti-Bribery Management System certification. However, it seems that few entities and companies have accomplished this certification. In any case, these efforts to achieve higher integrity standards are mainly undertaken by national entities and larger private companies; they have not found much application in sub-national entities or smaller companies where multilateral agreements and International Organization for Standardisation (ISO) certifications seem to be more difficult to accomplish.

4.2.7 Civic spaces to improve integrity

Civic participation and the rights of expression are threatened (including the media) in some countries; this risk may be hidden or more blatant. Groups such as Freedom House annually produce a global quantitative and qualitative report on the components of political rights and civil liberties by country (Freedom House, 2023). There are examples of ruling governments trying to control or shut down (public) institutions that monitor transparency and integrity. For example, in February 2024, Mexico´s president sent to Congress an initiative to eliminate seven autonomous organizations, including the National Institute of Transparency, Access to Information and Protection of Personal Data (El Financiero, 2024).

On the other hand, several countries consciously maintain spaces for civic participation. They may have introduced mechanisms that citizens, activists and civil society organisations (CSOs) can use to monitor and demand improvements. One example is the creation of mechanisms that make it easier for citizens to file claims regarding failures in the provision of services, obliging (public) entities and companies to establish relevant channels for this purpose.

An important question is, how -and to what extent- CSOs draw on the existing space to demand more efficiency, integrity and social accountability in the water and sanitation sector. Specifically related to the promotion of integrity pacts (WIN and TI, 2010), it is noted in the Ecuador case study that there is no shortage of organisations that can act as promoters or leaders ("champions") on this issue. Coalitions at the national level are still relatively weak and lack professional cadres and resources to launch and sustain campaigns towards the establishment of such pacts.

4.2.8 Protection of whistleblowers

As in most research related to corruption, case studies revealed sensitivities: some institutions contacted were reluctant to provide information and a number of respondents preferred to remain anonymous (as indicated in their consent form). While it is typical for interviewees to be cautious when discussing sensitive matters and reluctance can also be due to inadequate information or availability of time, it can also suggest substantial care to avoid possible adverse consequences (individual or institutional) of providing certain information or opinion.

This raises the question of whether institutions in the region - in this case, in the three countries where the study was conducted - are sufficiently advanced in terms of protection of whistleblowers from reprisals. This issue acquires particular relevance in the event that those reporting corruption and lack of integrity come across organized crime, proliferating rapidly in several countries in the region.

4.2.9 Steps are needed to buffer Public Financial Management progress from external impacts

Many international agencies have financed in Latin America a wide variety of programmes aimed at improving public sector management (e.g. through integrated financial management systems, public employment reforms, modernisation and reforms of tax and customs administration) and promoting accountability and transparency in government (e.g. through access to information laws, introduction of information and communication technologies in government, judicial reforms, public procurement reforms, training of judges and prosecutors, strengthening of CSOs, training of journalists). While more analysis and research is needed to understand the impact of these projects, many times programmes yield positive results at the outset, but are undermined by subsequent governments, crises, economic or political constraints or corruption.

4.2.10 Encourage institutional stability and consolidationl

An extremely important lesson refers to the need for stable institutional frameworks that incorporate monitoring and evaluation systems appropriate to the context of each country, ensuring that they function consistently over time. The aforementioned ECLAC publication (Rojas Ortuste, 2014) points out that in the case of Chile, the institutional framework and sustainability of the regulatory model has allowed the Superintendencia de Servicios de Saneamiento (SISS) to accumulate a database with records of nearly two decades and of all urban water and sanitation companies, enabling the monitoring and evaluation of their management, and making it possible to establish the characteristics of the model company for each of them in the tariff-setting processes.

4.2.11 Financial independence of regulators

Another key factor is to ensure the financial independence of the regulators, especially in relation to WSS utilities. This reduces undue influence and corruption risks in the regulatory institutional environments, in which many regulators obtain their revenues through a fee or aliquot that comes from the providers they regulate.

4.2.12 Greater control over contracting

A more recent study, commissioned by the Inter-American Development Bank (IDB) (IDB, 2020a), provides lessons to achieve greater control over contracting, where corruption risks in the water and sanitation sector are centred. Among others, it points out:

- Corruption risk assessments should be adopted, drawing on available databases and state-of-the-art methodologies for measuring corruption risk, through which risk assessment frameworks can be developed and incorporated into decision-makings.
- Data on public procurement should be improved, obtaining information that can be effectively used for policy development. In particular, errors in data and omitted fields should be reduced, applying procurement rules more rigorously. National public procurement databases could be expanded in scope, to cover a wider range of impacts and indicators related to corruption risks.
- Public procurement costs should be monitored and the impacts of corruption on the prices and quality of public procurement quantified. Governments, and especially anti-corruption agencies or supreme audit institutions, could regularly monitor the costs of corruption in order to better steer investments in anti-corruption activities from a cost-benefit perspective.

4.3 Considering the 3 Rs in the LA Context

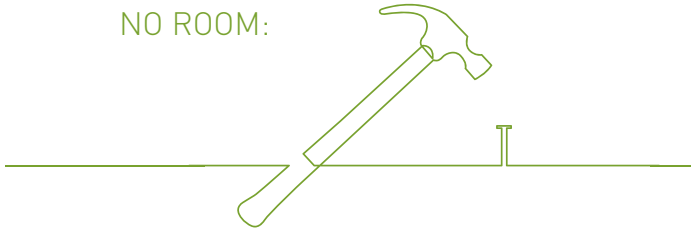
In terms of strategic ways to mitigate corruption risks ("no reason"; "no room"; "no reprieve") the following can be preliminarily concluded:

NO REASON:

in most Latin-American countries, corruption is endemic at all levels (institutional, social, etc.); people "live" with this phenomenon, even at the subsistence level. In this sense, Indij & Hantke Domas (2013) highlight the low awareness about the consequences of the problem and that - with few exceptions - the water and sanitation sector has not received sufficient focus in the fight against corruption.

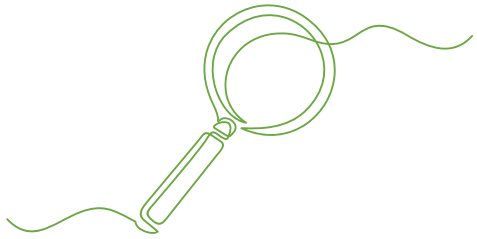
The path of "no reason" raises the serious challenge of the need to change social norms in order to weaken the "rationalisation" of integrity breaches and acts of corruption. There are examples of inducing positive social and institutional change on this issue, with lessons that deserve to be disseminated. An active citizenry and independent media are an important, but insufficient, element of this process.

NO ROOM:



In the last decades almost all countries in the Latin American region have progressively incorporated a series of laws, instances and instruments to reduce spaces and margins for integrity failures and corruption. International agreements have played an important role in promoting this process, in particular the IACAC and UNCAC. Digital tools, such as e-procurement and identification of red flags through big data analysis can significantly assist in this process.

NO REPRIEVE:



In most countries in Latin America, there is a perceived increase in the number of complaints and investigations in relation to breaches of integrity and acts of corruption. Institutional frameworks and legal instruments to investigate and sanction acts of corruption have been strengthened or (new) ones have been created, among others at the level of justice systems (particularly: prosecutors' offices), broader use of investigation tools and international cooperation mechanisms.

However, it appears that levels of effective and dissuasive sanctioning still remain relatively low. In this sense, early and visible achievements, such as the prosecution of high-level officials, can be essential to create space for credibility and generate sustained pressure for reforms.

4.4 Recommendations

Corruption and integrity failures can significantly reduce the value of present and future funding in providing universal safely managed drinking WSS in Latin America. As this report has illustrated, it is essential to assess the context for integrity interventions at a range of levels. Below are some key recommendations that can be considered to improve integrity in the financing of the water and sanitation sector in Latin America. These recommendations complement the recommendations made in the Water Integrity Global Outlook (WIN, 2024): Integrity in Water and Sanitation Finance.

Strengthen Public Financial Management

1. Define clear roles and responsibilities
2. Set conditions for access to public funds
3. Improve integrity in procurement
4. Introduce open contracting and e-procurement
5. Blacklist corrupt companies
6. Encourage and protect whistleblowers
7. Use international systems and standards for integrity in governance
8. Ensure financial transparency
9. Invest in incorporating (better) monitoring systems in institutions
10. Institute integrity safeguards for disaster management

Enable Stakeholder Engagement

1. Involve the public in making decisions about finance
2. Empower civil society and the media
3. Strengthen Community Organisations
4. Strengthen training for all sector actors— with an integrated component on integrity
5. Invest in governance and integrity programmes
6. Anti-corruption and the private sector

Promote a Culture of Integrity

1. Build a culture of integrity in institutionss

4.4.1 Strengthen Public Financial Management

Effective PFM is essential for a well-functioning administration, sustainable resource management, and service delivery, including in times of emergency. Above all, effective PFM requires more transparency (especially in areas such as procurement), data tools and robust processes to swiftly detect corrupt practices, and strong multi-stakeholder oversight.

Define clear roles and responsibilities

Implement the institutional design principle of **clearly separating functions that could potentially imply conflicts of interest**. For example, municipalities should not have regulatory functions if they at the same time are in charge of providing WSS. There are three areas where potential conflicts of interest could be minimised: a governing body in charge of national policy; an independent body with technical capacity that oversees the provision of services (regulator); and legal entities that provide services, and that can be held accountable and sanctioned in case of non-compliance and/or misconduct (Rojas Ortuste, 2014).

Set conditions for access to public funds

Consider **creating or expanding conditions under which service providers can access public funds**, capital markets or funding from multilateral agencies, depending on their degree of compliance with corporate governance standards, degree of transparency, implementation of anti-corruption measures, and certification (Campos & Santiso, 2018).

Improve integrity in procurement

Improve **controls over procurement**, where corruption risks in the WSS sector are focused. Open contracting and e-procurement are powerful ways to enhance transparency, reduce discretion, and minimise opportunities for misconduct (WIN, 2024). Specifically, there is a need to (i) improve the collection and processing of procurement data, (ii) reduce the degree of error with respect to collected data and omitted fields, (iii) adopt corruption risk assessments, using available databases and state-of-the-art methodologies, (iv) develop risk assessment frameworks and their incorporation into decision making, and (v) calculate the impacts of corruption on prices and quality of public procurement, to better understand the costs of corruption and to guide anti-corruption measures also from a cost-benefit perspective (see for more details: IDB, 2020a).

Introduce open contracting and e-procurement

Public procurement is extremely vulnerable to corruption, assisted by a lack of transparency. Open contracting forces contractual information into the open and, by doing so, reinforces both the 'no room' and the 'no reprieve' pathways.

Open contracting should be applied across all contracting, including emergency funding, which is particularly vulnerable to misuse and corruption.

Open contracting brings together e-procurement, the use of open contracting data standards, and machine-readable procurement data. In e-procurement, an electronic system replaces paper-based procurement processes with a largely automated online process. It streamlines elements of procurement and finance operations (Smith, 2017).

E-procurement systems offer improved spending visibility and control. Benefits include improved efficiency, transparency, equity, fairness, encouragement of local business and lowered transaction costs. There are several ready-made products for e-procurement that can be configured according to the relevant legislation and processes of the country.

The data from e-procurement systems can play a crucial role in supporting the implementation of automated, proactive fraud detection systems, or integrity filters in the system. These filters instantly review all transactions, unlike audits that only examine sample transactions. They effectively block irregular processes, such as bids from companies that are blacklisted, and promptly alert the contracting authority and oversight bodies to potential fraud in real time. Additionally, they create comprehensive audit trails and digital evidence for auditors and investigators.

Open data refers to procurement information that is made available for free and in formats that are machine-readable and can be reused for any purpose. **When water and sanitation authorities make public contracting information available openly, they strengthen their transparency and accountability. In addition, civil society can analyse the available data to assess public spending and raise red flags**.

The Open Contracting Partnership (OCP) has developed a set of Open Contracting Data Standards (OCDS), which are gaining momentum (currently being implemented by around 50 governments) and have the potential of becoming a global norm. OCP and the Infrastructure Transparency Initiative expanded the original OCDS into the Open Contracting for Infrastructure Data Standards.

Blacklist corrupt companies

Blacklisting, or debarring, is a practice where individuals or entities proven to be involved in corrupt or fraudulent activities are barred from participating in certain business or government activities, usually for a specified period. **Blacklisting is a form of deterrent designed to reduce corruption by increasing the consequences of fraudulent behaviour.**

Institutions like IDB maintain publicly available blacklists of contractors found guilty of malpractice, barring them from further engagement. Clearly blacklisting is more effective when institutions or countries share information, preventing companies blacklisted in one region or institution from simply moving their operations to another region or institution. Collaboration platforms like the cross-debarment agreement signed in 2010 by the African Development Bank Group, Asian Development Bank, European Bank for Reconstruction and Development, Inter-American Development Bank Group, and the World Bank Group, are essential to reinforce such measures (African Development Bank Group, n.d.).

Encourage and protect whistleblowers

Whistleblowing is an important tool in the anti-corruption fight and a means to protect organisations against legal, reputational and financial harm. It should be encouraged and protected at all levels. Alongside the safeguards and transparency embedded

in PFM systems, countries commonly establish mechanisms for reporting corruption by the public and officials. Additionally, they institute whistleblower protections and establish specialist anti-corruption agencies with the power to investigate and sanction corruption, although not all countries have sufficiently strong whistleblower protection laws. **Many countries require institutions to implement internal whistleblowing systems. Even where this is not required, organisations should implement such systems.**

A strong whistleblower policy should include:

- A **safe, confidential and easily accessible reporting mechanism** for staff to report unethical or illegal behaviour that they witness either or are asked to participate in.
- A **commitment to protecting whistleblowers from retaliation** in relation to their reporting of violations (such as demotion or firing), and
- **Mechanisms to investigate and enforce** this commitment, such as disciplinary action against anyone who violates the policy.

Use international systems and standards for integrity in governance

International systems and standards for the governance of institutions can be adopted to promote integrity in the sector. The AquaRating assessment system is a methodology to achieve a characterisation of the management and delivery of WSS in a given area and time period. In Latin America this tool is promoted by IDB. AquaRating can include a focused analysis on corporate integrity for water and sanitation utilities (Cubillo et al., 2022). Similarly, the International Benchmarking Network for Water and Sanitation Utilities (IBNET) has indicators that allow water and sanitation utilities to measure their governance and integrity.

WIN's Integrity Assessment for utilities—part of the InWASH tool for integrity management—includes details on the relevant financial information to disclose, including, at minimum, revenue, profit, cash flow from operating activities, gross investment, return on equity, equity/asset ratio, dividends, audit reports, and tariff structure. For a maximum score on the relevant indicators, utilities would have to publish up-to-date financial statements both in their original format and in a summarised form to make them more easily understandable. It would also have evidence to show it fulfils return of investment (ROI) requests systematically and in a timely manner.

ISO has created a series of norms and standards related - directly or indirectly - to the quality and integrity of drinking WSS (including issues on finance).

For efficiency and integrity purposes, where feasible, drinking water and sanitation service providers should seek certification in one or more of these technical and management standards. ISO 37001, Anti-Bribery Management System, has quite demanding requirements, mostly appropriate to larger entities or companies. For smaller companies, the use of a national standard or code of practice could instead be encouraged as a reference; if such a code does not exist, action could be urged to establish or to use a similar standard (WIN, 2024).

BOX 1: ISO NORMS AND STANDARDS FOR MEASURING QUALITY AND INTEGRITY IN WATER AND SANITATION SERVICES

ISO 9001: Applies to the quality management systems of public and private organisations, regardless of their size or business activity.

ISO 26000: Guidance on social responsibility: sets out the definitions, principles and core materials of corporate social responsibility.

ISO 37001: Anti-bribery management system that specifies requirements and provides guidance for establishing, implementing, maintaining, reviewing and improving an anti-bribery management system.

ISO 24510: Guidelines for assessing and improving service to users, provides guidelines for assessing and improving drinking water and wastewater service to users.

ISO 24512: Guidelines for the management of drinking water utilities and for the assessment of drinking water services.

Source: IDB, 2021c.

Ensure financial transparency

Detailed, accessible financial information is required to reduce the risk of corruption in the water and sanitation sectors. Transparency about the sources of funding and how they are used, such as the scale and type of projects, is important as a basis for identifying integrity risks. This can support the identification of hidden use or misrepresentations around how funds are used, such as in resource extraction or climate greenwashing. This includes traditional sources of funding, innovative financing, and climate financing. Financial transparency is also important in ensuring that national WASH accounts are used and linked with policy objectives and strategic financing plans.

Financial transparency is crucial at different levels and utilities also have a role to play. WIN's Integrity Assessment for utilities—part of the InWASH tool for integrity management—includes information on the relevant financial information to disclose, including, at minimum, revenue, profit, cash flow from operating activities, gross investment, return on equity, equity/asset ratio, dividends, audit reports, and tariff structure. For a maximum score on the relevant indicators, utilities would have to publish up-to-date financial statements both in their original format and in a summarised form to make them more easily understandable. It would also have evidence to show it fulfils ROI requests systematically and in a timely manner.

Regulators and utilities should adopt standards for **financial transparency** including access to public records, requirements to publish financial information and incorporating global best practices such as recommendations from the Open Government Partnership and in model legislation from the Organisation of American State. Independent regulators should be in place to enforce these standards.

Invest in incorporating (better) monitoring systems in institutions

Incorporating or improving monitoring and evaluation systems within anti-corruption agencies, supreme audit institutions and even at the level of CSOs is often an effective measure to detect areas and sources of major integrity failure and corruption and to target anti-corruption policies and measures effectively. It is essential that monitoring and evaluation systems are structurally incorporated into the institutional framework and that they function adequately and permanently.

Institute integrity safeguards for disaster management

As a result of climate change and increasing water demand, Latin American governments are increasingly forced to respond to the impacts of disasters such as earthquakes in Ecuador or forest fires in Chile and Brazil. In anticipation of such emergencies, disaster risk funding is fortunately on the rise. Yet it is essential to mitigate against related integrity risks. When **emergency declarations** are made public entities involved, including those in the affected water and sanitation sectors, can make use of extraordinary powers granted through such declarations of emergency, with all the additional risks of misconduct that this implies.

Climate emergencies, natural and human-made disasters create the need for rapid disbursement of funds for recovery and reconstruction: in most PFM legal frameworks these funds are disbursed through shortened procedures with fewer checks and less transparency, increasing the risks of corruption and reducing the likelihood of corruption being detected. The challenges are higher in countries that are grappling with systemic corruption, have poor internal control systems, or are politically instable. Nevertheless, there are measures that can be taken to limit the integrity risks along the various phases of disaster management: prevention, preparedness, response, and recovery. Particular focus should be given to improvements for the first two phases. Having strong integrity procedures in place from the onset can safeguard vital relief funding and recovery investments. Fenner and Mahlstein (2009) discuss means of curbing corruption in natural disaster situations.

4.4.2 Enable Stakeholder Engagement

Stakeholder engagement in financial decision-making in water and sanitation is crucial for reducing corruption and improving integrity. This is especially the case for high-risk decisions, related to tariff setting, subsidy policies, location and nature of infrastructure investment, and the long-term financial impacts of loans. Such engagement requires dedicated and inclusive avenues for participation and social accountability, alongside capacity building to make them effective.

Civil society organisations and the media play critical roles in establishing a culture that tolerates no corruption, through vigilant monitoring, investigation, and advocacy to remove corrupt politicians, staff and companies from positions of power and influence (WIN, 2024).

Involve the public in making decisions about finance

Involvement of the public in decision-making on finance in the water and sanitation sectors is crucial for reducing corruption risks and improving integrity, for example in tariff setting, subsidy policy and decisions that have long-term financial impacts on water users, such as loan financing.

Civil society should be considered a strategic ally that can contribute to better management of integrity risks, anticipating or detecting integrity failures, making them public, and requiring their sanction. CSOs and the media can -and should- play an important role in monitoring integrity and promoting social accountability in the water and sanitation sector. There are several tools that can be used by civil society and the media, including analysing budget execution reports, expenditure tracking and community monitoring (for more details: see WIGO 2024).

Empower civil society and the media

Citizen groups, non-governmental organisations (NGOs), journalists, and activists need not just to be free but actively encouraged to hold the powerful accountable. In the water and sanitation sectors, this entails promoting transparency, community participation, and accountability mechanisms at all levels, from local water management to national policymaking. Actors in the water and sanitation sectors can also seek out allies in the broader social justice space, which can increase their impact.

Strengthen Community Organisations

Partnerships between municipalities and community organisations have proven to be of great importance, as they facilitate the provision of WSS, especially in rural areas, while also respect traditional and community organizational structures.

It is noteworthy that these partnerships are being replicated throughout the region (including experiences in Ecuador, Colombia and Mexico), demonstrating their effectiveness and relevance. However, public policies are needed to create the necessary conditions to increase public resources, both municipal and national, allocated to rural areas. Furthermore, it is essential to improve the availability of technologies adapted to the local context and strengthen the capacity of communities to adopt measures of transparency, accountability, participation, and anti-corruption. These actions will not only complement self-supply efforts but also grant the recognition that community organizations deserve.

Finally, it is essential to continue exploring alternative models of public-community partnerships. To achieve this, research and South-South knowledge exchange are fundamental.

Strengthen training for all sector actors— with an integrated component on integrity

Donors and international finance institutions should increase resources allocated for technical and managerial training in the sector-- ensuring that it includes a focus on mitigating corruption and integrity risks in the use of funds. This is needed at different institutional levels and social-community levels, namely:

- Decision-makers in charge of public policies in WSS (governing bodies and others).
- Regulators (national/subnational).
- Local (rural) municipalities).
- Water and sanitation service providers (public; private).
- Other relevant stakeholders (community organisations; consumer groups; etc.)

For example, multilateral agencies are well-positioned to cooperate with national government, while NGOs and other entities can work with community organisations, particularly at the level of municipalities and small suppliers.

When conceived with an integrated approach, training and technical assistance will not only improve the quality of WSS investments and services, but will also help to combat local vulnerabilities in terms of corruption risks and integrity failures, by including issues of transparency, accountability, participation and anti-corruption measures (TAPA).

Invest in governance and integrity programmes

Multilateral agencies that support the sector (Inter-American Development Bank, World Bank, Development Bank of Latin America, others) **should continue to support measures to reduce corruption and improve integrity**. If these organisations adopt more uniform mechanisms in promoting integrity, this would add an additional regulatory and political layer onto corruption control strategies (Indij & Hantke Domas, 2013). In addition, regulators can require water and sanitation service providers to implement integrity programmes.

At the same time, literature analysing corruption in the sector in Latin America is sorely lacking. Where it does exist, there is little detail or depth, with few exceptions. Financial analysis and investigations are relatively scarce. Studies of how wider social platforms influence policy in its different aspects (agenda setting, finance, implementation, etc.) are needed.

Donors and governments should fund larger, ongoing **studies by academics and civil society** on the forms and expressions of corruption and lack of integrity in the water and sanitation sector in LA, particularly focused on finance. The knowledge gained can help to refine anti-corruption policies, as well as strategies at both public and private (civil society; business) levels. This may include big data analytics research, which can be used to detect corruption in procurement contracts and in other procedures (see also: WIN, 2024).

Donor and international financial institutions, as well as ministries, regulators, and utilities, can use data tools, including the Framework for Investment in Infrastructure Planning (FIIP) developed by WIN, Infrastructure Transparency Initiative (CoST), and IDB to analyse corruption and integrity risks on the early phases of water services infrastructure projects (strategic planning, screening and appraisal including feasibility studies, and budgeting and approval) (WIN, 2023; IDB, 2024).

Anti-corruption and the private sector

While elected governments and officials are most often under public scrutiny, the magnitude of corruption within private companies, from the very large to the very small, must also be recognised and addressed. The big amount of small private sector actors are important players in the provision of water and sanitation, often reaching the most marginalised. However the lack of clear regulatory frameworks leaves scope for exploitative practices by less scrupulous providers, including high costs of water and sexual corruption. Improved oversight and accountability are needed.

Different service delivery models, from full private sector provision to public-private partnerships, carry specific integrity challenges. Guidelines on tendering and conflict of interest aim to improve procurement processes and limit risks of collusion or bid rigging, yet enforcement remains difficult, especially in

contexts of systemic corruption. The power and information imbalances between governments and large private companies, increasing financialisation, along with the challenges of contract enforcement and conflict resolution, further complicate regulation and oversight and raise the potential for integrity failures.

The fight against corruption cannot be achieved by government in isolation. As evidenced in Brazil, it is critical that the private sector addresses corruption risks and works with government and civil society to reduce corruption. Significant improvement in integrity in a society cannot be achieved without the **private sector** being part of the solution. Businesses have a responsibility to act as good corporate citizens, nationally and internationally. There is evidence that reducing corruption risks is good for business and important in protecting the reputation of companies. Many forms of corruption are also illegal, and there are significant consequences for companies that are caught violating the law.

Many companies have developed robust integrity and compliance programmes and should pursue these efforts. However, there are companies that are involved in corrupt activities and some that are involved in legal but unethical practices.

Integrity can be encouraged in private sector companies by advantaging those who demonstrate good anti-bribery, or more generally, anti-corruption practices. This could be done by large companies obtaining accreditation under ISO37001, the global anti-bribery standard. For smaller companies, for which ISO37001 may be excessive, reference to an existing national standard or code of practice could be a useful first step. If such a code does not exist, action could be urged to establish such a standard. National authorities should then be encouraged to tie success in tenders to compliance with the standard or a set of expected behaviours. This can be done at either of two levels:

- A 'hard' level where eligibility to even bid for a tender requires the company to have the standard; or
- A 'softer' version, used at the tender assessment stage, where extra marks are given in the evaluation for those who possess the standard against those which do not.

4.4.3 Promote a Culture of Integrity

Build a culture of integrity in institutions

Building a culture of integrity within institutions, organisations and projects can be achieved through the promotion and rewarding of integrity, and by setting expectations for integrity from all stakeholders, including private sector players and participants in multi-stakeholder initiatives. Careful assessments of the norms that enable corruption can be an important first step. Other steps could include:

- **Build multi-stakeholder platforms,** for better input to decision-making, to build momentum through collective action, and to strengthen oversight.
- **Influence social norms related to integrity,** analysing norms and highlighting their impact on peers, training for and rewarding integrity from all players, both formal and informal.

4.5 Conclusion

Addressing integrity failures in the financing of water and sanitation sectors is not merely a financial necessity but a social and economic imperative. The costs of inaction—manifesting as poor service delivery, inflated infrastructure costs, and compromised water quality—disproportionately affect marginalised communities and undermine broader development goals. By strengthening public financial management, encouraging civil society oversight, and shifting social norms, we can create resilient water and sanitation systems that serve everyone, especially those most in need.

Over two decades ago, a study on corruption in Latin America by Parker et al. (2004) made two points that are equally relevant today. First, there are no quick fixes. Fighting corruption is a complex political task that requires wide-ranging reforms in government and the economy. A long-term commitment is required to gain public confidence in efforts to prevent and control corruption and to change social norms. Anti-corruption strategies, whether at the national or regional level, require a long-term vision and a clear understanding that while fundamental change begins now, some benefits may be seen over years. Second, it is necessary to balance visible, short-term goals that raise awareness and action even if they only touch a small part of the problem, with deeper and more difficult systemic and social norm reforms that take much more time and effort but attack corruption at its roots. Early and visible achievements, such as the prosecution of high-level officials can be essential to create space for credibility and generate sustained pressure for reforms. Investigations and penalties imposed on corrupt businesspeople and private companies may also serve as deterrent and encouragement for them (and others) to invest in compliance programs, which prevent corruption.

By fostering a culture of integrity, we can ensure that available funds are used effectively, projects are prioritised correctly, and services are delivered equitably and sustainably. This approach requires the commitment and cooperation of all stakeholders, from government agencies to CSOs and private sector partners, each playing a pivotal role in promoting transparency, accountability, and ethical practices.

While external partners and donors can encourage anti-corruption activities, leadership and strength must come from within. In terms of institutionalism, the best path for development and reform is one that reflects on and questions its own procedures, its ways of thinking and acting, in a life-giving and continuous process of organisational re-engineering, aimed at continuous improvement of results.

Now is the time to act decisively and collaboratively to ensure that the right to water, sanitation, and a clean environment is realised for all.

ANNEXES

Annex 1: Acronyms

ABCON SINDCON	Brazilian Association of Private Water and Sanitation Utilities (Associação e Sindicato Nacional das Concessionárias Privadas de Serviços Públicos de Água e Esgoto)
ANA	National Water Agency (Agencia Nacional del Agua)
ARCA	Agency for Water Regulation and Control
BDE	Development Bank of Ecuador (Banco de Desarrollo de Ecuador)
CAF	Development Bank of Latin America and the Caribbean (formerly: Corporación Andina de Fomento)
CCC Index	Capacity to Combat Corruption Index
CENAGRAP	Support Centre for the Management of Rural Drinking Water (Cañar canton)
CGE	Comptroller General of the State (Contraloría General del Estado)
CLOCSAS	Latin American Confederation of Community Organisations for Water and Sanitation Services (Confederación Latinoamericana de Organizaciones Comunitarias de Servicios de Agua y Saneamiento)
CoST	Infrastructure Transparency Initiative
CRI	Corruption Risk Index
CSO	Civil society organisation
ECLAC	Economic Commission for Latin America and the Caribbean
EPS	Sanitation Service Providing Company (Empresa Prestadora de Servicios de Saneamiento)
ETAPA EP	Municipal Public Company of Telecommunications, Drinking Water, Sanitation and Environmental Management– Cantono f Cuenca (Empresa Pública Municipal de Telecomunicaciones, Agua Potable, Saneamiento y Gestión Ambiental del cantón Cuenca)
FIIP	Framework for Investment in Infrastructure Planning
FTCS	Function of Transparency and Social Control
GLAAS	UN-Water Global Analysis and Assessment of Sanitation and Drinking Water
GDP	Gross domestic product
GPS	Global Positioning System
IACAC	Inter-American Convention against Corruption

IDB	Inter-American Development Bank
InWASH	Integrity in WASH (Integrity Management Toolbox)
ISO	International Organisation for Standardisation
MEF	Ministry of Economy and Finance
MOP	Ministry of Public Works
MVCS	Ministry of Housing, Construction and Sanitation
OCP	Open Contracting Partnership
OCSAS	Community water and sanitation organisations (Organizaciones comunitarias de servicios de agua y saneamiento)
OCDS	Open Contracting Data Standards
OECD	Organisation for Economic Co-Operation and Development
ROI	Return on Investment
SABESP	Estate water and sanitation company of São Paulo
SEDAPAL	Servicio de Agua Potable y Alcantarillado de Lima (Lima Potable Water and Sanitation Service)
SENAGUA	National Water Secretariat (Secretaría Nacional del Agua)
SERCOP	National Public Procurement Service (Servicio Nacional de Contratación Pública)
SISS	Superintendency of Sanitation Services (Chile)
SSSR	Subdirectorate for Rural Sanitation Services
SUNASS	Superintendencia Nacional de Servicios de Saneamiento
SDG	Sustainable Development Goals
UNCAC	United Nations Convention against Corruption
USD	US dollar
WB	World Bank Group
WIGO	Water Integrity Global Outlook
WIN	Water Integrity Network
WSP	Water and sanitation providers
WSS	Water and sanitation services

Annex 2: Methodology of study

The methodology of this study was structured through the following phases/components:

i. Preparatory phase: elaboration of terms of reference, constitution of the study team (senior researcher; local researchers for the three case studies: Peru, Ecuador, Brazil), definition of topics and research questions (see: Annex 3), as well as corresponding work plans and agreements.

ii. Literature review on the global situation, barriers, trends and integrity challenges regarding finance and service in the water and sanitation sector in the Latin American region, by the senior researcher.

iii. Conducting the three case studies - in Peru, Ecuador and Brazil, respectively - addressing specific experiences and issues around risks of corruption and integrity failures in the water and sanitation sector.

iv. Compilation of the three case studies in a single document, included drafting a balance on main findings and reflections.

v. Preparation of the final report (WIGO LA 2024), integrating the regional literature review, the compilation of the three case studies, the balance of findings and reflections, as well as presenting the main conclusions and recommendations.

It should be noted that the methodology of the WIGO LA 2024 study did not start from the beginning with a fully defined methodology. Rather, the methodological process matured in certain aspects over the course of the project. Thus, for example, adjustments were made in terms of theme and focus around the case studies, although the same selection of countries was maintained (Peru, Ecuador, Brazil). Also, the research questions – global and country-specific - experienced some modifications in the initial phases of the project, so that they could be better tune in with the selected cases.

Regarding the literature review, an extensive search was carried out for relevant and specific information on the issue of finance and services in the drinking water and sanitation sector in the Latin American region. This review was conducted mainly by using internet searches and available documents (studies, articles, etc.), downloadable or provided by colleagues. In addition, databases from different entities and platforms were used, such as CEPALSTAT, JMP, TI, GLAAS and others.

With respect to the case studies, once having defined the thematic focus and respective research questions as reference framework, the local researchers began their work by compiling relevant documentation regarding the country context, as well as specifically on the subject of study. They also identified and contacted a set of key informants to be interviewed in order to obtain first-hand information and get their points of views. The selection of these informants was based on the criterion of achieving a diversity of people - coming from different spheres - to be interviewed. As part of the interview protocol, each interviewee was asked to sign a statement of consent regarding the use and discretion of information (see Annex 6).

Using the information gathered and incorporating the information obtained through the key informant interviews, the researchers proceeded to prepare the respective case study documents. The drafts were extensively reviewed and commented on by the senior researcher in charge of the research at the regional level, in interaction with the local researchers. Coordination and discussion meetings were also held between the senior researcher, the local researchers and the project coordinators (WIN). The MS Teams

virtual platform was used for holding meetings throughout the entire process.

The final drafts of the case studies were commented on by the project coordinators and WIN staff members at headquarter, by IDB personnel, and with additional comments by the senior researcher. With these inputs, the local researchers proceeded to issue the final versions of case studies. For compilation purposes, these final versions were reviewed by the senior researcher on editorial consistency, translation (Spanish-English or vice versa) and additional adjustments.

Based on the analysis of the three case studies, the senior researcher drew up a balance of findings and reflections from the three case studies and integrated it into the compilation document. This balance section was discussed with the project coordinators, after which adjustments were made to the document.

Following the main components of the study - the regional literature review, the final compilation of the three case studies, the section on findings and reflections, as well as the main conclusions and recommendations - the draft Final Report (WIGO LA 2024) was assembled. A synthesis of this report, prepared by the senior researcher in the form of a powerpoint, was presented and discussed with WIN staff and local researchers. Based on the comments received and adjustments made, the WIGO LA 2024 Final Report was refined. The Final Report was submitted to WIN in English and Spanish language

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Annex 3: Matrix of research questions

Global research questions (Latin America region)	Research questions for the three case studies		
	PERU	ECUADOR	BRAZIL
a) What is the overall situation and trends with regard to financing and service provision in the water and sanitation sector in Latin American countries?	1. How is drinking water normally distributed and monitored in informal settlements in Lima outside the coverage of the SEDAPAL network?	1. What is the situation and trends with regard to financing in the water and sanitation sector in Ecuador?	1. What are the international standards and best practices on privatisation of water and sanitation services, and how does the current Brazilian scenario of legal reforms in the water and sanitation sector relate to them?
b) What are the main integrity risks in financing and service delivery in the water and sanitation sector in the countries of the Latin American region?	2. What are the main risks and integrity failures to which free water distribution by tanker trucks in informal settlements in Lima is exposed?	2. What are the main risks and integrity failures in water and sanitation services in Ecuador?	2. What are the main corruption and integrity risks in the privatisation process of water and sanitation services in Brazil?
c) What is being done and what can be done to improve integrity in financing and service delivery in the water and sanitation sector in the Latin American context?	3. What control actions have been introduced for efficient management based on integrity in the process of free drinking water distribution by tanker trucks in informal settlements in Lima, and what have been the results?	3. What progress have public-community alliances made in promoting integrity in the water and sanitation sector? What are the main challenges and tasks ahead to institutionalise them?	3. How to mitigate corruption and integrity risks in this process and what efforts are being made by governments and private companies to ensure and evaluate effectiveness?

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Annex 5: Informed Consent Form

I agree to participate in the research carried out by the undersigned, Mr. ....., of the Water Integrity Network (WIN), an organisation based in Berlin, Germany (website: https://www.waterintegritynetwork.net/), on the role of integrity in sustainable financing in the water and sanitation sector.

	YES
The undersigned researcher explained to me the objectives of the research and why I am being asked to participate.	
I understand that my participation in this research is voluntary and that there are no direct benefits to me. I agree to participate in an interview in person or online.	
I allow my interview notes (and recording if I consent) to be stored without identifying information in a password-protected file on a computer that remains in the possession of the researcher signing this form.	
I understand that any and all personal data (such as name, contact information, address) will only be available to the researcher and supervisor. They will be protected in accordance with the General Data Protection Regulation (GDPR) of the European Union.	
I allow the researcher to record the audio/video interview.	

SELECT AN OPTION:

I do not authorise the publication of my name, organisational affiliation or job description in the study. My statements may only be used and quoted anonymously or by using a pseudonym.	
I authorise the use of the following identifiers in connection with my declarations: tick your choice(s): - My name. - My organisational affiliation. - Description of my work.	
I have read and understood the contents of this form. My questions have been answered and clarified. I have been offered to keep a copy of this consent form signed by the investigator..	
Place and date: Name and signature of the researcher:	Place and date: Name and signature of the participant:

If you have questions about the research or your participation, please contact me as researcher (<e-mail>) and/or the principal investigator Jan Hendriks (jhsmhendriks@gmail.com).

Annex 6: Glossary

Corruption: The abuse of entrusted power for private gain

Integrity in water and sanitation: the use of vested powers and resources ethically and honestly for the delivery of sustainable and equitable water and sanitation services in the public interest (WIN, 2021).

Public Finance Management refers to the rules, institutions, policies, and processes that govern the use of public funds, from revenue collection to the monitoring of expenditures.

A Public Private Partnership is a long-term agreement between a government agency and a private enterprise to offer a public service or a public asset.

Self-supply: Self-supply of water and sanitation refers to incremental improvements to water and sanitation services, mainly financed by the user(s).

Sextortion/ sexual corruption: Sexual corruption occurs when a person with entrusted authority abuses this authority to obtain a sexual favour.

The 3 Ts: Taxes, Tariffs and Transfers: The 3Ts concept describes the three sources of finance for the water and sanitation sectors: monies provided by domestic taxpayers through government ("taxes"); monies paid by users of the services ("tariffs"); and monies provided by foreign countries, philanthropists, and/or individual donors ("transfers").

WIN Water Integrity Network