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[Water. Power. Conflict.](#)

# Private vs. Public

Thoughts on Regulatory Matters  
Relating to Water Supply in Latin America

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While the wave of public service privatisation in Latin America is waning, the underlying issue of regulation remains unresolved. The failure of many projects in the water sector after some initial successes shows that huge challenges remain, whether the water supply is in public or private hands. This is in part due to a failure to engage in a debate about a stable governance model for the region.

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Latin America is among the water-richest regions in the world. According to the World Bank, some 31 per cent of global freshwater reserves are located in this region.<sup>1</sup> But the distribution of the resource is enormously uneven. The amount of water available per inhabitant in southern Chile, for instance, is up to 1,000 times higher than in certain areas in the north.<sup>2</sup> Brazil's major cities regularly suffer from interruptions to the water supply while the country is home to the Amazon and therefore one of the world's most water-rich areas. And the region's most important industries – agriculture and mining – generate a high demand for water in many countries that has serious consequences.<sup>3</sup> At the macro level, water supply is essentially a distribution problem in Latin America. However, the distribution and transportation of the rich water resources generate a complex cascade of challenges. In terms of regulation, these regularly involve the contentious question of whether water supply management is by its very nature a task for the state or for private enterprise.

The publicly exchanged arguments follow a well-known pattern. Based on the conviction that access to drinking water has to be guaranteed as a human right, the proponents of state control call for the regulating force of the public sector to be able to guarantee that disadvantaged areas are also provided with a reliable water supply and to ensure a supply at low prices or even at no cost to the consumer. Those advocating a free market system, on the other hand, fear waste, a lack of investment, and costs rising unnecessarily in the public sector because of a lack of competition and the absence of the need for cost-effective

resource utilisation. They maintain that only a free market can guarantee efficient supply, investments and the expansion of the networks with connections at the lowest price in the long term.

It is a beautiful, simple world, in which the solution to such a challenging problem will ultimately be decided on the basis of a closed either-or question. However, in the end the well-worn debate between liberalism and paternalism may ultimately ignore the actual problems. This can be seen from the failed consolidation attempts in the water sector by both public and private operators. Time and again, both sides fail to meet their investment targets.

Latin America plays a special role in the privatisation debate in the water sector. In some countries, privatisation was pushed particularly hard, with greatly differing results. The authoritarian regimes that had characterised many of the continent's countries in the past tended to veer to political extremes, both on the left and the right side of the spectrum. Their interventions were either collectivist in nature or pursued an ultraliberal policy, such as in Chile. The climate of world politics after the collapse of the Soviet Union also encouraged the willingness to open up the market in sectors that had been under state control for a long time. While the water supply sector in Chile is virtually fully privatised and provides a high-quality service to this day, there were four privatisation projects in other Latin American countries that ended in the premature termination of the concessions. These affected Buenos Aires and Tucumán in Argentina as well

as Cochabamba and La Paz in Bolivia. After the premature withdrawal of the concessions, responsibility for water supply and sewerage was transferred back to the public sector. Particularly in Bolivia, this caused considerable disruption, revealing the sensitive nature of the water supply management.<sup>4</sup>

### A Regulatory Bone of Contention

The water supply issue no doubt represents one of the most emotive political debates. Drinking water is essential for sustaining human life – hardly less so than the air we breathe. But while the latter is generally freely available, a functioning drinking water supply requires a complex infrastructure. Due to the increasing urbanisation of the world’s population, the supply of water has turned into a huge logistical challenge.

The amount of emotion the debate about clean water evokes was last revealed in Germany during the TTIP protests. A few years earlier, statements made in December 2011 by the EU Internal Market Commissioner Michel Barnier when presenting new concession guidelines, were immediately equated by the German public to an EU diktat for the water supply to be privatised. But forced privatisation was, in fact, never mentioned. The commission directive merely envisaged giving public authorities the right to decide whether to transfer public services into private hands or to take them back under state control. But immediately, opposing voices made themselves heard and a popular petition was set up, forcing the withdrawal of the draft paper relating to the water sector. Contrary to the facts, some commentators were convinced that representatives from the multinationals had taken up the fight against the right to water.<sup>5</sup> During the negotiations on a Transatlantic Trade and Investment Partnership, the supposed enforcement of privatisation once again appeared as a post-factual poltergeist in the publicly conducted debate and helped denigrating the TTIP among wide swathes of the population.

The unspoken conviction is that only public utilities can offer an equitable supply of clean drinking water for all and that every private enterprise is enriching itself while exploiting people’s vulnerable position in their urge to satisfy as fundamental a need as that for drinking water. Only trade in the air we breathe could elicit greater outrage.

Where political debates on sensitive issues are concerned, Latin America tends far more towards extremes than Germany. Particularly in the Andes, where the cultural significance of water and water management is not to be underestimated, involving a bonding effect and an almost mystical character, is adding to the emotional content of the debate. There have been significant clashes in the past in Latin America in connection with privatisation projects in the water sector, tragically even resulting in some deaths. During protests against the Tía-María copper mine and its huge demand for water in 2015 in Peru, for instance, five people lost their lives. The following year, the human rights activist Berta Cáceres was shot and killed by an armed commando in Honduras after years of fighting against the construction of the Agua Zarca dam.

### Several people lost their lives during protests against privatisation projects in the water sector in Peru and Honduras.

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The topic of water polarises societies throughout Latin America. However, in this region in particular it becomes clear that the decision between public and private supply management by itself cannot solve the problems. Whether water is traded freely or not – the supply of water causes costs and requires a functioning infrastructure. There is a demand for water. And water is scarce. These facts immediately make it a commodity. In economic terms, however, water plays a special role. And this is not due entirely to its enormous importance for human health.







A question of distribution: Although Latin America is one of the world's water-richest regions, there are areas that regularly suffer from dry periods and drought. [Source: © Ueslei Marcelino, Reuters.](#)

The example of water can be used to illustrate practically every type of market failure in textbook fashion. Particularly natural monopolies, external effects and the properties of public goods, but also asymmetries of information affect the water sector directly or indirectly. These special properties legitimise state intervention in the water market; this also applies against the backdrop of a social market economy where the purpose of the state is first and foremost to ensure rule-governed competition and therefore to install a clear regulatory framework. The unanswered question is how far this state intervention should go. Is a state utility required as a last resort or is state regulation of private competitors sufficient?

### **The Case of Buenos Aires**

In Latin America, the debate over water supply management resulted in a number of seemingly attractive privatisation projects. These can be viewed above all as a response to the inadequate outcome of the states' water policies. Even before it made the headlines as a country in crisis from the beginning of the recession in 1998, Argentina had considerable problems with water supply management, for instance in Buenos Aires. Almost half the city's inhabitants had no consistent access to drinking water. And the sewerage situation was even worse. Delays in replacement investments caused the water network become increasingly dilapidated and supply security was greatly reduced.<sup>6</sup> This brought about a typical privatisation scenario.

A private investor takes on the ailing sector under a long-term concession and consolidates the infrastructure under market economy pressures without which the public predecessor was not able to deliver the required services. But as the investor can only generate revenues from a comprehensive network that reaches every paying consumer, everybody's situation is improved – if only because, for many inhabitants of the supplied city, a reliable paid-for connection is more useful than no connection.

### **The privatisation projects in Latin America were initiated not least due to the state's inadequate water policies.**

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However, the privatisation of water supply management in Buenos Aires failed because of a deficient regulatory framework. In retrospect, the regulatory authority ETOSS, which was specifically set up for managing the award of the concession to the French-dominated consortium *Agua Argentina* (ASAA), made fatally flawed decisions in an attempt to steer a course through the country's economic crisis. It failed, for instance, to adjust the transfer prices to the depreciating national currency. And it continued the erratic and already failed system of price regulation unchanged.

Governance failures resulted in the premature withdrawal of the concession, scheduled to run for 30 years, after just 13 years.<sup>7</sup> What happened? When the concession was awarded, it went to the bidder who was prepared to offer the lowest water price. Consequently, the award entailed a 26.9 per cent average reduction in the price to the consumer. While using such tender criteria might be suitable to ensure social peace in the immediate aftermath of a concession being awarded, it sows the seeds of unavoidable subsequent problems. After all, high investment costs can only be paid for if the appropriate capital is available. Generating funds for replacement investments is anything but easy. Consequently, there were

several renegotiations during the term of the concession. The situation escalated with the abolition of the dollar peg, which resulted in a drastic deterioration of the debt situation for ASAA due to its outside capital being set in dollars, and the consortium consequently became a loss-making enterprise for its international shareholders.<sup>8</sup>

Although the ASAA injected multiple times the amounts invested by its public predecessor, the increase was not sufficient to fulfil the contractually agreed targets. The unfavourable design of the tender process and the implausible conditions elicited bids for the contract that were far too aggressive. The low starting tariff was contractually frozen and the consortium would only be allowed to adjust it to the consumer price index every five years. In the absence of water meters, customers were charged a flat rate that differed substantially by district and eliminated the incentive to supply precarious locations. The lack of data about individual consumption made efficient monitoring virtually impossible. The contractually regulated transfer of all information risks to the operator, who would not have been allowed to make any claims against the state based on defects of information provided, was implausible in view of the great negotiating power of a water supplier. This alone illustrates that the institutional framework prevented a successful privatisation in Buenos Aires.<sup>9</sup>

### **Disparities in Bolivia**

While Buenos Aires had problems with institutional obstacles, private projects in Bolivia failed due to an inept approach to dealing with the prevailing social conditions. After having suffered from military dictatorships for years, the country asked the World Bank for loans in the 1980s. The conditions imposed in connection with the loans included the privatisation of the water supply management to relieve the government budgets. Consequently, the Bolivian government put concession rights out to tender.

Scarce reserves: Bolivia, plagued with aridity, → is especially dependent on an efficient water supply.

Source: © Monica Machicao, Reuters.





In Cochabamba, the *Aguas del Tunari* consortium, whose majority shareholder was the US construction company Bechtel, was the only bidder. It was ultimately awarded the 40-year contract, which for the most part corresponded to the terms offered by the consortium. Where prices were concerned, *Aguas del Tunari* was granted the right to apply increases upon taking over as well as an option of a further 20 per cent increase in 2002. The tariffs were determined under a price discrimination model depending on the household income of the respective city district and the amount of water consumed.<sup>10</sup>

Once the contract had been awarded to *Aguas del Tunari*, a successive escalation of events took place. While there had already been some indications of opposition before the privatisation, this threatened to get out of control with the price increase in January 2000. The price for water connections in Cochabamba was raised by an average 35 per cent. This meant a painful attack on the budgets of many households that had previously only just been able to pay their bills. *Aguas del Tunari* responded to the failure of households to pay the company by cutting their supply, which triggered vehement protests. It started off with farmers affected by the water price increases protesting, soon followed by mass protests by people assembling in the city centre to demonstrate against *Aguas del Tunari*'s pricing policy, the World Bank and allegedly neoliberal politics in general. There followed a general strike with police intervention, resulting in over 100 wounded. After renewed riots in April, the government declared a state of emergency. The subsequent clashes, which involved the military and left one person dead, made a settlement involving *Aguas del Tunari* impossible. The government ended up cancelling the concession contract unilaterally.

The criticism of the way the privatisation of water supply management in Cochabamba was conducted focused mainly on the price increases that triggered the protests. But assigning the blame for the loss of control in Cochabamba solely to the private consortium ignores the bigger picture. While the Bolivian government's

negotiating position may have been weak, the consortium did take on substantial obligations when signing the contract. This included the drilling of four new wells and a substantial expansion of the network. *Aguas del Tunari* could not take over funds from the highly indebted previous municipal operator SEMAPA. The required investments had to be funded from current revenues, as would be the delayed renovation work. To the management of the international consortium, the abrupt price increases were unavoidable, but they hit many households and businesses hard, particularly given the prevailing conditions. From a commercial perspective, the decision to increase the prices was overdue. But this was only the case if you viewed the situation in isolation from the socioeconomic conditions in Cochabamba. Because of the lack in local purchasing power, the price increases were simply not enforceable. To the local population, simplistic reactions such as that of the then manager Geoffrey Thorpe, who called for the non-paying customers simply to be cut off, was confirmation of the suspected colonial ruler mentality.<sup>11</sup>

### **In Bolivia, private projects failed because the prevailing social conditions were not adequately taken into account.**

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The case of Bolivia remains overshadowed by the disaster in Cochabamba. The World Bank recorded it as a clear failure in its statements. That said, Cochabamba was not the only water supply project in which the World Bank invested in Bolivia at the turn of the millennium; La Paz/El Alto and Santa Cruz de la Sierra also needed their water supply networks renovated at the time. In the region of La Paz and El Alto, the water network was also transferred into private hands. But here, protests such as those in Cochabamba were avoided by pursuing a different implementation strategy. The bidder that guaranteed the largest scope of network expansion was awarded the contract, and the necessary price increases were implemented by the state-controlled company

before the private bidder took over as operator. Contrary to the measures taken in Cochabamba, some areas were also treated more leniently in terms of prices, producing an average price increase of 35 per cent as well.<sup>12</sup> In Santa Cruz de la Sierra, by contrast, there was already a water supply operation run by a cooperative in place at the time of the state intervention. In this case, a General Delegate Assembly appointed senior management, and the cooperative's by-laws gave the Supervisory Board veto rights over the Management Board. Because of the cooperative's good record on fighting corruption and creating transparency with respect to the use of funds, the World Bank did not insist on a change in legal form as a loan condition. The cooperative of Santa Cruz achieved the targets set by the World Bank in full within the specified deadlines using its loans. It is also the only operator out of the three communities that has continued its operation to the present day.<sup>13</sup>

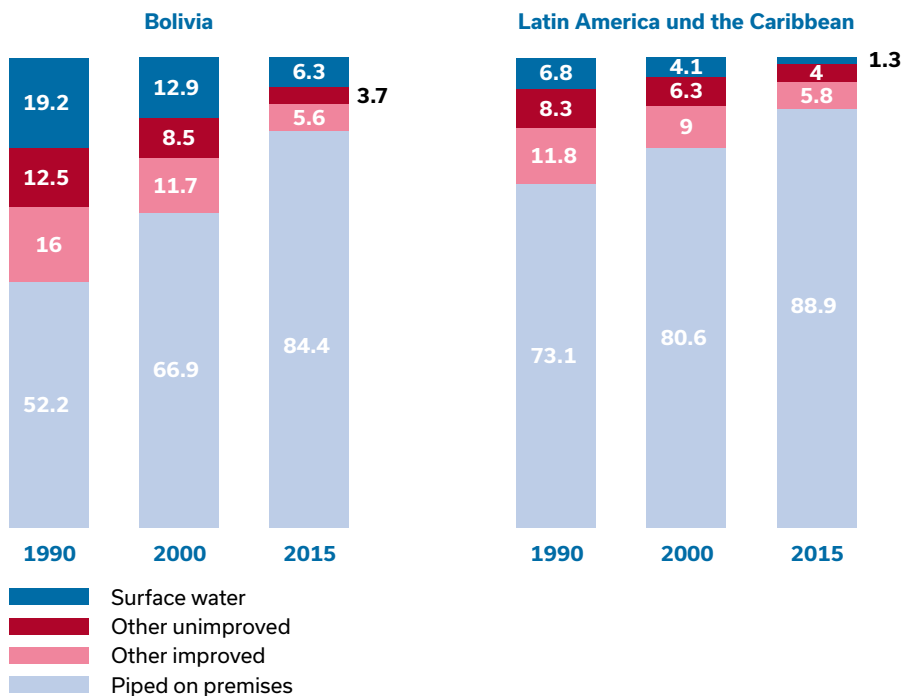
### Lessons from Bolivia

Overall, Bolivia still lags behind the average service level in the region where the water supply is concerned (cf. fig. 1).

While the achievements of the cooperative in Santa Cruz provide some hope for possible solutions, one would be naïve to believe that the entire water supply in Latin America can be set to rights by the panacea of small, cooperative municipal operations.

The system in Santa Cruz works mainly because it incorporates effective control mechanisms. The success of the World Bank investments in the 2000s has been ascribed above all to the fact that the cooperative managed to rid itself permanently of virtually any type of corruption. This eliminated one of the greatest obstacles to investment. Whether a private or a public company is responsible for a network infrastructure,

**Fig. 1: Development of the Water Supply 1990 to 2015 (in per cent)**



Source: WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (WHO/UNICEF JMP), in: <https://washdata.org> [6 Sep 2017].



corruption facilitated by opaque structures hinders both types of organisation equally. Funds are extracted from the water supply and drain away into the coffers of corrupt officials.

### Successful Privatisation in Chile

Chile provides an example of successful privatisation under the right framework conditions. The Andean state excels through good supply security and quality. With a water sector that is almost totally in private hands, Chile is in a special position worldwide. The country demonstrates that under the right conditions private water supply management is not only possible but can be successful, and that occasional failures of privatisation projects do not necessarily have to result in state intervention.

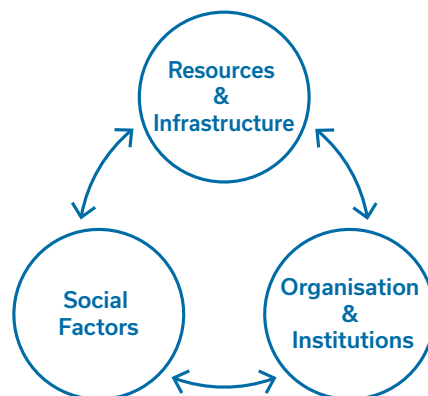
Until the end of the 1970s, the Chilean water supply system was a fragmented system in the hands of local authority operators. The supply rate in urban areas was around 80 per cent, but the proportion of households connected to a sewerage system only around 50 per cent. The country was able to increase the connection rates to 98 and 82 per cent respectively by 1988. While the legal framework concerning the water supply in Chile continues to be the subject of partly heated discussions, the country has an excellent record by regional comparison. It would be too easy to simply explain this success with the efficiency of private organisation, which the above-mentioned examples have shown. The question is, in fact, why the private organisation of the water supply works so much better in Chile than it does elsewhere.<sup>14</sup> It is useful in this context to examine the Worldwide Governance Indicators of the World Bank. Chile regularly ranks far above its regional neighbours among the OECD countries and is usually placed in the upper fifth percentile. Its regulatory quality for the reporting year 2015 was even ranked above that of Belgium and the United States of America.<sup>15</sup> These figures indicate that in Chile private operators work under far better conditions and their supply remit is hindered far less by institutional and regulatory deficiencies.

### Factors Determining Efficient Water Policy

The functioning of a water policy therefore depends not so much on the question of whether you are dealing with a private or public operator but more on the institutional framework for the private or public water supply. Improving the supply situation in disadvantaged areas therefore requires reliable criteria for a sustainable supply and effective governance.

However, every political framework must contend with existing conditions. A water supply system is therefore not designed on the drawing board of economic policy, but has grown historically and is consequently the result of various factors. These include local circumstances such as the available volume of natural fresh water per inhabitant and its future development as well as the level of purity of the resource. They also include the state of the created infrastructure, such as the age and condition of the water networks, the depth and number of existing wells as well as possible sources of contamination. Social factors are comprised of particulars such as the specific water consumption per inhabitant and the current level of satisfaction with the supply as well as the size of the workforce in the water sector. And finally, organisational factors include the financial strength of potential supply operators, the efficiency of the

Fig. 2: Factors Determining Efficient Water Policy



Source: Own Illustration.

flow of information, and the rules regulating ownership rights as well as the quality of the institutions involved and the level of corruption.<sup>16</sup> The listing of relevant factors could be continued at length, but they will all come under the already mentioned categories of natural resources, existing infrastructure and social as well as organisational and institutional factors.

### **Social opposition above all makes the regulatory task in the water sector extremely complex.**

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In the case of the cancelled concessions in Bolivia, the actors had to contend with numerous obstacles in the above-mentioned areas. Social opposition above all made the regulatory task extremely complex. Freedom from social and political pressures is crucial for the regulator if they wish to promote technical optimisation – an approach that is, however, frequently not realistic. Because of the great dependence of those affected, dealing with the water supply is a highly precarious field of activity for regulators. Added to this is the fact that poorly developed regions frequently suffer from a very unevenly distributed flow of information. Measures can therefore be perceived totally differently in varying social milieus. A poorly communicated price adjustment can undermine the process of supply stabilisation for a long time. Suppliers and regulators must be particularly cautious in deciding who to talk to in order to ensure that all affected groups are properly informed. When setting prices for services, the time component plays a key role in addition to the amounts themselves; while the operator in Cochabamba was under time pressure to adjust the pricing structure, it underestimated the impact of a large price hike directly after taking over. It thereby gave credence to people's belief that it would exploit the commercialisation rights it obtained from the government through the concession contract.<sup>17</sup>

### **Conclusions**

How can the problems relating to water policy be addressed? In Latin America, different countries, regions and communities have developed a wide range of measures. Which of them will be suitable in any one case of course depends on the individual circumstances. But it is possible to define a number of governance standards without which stable water supply management is not conceivable.<sup>18</sup>

Against the background of the examples described above, it is possible to derive several recommendations for sustainable water governance. Where resource availability and infrastructure are concerned, there should be regulations in place to determine who will be allocated rights of use for water reserves in what way, how far private autonomy should extend and which areas should be subject to regulation. The regulator itself should be independent and separate from the other actors. It should be equipped with the necessary competences to be able to make decisions. The assignment of responsibilities to the administrative entities should ideally be made on the subsidiarity principle so as to be able to take the social situation into account most effectively.

There must also be clarity for the actors as to who is responsible to pay for investments, for what period of time the supply agreements apply and how the pricing will be regulated. Crucially, there must be clearly regulated ownership rights in place, which would have to be transferred to the state in conflict situations if necessary. It is important that the scenarios are described in as much detail as possible ahead of any investment projects.

As regards the design and quality of institutions, measures should be put in place to achieve maximum transparency and prevent corruption. For any potential conflict, a catalogue of clearly defined processes to resolve conflicts of interest is very useful. A successful resolution would depend crucially on the neutrality of the arbitration bodies.

The guidelines for a stable water supply must be devised in collaboration with the involved partners. Poor coordination – between national, regional and local levels – is often due to a lack of clarity regarding the distribution of the competences between the actors. This can be counteracted by various means, including, for instance, multi-sector conferences involving people from the national and subnational levels or from the private and the public sector, interdepartmental coordination groups, or the amalgamation of administrative units. The instrument of multi-sector conferences is particularly popular. Over half of the surveyed OECD countries in Latin America use this instrument to determine the necessary starting conditions and to coordinate their measures. It is therefore the most frequently used measure.<sup>19</sup> On the basis of the above-mentioned determining factors, objectives can then be identified on which the actors involved in the water supply sector have to agree in order to be able to guarantee a stable water supply, whoever will manage it. Only once a consensus has been found will it make sense to renegotiate and come to a regulatory decision on placing the management of the water supply into private or public hands. This decision will depend on economic policy premises and regional idiosyncrasies, which may call for private engagement as well as commercial activity by the state. But the development of reliable governance guidelines must be given priority.

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