

Case Study— Brasov, Romania

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Key Characteristics of Aggregation Case Study

BRASOV WATER COMPANY, ROMANIA	
Context	<ul style="list-style-type: none"> • Upper-middle-income country • Aggregation covering urban and rural areas • Medium level of WSS performance
Purpose	Performance, professionalization, environment benefits, economic efficiency, equity
Scope	WSS functions and services
Scale	<ul style="list-style-type: none"> • Administrative boundaries • Localities covered: 15 for water and 12 for wastewater • Population covered: 346,330 inhabitants for water and 302,233 for wastewater • Coverage: 95 percent for water and 83 percent for wastewater • Connections: 35,594 for water and 27,197 for wastewater • Network length: 1,263 km for water and 761 km for wastewater
Process	Top-down with financial incentives
Governance	<ul style="list-style-type: none"> • Delegated (49 years) • Public company • Decision making: Municipalities and county councils hold 42 percent of utility shares each; remaining 16 percent is allocated to six other municipalities relative to the proportion of their inhabitants. • Asset transfer: Assets remain the property of local and county authorities and are being transferred to the operator for the duration of the delegation contract. Royalty fee received by local authorities in return for this transfer. This royalty fee is feeding a special fund to finance investments. • Liability: Liabilities and debts from previous operators were not taken over by the aggregated utility. • Staff transfer: There was no commitment to transfer staff. • No clear entry and exit rules

In 2017, after a decade of aggregation, the expansion of Brasov Water Company (BWC) was completed as all envisaged localities were covered with water services. In implementing the aggregation reform, BWC adopted a progressive approach, gradually expanding its operation in surrounding localities benefiting from the European Union (EU) investment program. This cautious strategy, in terms of municipalities covered, services taken over, and staff transfer, finally proved successful. This did not go without saying as the aggregation reform triggered political resistance from municipalities, which perceived it as a loss of power and control over water utilities.

From Fragmentation to Aggregation of WSS Utilities in Romania

The water sector in Romania has followed a contrasting evolution over time, fluctuating between fragmentation and aggregation. Before the 1990s, Romanian water services were supplied at the county level by companies that also provided other public services such as solid waste collection, heating, and the like. Water infrastructure investments were entirely subsidized by the central government budget and operational costs were subsidized by local authorities or through cross-subsidies, with industries paying a higher tariff than institutions and domestic users. Immediately after the fall of the socialist system (1989), the operating areas of these services started to narrow down as each local authority wanted to have its own public service operators. As a result, hundreds of WSS utilities were then created.

In a reverse movement, a comprehensive water sector aggregation reform was designed in 2005–2007 and implemented during the five following years. This regionalization consisted of a top-down mandatory process incentivized by EU investment grants—Sectoral Operational Program Environmental (SOP E) funds—which were allocated only to projects led by a regional operator. From an institutional perspective, the regionalization was generally performed through the reorganization of public services operated by the capital city of

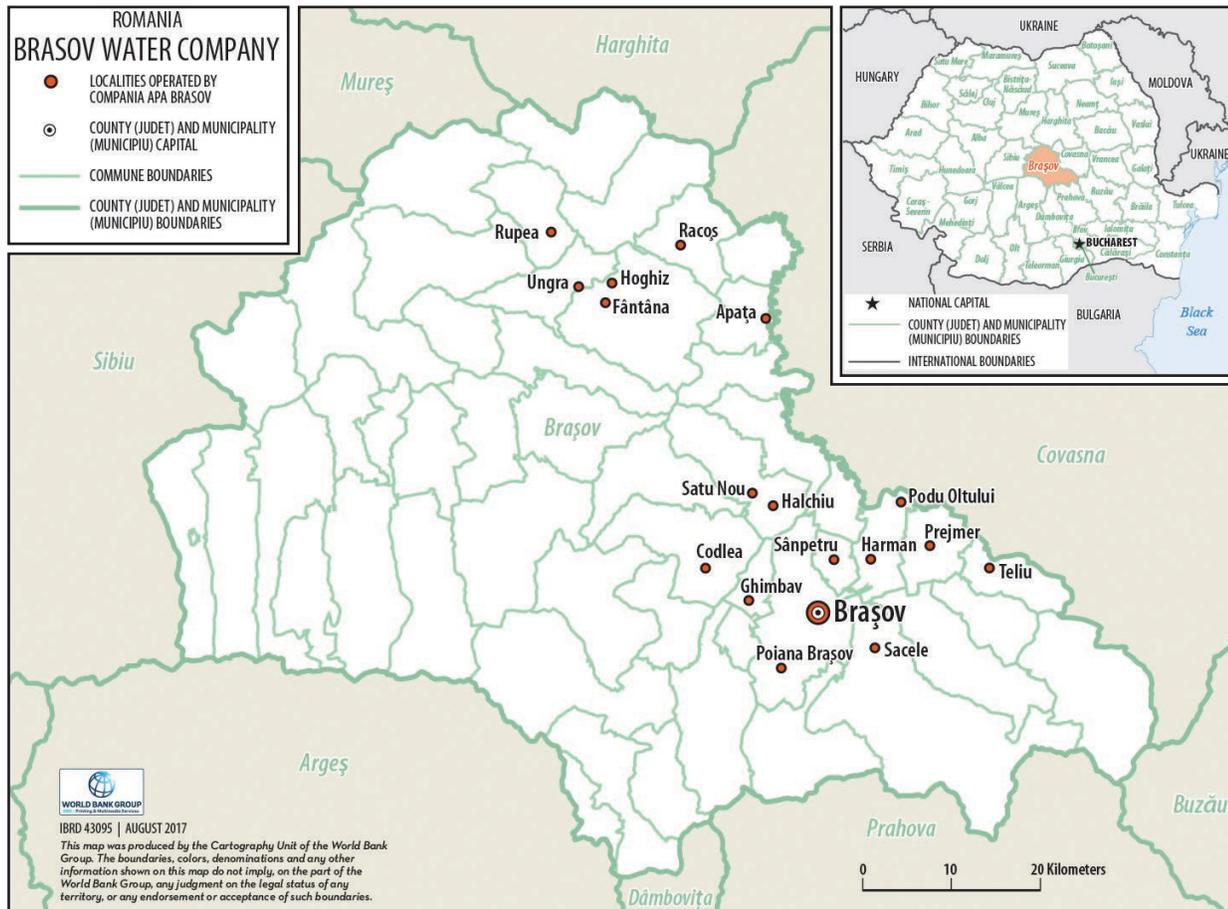
the county. The process had two stages. First, it concentrated the operation of services provided to a group of municipalities at the county level. The second step, which has not been achieved yet, aims to concentrate these county utilities into river basin utilities.

The overall aggregation reform is based on three key institutional elements: an Intercommunity Development Association (IDA), a Regional Operating Company (ROC), and a contract of delegation of services. The IDA acts as the sole interlocutor of the ROC, representing the common interests of its member municipalities regarding water and wastewater services, especially with regard to general strategy, investments, and tariff policy. The ROC is a commercial company, owned by the IDA member municipalities, to which the management of the water and wastewater service is delegated through a delegation contract. The ROC is thus appointed to manage, operate, maintain, upgrade, renew, and expand, where appropriate, all public assets designated in the contract. It collects the invoices paid by customers, in accordance with the contract provisions. The purpose of aggregation in Romania, as stated in the official Guide to Regionalization, is the “improvement of sector performance by a better management and professionalism, as well as benefiting from scale economies.” However, in the views of the European Commission and the Romanian government, the regionalization process was also a means to promote integrated water resources management in order to comply with EU directives and create environmental benefits. It was as well a way to set up financial solidarity through cross-subsidies at the county level, and to offset decreases in water sales. Service quality and technical capacity enhancement were also targeted, especially as large investment projects were planned.

A Gradual Strategy of Expansion at the County Level...

Brasov is one of the most important cities in Romania, with about 300,000 inhabitants. It has a powerful economy, and it is one of the top tourist destinations,

MAP 1. Municipalities Served by the Brasov Water Company



located near the best ski resorts in the country. In 2008, as a result of the regionalization reform, the autonomous administration of BWC, was turned into a commercial company, in order to become the ROC. Subsequently BWC signed a delegation contract with the IDA to supply over 250,000 inhabitants in eight municipalities.

BWC capital is composed of its own infrastructure and equipment. Shares were allocated between two major shareholders: Brasov Municipality and the Brasov County Council, each receiving 42 percent of the shares. The remaining 16 percent was divided among six other localities, with respect to the proportion of their inhabitants. Allocating equal participation to the Brasov County Council and Brasov Municipality was aimed at balancing powers and reaching consensus between those two

shareholders to prevent any unilateral decisions. Moreover, according to Romanian law, strategic decisions must be adopted with two-thirds of the votes, which for BWC made consensus between the major shareholders compulsory.

Seven years later, in 2015, the company was supplying almost 350,000 inhabitants in 15 cities and towns. During the same period, the number of inhabitants receiving sewerage services increased from 220,000 to over 300,000. Almost 95 percent of wastewater is being treated with secondary treatment. BWC first chose to take over services in localities that had functional water supply and/or sewerage systems. Where assets were dysfunctional, the expansion of service area was delayed until investments could be made to ensure sufficient service quality with

TABLE 1. Evolution of the Number of Municipalities, Number of Connections, and Population Served by the Brasov Water Company

Item	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
No. of municipalities	9	9	10	12	13	13	13	14	15	15
No. of connections	17,003	17,025	17,100	22,320	24,120	24,363	29,837	33,007	34,714	35,594
Population served	254,345	254,345	281,173	290,995	316,552	316,552	341,483	344,998	346,330	346,330

regard to the level of tariffs applied. In comparison with other major water companies, Brasov ROC adopted a voluntary and non-intensive approach toward aggregation, increasing its service area by 11 percent of connections per year and 3.6 percent of inhabitants served over a decade.

Nevertheless, from 2008 to 2015, service coverage in terms of population expanded by 40 percent for water and by 36 percent for wastewater. The number of connections doubled, and the length of the water and sewer network increased by 50 percent.

The caution characteristic of the BWC expansion process is also illustrated by the staff transfer arrangement chosen by the utility. Although the model of delegation contract prepared by the Environment Ministry advocated for transferring all staff to the incumbent, BWC managed to transfer only a small number of operational staff. Billing, financial, and accounting activities were absorbed into the existing organizational chart of the company. This proved crucial to ensuring good financial results in the following years.

... Supported by Large Infrastructure Investments and EU Cohesion Funds...

BWC choose to aggregate only with localities where investments were to be implemented and where the service could be enhanced and tariffs could be increased at the same time. For example, Codlea was taken into operation four years after signing the delegation contract, when the new water line providing 24/7 high-quality water services was completed. BWC took over services in two urban municipalities (Sacele and Codlea), where it ensured 24/7 high-quality water supply. Sacele is an urban municipality of 30,000

adjacent to Brasov which joined the IDA pretty late because of political resistance and, therefore, was included in the SOP Program for only a small amount of investment. Nevertheless, the service quality improved as the investments increased five to seven times compared with that of the base year of 2008. The investments planned from 2017 and for the coming five years to be a lot more important. From 2008 to 2016, the economic efficiency of the Sacele water service doubled, taking advantage of economies of scale resulting from its closeness to Brasov city and benefiting from Brasov’s water supply infrastructure.

BWC also extended a main water line from Brasov to Codlea (a city of 20,000 inhabitants, 20 km away from Brasov) and discarded the former water treatment plant, which used a polluted water source. By 2016, the entire water network had been replaced and extended. The sewer system was rehabilitated, and a main collector was built, as was a brand-new regional wastewater treatment plant.

... and Resulting in Enhanced Performance and Increased OPEX

Since BWC took over, water supply and sewerage systems have been rehabilitated or replaced. New wastewater treatment plants have been built, and the new service has been upgraded to European standards. All assets have been inventoried in a database connected to a geographical information system. Accounting practices have been improved. A medium- and long-term investment plan has been elaborated. Thus, municipalities where the service was taken over by BWC have witnessed important improvements in terms of technical capacity, environmental benefits, equity, and service quality.

FIGURE 1. Evolution of Brasov Water Company Key Performance Indicators after Aggregation

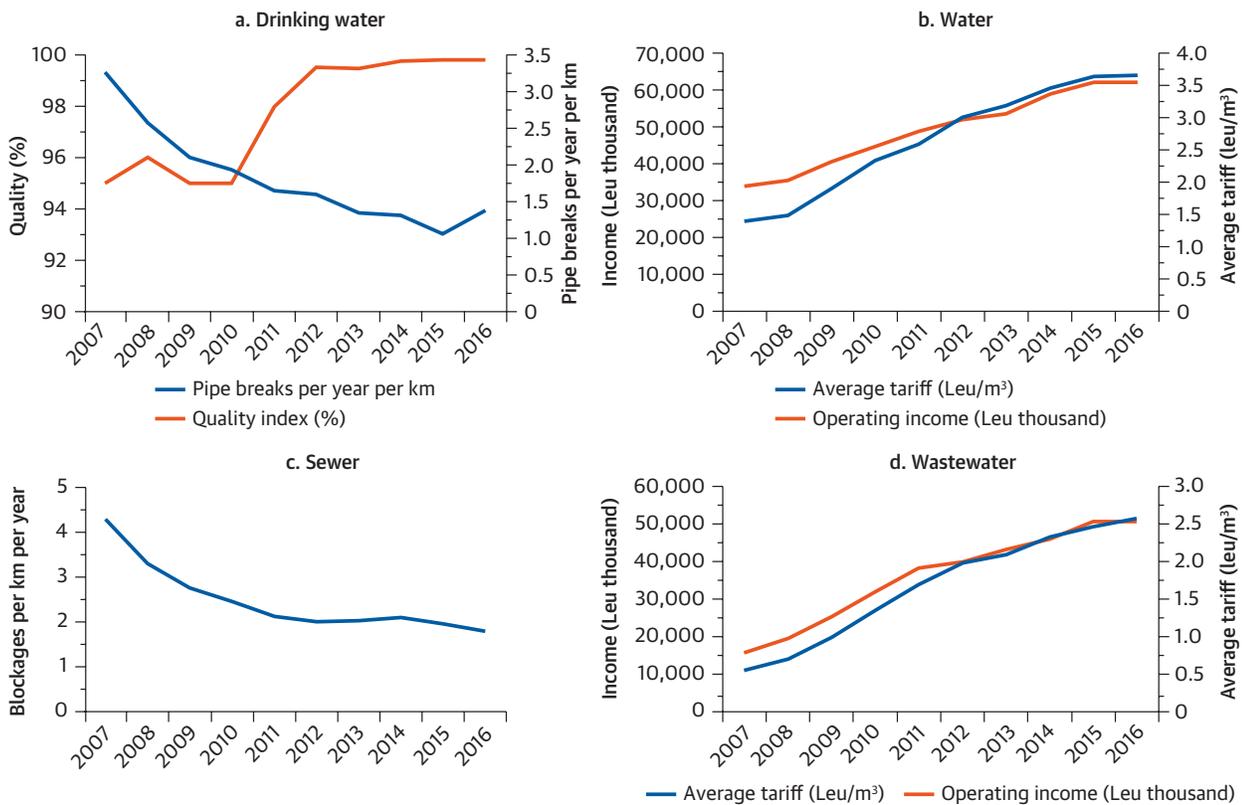
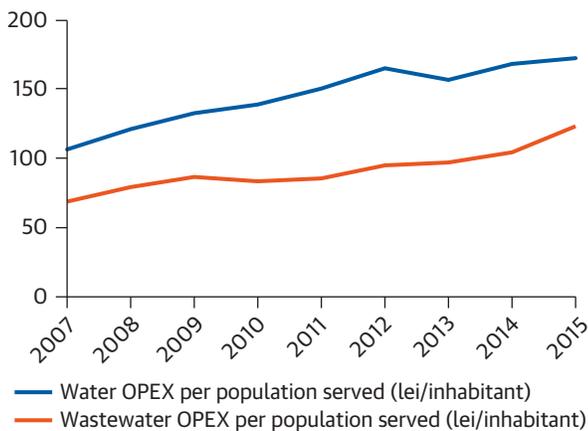


FIGURE 2. Evolution of Water and Wastewater OPEX



Note: OPEX = operating expenses.

In terms of economic efficiency, results are likely to be nuanced. Although water and wastewater tariff and revenues have increased from 2007 to 2016, overall OPEX and OPEX per population served have clearly increased over the same period for both water and wastewater.

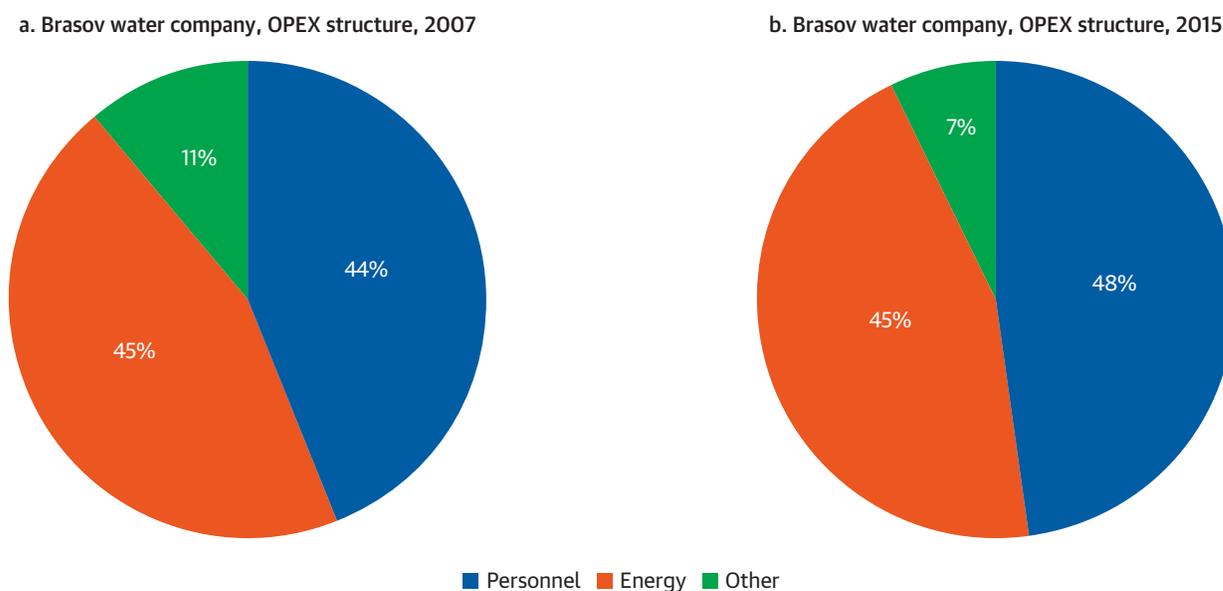
This increase is partly due to a rise in labor costs of 22 percent from 2007 to 2016, despite the fact that BWC did not transfer all staff from previous operators. The OPEX structure also evolved during the period as energy cost share decreased, making room for staff costs.

Improved Accountability Mechanisms to Enhance Communication with Customers

As a consequence of agreements signed with the European Bank for Reconstruction and Development (EBRD) and the European Commission, a range of measures to help improve accountability had to be implemented, such as informing and engaging with the community about investment projects, and launching public consultation.

BWC has not encountered real resistance from citizens but was faced with complaints related to tariffs, introduction of metering, and discomfort caused by works. These complaints were dealt with through

FIGURE 3. Evolution of Brasov Water Company OPEX Structure Before and After Aggregation



Note: OPEX = operating expenses.

individual responses or through the organization of meetings at the request of residents. BWC set up an information program on investment projects, which was carried out in schools in villages concerned about the various projects. Reaching out to students and teachers proved a good way to also reach out to parents. In order to increase accountability, water petitions could be filed in each village. These were then transmitted to the company for it to respond to as quickly as possible. In addition to an interactive website, BWC set up a call center that features software access to the company database to quickly answer customer requests.

Aggregation: Presently on Hold but May Resume with Financial Incentives Being Available Again

Despite a gradual and cautious expansion strategy, a few local authorities opposed resistance to the aggregation process. Following the signature of the delegation contract in 2008, one municipality left BWC. Some municipalities were reluctant to lose their control over the water

utility and its revenues. They were also reluctant to transfer assets and feared there would be a significant increase in tariffs. The constant support from the two main shareholders of BWC along with the aggregation implementation and the operators' determination to proceed with the expansion strategy were decisive in overcoming obstacles. Further aggregation is not foreseen in the next coming years, but the process is expected to resume with the launch of the new EU investment program.

Aggregation Case Study at a Glance

Key Lessons Learned from Aggregation Case Study

Having a Large Utility as a Nucleus Can Work, but Aggregation of Similar-Sized Small Utilities Can Also Be Successful

The BWC case study describes an aggregation example that groups urban and rural settlements. In such a configuration, the larger urban utilities act as a nucleus around which less populated, less profitable, and lower-performing service providers aggregate, with the nucleus helping surrounding services to improve. BWC's operating area is organized around Brasov and

Rupea, two main cities, which have their own water systems supplying surrounding rural settlements. A similar service quality is provided across the operating area.

Strong Citizen Engagement and Clear Accountability Improve Support for Aggregations

Although there are potential benefits attached to utility aggregation, the provision of services to a larger customer base increases the distance between the utility management and the final customer, making the utility less demand-responsive and causing accountability¹ issues (World Bank 2003). In order to address these potential accountability issues, utilities can enhance customer engagement mechanisms through internalized processes. As a consequence of agreements signed with the EBRD and the EU Commission, BWC implemented a range of measures to improve accountability. An information program on investment projects was carried out in schools. Reaching out to students and teachers proved a good way to also reach out to parents. To respond to complaints related to tariffs, to the introduction of metering, or to discomfort caused by works, water petitions could be filed in each village. These were then transmitted to the company and dealt with through individual responses or through the organization of meetings at the request of residents. In addition to an interactive website, BWC set up a call center that features software access to the company database to quickly answer customers' requests.

Aggregation Forces More Explicit Decision-Making Processes, Leading to Better Corporate Governance

Aggregation involves the creation of a new, separate organizational entity that is accountable to more

than one stakeholder. Therefore, aggregation presents an opportunity to adopt sound corporate governance principles on autonomy and accountability. In Romania, BWC has been turned into a commercial public company as a result of the regionalization reform.

Aggregation Takes Time to Show Results; Gradual Improvement Strategies Are Particularly Successful

Both the aggregation design and the implementation take time; in particular, implementation is a continuous process that can stretch over decades. As a result, aggregation benefits also take time to materialize. A gradual improvement strategy has proved successful in many case studies, as it spreads the efforts and changes to be made over time, thus not burdening utilities with having to do too much too quickly. BWC adopted a progressive approach toward the expansion of the service area. The number of water connections doubled in 10 years, while the population served increased by one-third. The utility chose to aggregate in nearby localities where investments were to be implemented and where service quality could be improved and tariffs increased at the same time.

Note

1. For the purpose of this particular study, accountability is defined as being answerable to other parties for policy decisions, for the use of resources, and for performance.

Reference

World Bank. 2003. *World Development Report: Making Services for Poor People*. Washington, DC: World Bank.



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