

Ex Post-Evaluation Brief

Azerbaijan: Open Programme for Municipal Infrastructure Phase I



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| Programme/Client | Open Programme for Municipal Infrastructure Phase I (Water Supply Imishli), No.1998 65 197 | |
| Programme executing agency | Imishli JV, AzerSu JSC | |
| Year of sample/ex post evaluation report: 2011*/2011 | | |
| | Appraisal (planned) | Ex post-evaluation (actual) |
| Investment costs (total) | EUR 14.8 million | EUR 3.4 million |
| Counterpart contribution (company) | n/a | EUR 12,800 |
| Funding, of which budget funds (BMZ) | EUR 14.8 million | EUR 3.4 million |

* random sample

Project description: In its original conception, the project comprised construction and rehabilitation measures for the drinking water infrastructure in the cities of Agzabedi and Imishli. Additional sites were also to receive support, upon meeting pre-defined criteria. At the request of the Azerbaijani partner, investment measures were ultimately confined to Imishli, and funds thus released (amounting to EUR 11.4 million) were re-allocated to a subsequent 'Phase II' (2001 66 702), covering other sites. With the Imishli intervention constituting a project in its own right, this ex post evaluation focuses exclusively on measures implemented there.

Responsibility for operating the Imishli facilities was transferred under a concession to a newly established company with majority private ownership – in return for a concession fee. The operating company was given support to improve technical, commercial and management capacities through a training programme, financed out of dedicated training funds. In 2009, due to economic difficulties, the operating company was dissolved and integrated into AzerSu, the national water supply company.

Objective: The intended impact of the project was to contribute to improved living conditions for the population, focusing on their basic needs, and to contribute to the project sites' social stabilisation. The project objective (the desired *outcome*) was to eliminate serious constraints in residential water supply for the populations of small and medium-sized cities.

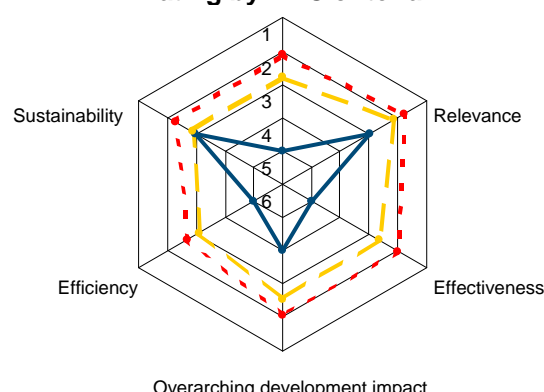
The target group was the urban population of the project sites of Imishli (54,000 inhabitants) and Agzabedi (40,000 inhabitants). As a result of the Nagorny Karabakh conflict the target group in Imishli comprised a large number of refugees and internally displaced persons (34%) at the beginning of the project. By 2009, those had all been relocated to other parts of the country, with only 35,000 people remaining in Imishli.

Overall rating: 5

Operation was unsatisfactory, even prior to the private operating company's dissolution; inadequate progress was made toward the objective; and project largely failed to reach the intended beneficiaries – in part due to the refugees' relocation.

Points to note: These first steps taken by FC toward a majority private operating company encountered great difficulties. These were the result of unfavourable economic and legal circumstances, which ultimately did not provide a sound basis for awarding a concession. Furthermore, the relatively small supply area, in hindsight, did not offer the minimum size needed for such an approach.

Rating by DAC criteria



—●— Project
—■— Average rating sector (starting 2007)
- - - ◆ - - - Average rating region (starting 2007)

SUPPLEMENTARY INFORMATION TO THE PROJECT DESCRIPTION

At the beginning of the project, there was no capable institution in Imishli to operate water supply facilities; those functions were exercised by the national agency AzerSu in Baku, through a local office in Imishli. It was therefore decided to establish a designated project executing and operating agency in Imishli. Following the decision to pursue private sector participation, a concession company was formed, which was majority held by Berlinwasser International GmbH (BWI). This company took over the facilities in return for a concession fee. On-site training was provided to support responsible staff in technical, commercial and management. However, economic and technical difficulties beset the executing agency from the outset; in addition, BWI had almost no operating experience in emerging and transition countries, and loopholes in the concession contract became apparent. Finally, BWI prematurely pulled out of the company in 2009 by selling its shares to AzerSu, the national supplier.

While EUR 14.8 million had originally been envisaged for the water supply systems in cities Imishli, Agzabedi and other potential sites, measures were only implemented in Imishli – at the partner's request. The remaining funds from Phase I of the programme were used in a subsequent phase to improve water supply and sanitation in the cities of Ganja and Sheki. Bearing in mind the negative concession experience in Imishli, management shortcomings in those sites were bridged through private sector participation for a limited period (i.e. management contract), building on positive results in Turkey and Armenia.

EVALUATION SUMMARY

As the project did not make adequate progress toward its programme objective and, in the long term, failed to reach the target group, it has been rated as inadequate. **Overall rating: 5**

Relevance: Improving water supply and sanitation remains a priority area for German-Azeri Development Cooperation. Despite lacking a coherent water sector strategy, key supply objectives are contained in Azerbaijan's programme for poverty reduction and economic development as well as in the respective regional development programmes. In line with these objectives, the government is making significant efforts towards country-wide improvements to the water supply infrastructure.

From today's perspective, the measures are still considered relevant, particularly when seen against the background of the large proportion of refugees in the population in the programme region at the time. The intervention logic of improving living conditions in Imishli through sustainable water supply, thus also contributing to the social stabilisation in a region hit by civil war is still valid today. In principle, the project's relevance in terms of poverty reduction continues to appear plausible.

Even with the core problem having been identified correctly and with water supply investment measures having been well conceived, the private concession model has proven to be unsuitable with hindsight. The legal and institutional framework prevailing in Azerbaijan's water sector did not offer adequate conditions for this approach, and neither did the limited customer base. Similar experiences had been made by a World Bank supported scheme in Baku, admittedly under considerably more favourable economic conditions. Nevertheless, relevance is rated as still satisfactory, particularly due to the target group's needs at appraisal as well as the project's basically sound intervention logic; besides, the project corresponded with both the partner country's and the BMZ's sector focus (Sub-Rating: 3).

Effectiveness: Whilst the project was capable of eliminating serious temporary supply constraints, its long term objectives were, to a large extent, not achieved. By 2009, the water supply customer base had dropped sharply, due to the gradual relocation of refugees and internally displaced persons. Whereas the original target group in Imishli comprised 54,000 inhabitants, only 35,000 remain today. Only a small proportion (17%) of the current population is being supplied via the rehabilitated network. The connection rate is close to the same low level as prior to the project's implementation. The lack of financial incentives for the private operator to provide additional connections and network extensions appears to have significantly influenced this outcome. It is also due in part to the design specifications chosen by BWI (ductile cast iron pipes): these offered poor compatibility with the rest of the system; with significantly higher unit costs, the degree of network expansion was reduced. The use of mobile tanks to provide the refugees with water meant that higher revenues per m³ could be generated than through the fixed mains water system. It should be noted that – given the small volume of water produced – only the greatly reduced number of direct beneficiaries (around 5,900 inhabitants) could actually enjoy the targeted increase in per capita consumption.

In 2009, the joint venture between BWI and its Azerbaijani partner was dissolved. The national supplier *AzerSu* acquired BWI's shares. According to *AzerSu*, the facilities in Imishli were still in operation at the time of the ex post evaluation and supplying the target group (the majority of whom have storage tanks) with drinking water, but only for four hours per day. As there is no adequate monitoring system, no statements can be made about water quality.

As a consequence, the project objective has only been inadequately achieved (Sub-Rating: 5).

Efficiency: Prior to the relocation of a large part of the target group, investment costs per capita were considered appropriate. Taking into account the small number of people who benefit from the improved water supply today, an appropriate level of cost (production efficiency) can no longer be assumed. The design selected by BWI, based on its own in-house standards (see above), only conformed to a limited extent with the real needs of an applica-

tion in an emerging country, and this further hampered smooth operations. At 40%, total water losses are considerably higher than the 30% targeted; therefore, these figures are equally considered to be too high.

Given the low connection rate, the inadequate collection efficiency and the failure to cover operating costs – which ultimately also led to the premature withdrawal of BWI from the concession company - we assess the allocative efficiency of the project as poor.

Although the linear tariff system (with no social tariffs) applied throughout the country does vary between different urban locations, it is designed at respective city level – and not according to the customers' ability to pay. The system offers little incentive for economic use of drinking water.

Consequently, the efficiency of the project is rated as inadequate (Sub-Rating: 5).

Overarching developmental impact: Viewed from today's perspective, due to the enduring nature of the Nagorno Karabakh conflict, the project's contribution to overall social stabilisation must be considered low (even though it certainly made a temporary contribution to social harmony, albeit restricted to Imishli). The refugees living in Imishli, who made up a large part of the target group initially, received an appropriate supply of drinking water; by 2009, however, they had all been relocated to other parts of the country.

The living conditions of the population in Imishli appear to have improved, as in most cities in Azerbaijan. However, given the background - the moderate amount of drinking water actually produced, the low connection rate to the rehabilitated mains network, as well as the continuing high use of alternative sources of water - the contribution made by the project in this regard is considered low. The project's health impact could not be verified locally; however, with only a small number of people being supplied with treated water and the continuing prevalence of consuming untreated water from private wells and the Araz river, it has to be assessed as low.

Seen from an earlier perspective, in providing support to the concession company, Financial Cooperation (FC) - together with Azerbaijan - ventured a bold first step towards private sector participation in the provision of social infrastructure. This was a far-reaching, but – with hindsight – premature move. In contrast with World Bank and ADB, less complex and less challenging approaches for private sector participation in the water sector in Azerbaijan – like management contracts – are still being discussed within FC. With adequate design modifications and due consideration to experience from similar approaches in the region, these could lead to more positive results. Also, given its small size and its particular circumstances (the refugee situation), the project in Imishli could not have any appreciable influence in strategic policy terms for Azerbaijan's water sector. The overarching developmental impact is therefore judged to be unsatisfactory (Sub-Rating: 4).

Sustainability: Operational difficulties jeopardised the sustainable operation of the water supply company from the outset. At the time the JV ended, important maintenance and expansion measures had not been undertaken. Even after the takeover by the national water supply organisation *AzerSu*, those have still not been carried out. In addition, the measures originally planned by the World Bank for the expansion of the Imishli water supply were not implemented. However, these measures have been included in the national programme and, according to *AzerSu*, the first work in Imishli is planned for 2012.

Current financial risks to the sustainability of the national water supply company are limited by the state subsidies it receives, which enable the company to survive even though it cannot cover its costs. The Azerbaijani government is planning a nationwide programme over the next few years to rehabilitate urban water supply systems, paid for out of budget funds. Should this be implemented as planned, it would lead to a significant improvement in the hitherto critical operational situation in Imishli (Sub-Rating: 3).

Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being relevance, effectiveness, efficiency and overarching developmental impact. The ratings are also used to arrive at a final assessment of a project's overall developmental efficacy. The scale is as follows:

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| 1 | Very good result that clearly exceeds expectations |
| 2 | Good result, fully in line with expectations and without any significant shortcomings |
| 3 | Satisfactory result – project falls short of expectations but the positive results dominate |
| 4 | Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results |
| 5 | Clearly inadequate result – despite some positive partial results, the negative results clearly dominate |
| 6 | The project has no impact or the situation has actually deteriorated |

Ratings 1-3 denote a positive or successful assessment while ratings 4-6 denote a not positive or unsuccessful assessment

Sustainability is evaluated according to the following four-point scale:

Sustainability level 1 (very good sustainability) The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 2 (good sustainability): The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The overall rating on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Ratings 1-3 of the overall rating denote a "successful" project while ratings 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (rating 3).