

Albania: Rural water supply, Kavaja

Ex post evaluation report

OECD sector	1403000 / Basic facilities in drinking water, wastewater and sewage	
BMZ project ID	1997 65 892 (investment)	
Project executing agency	Water and Sewerage Works Kavaja (WSWK), Rrogozhina Water and Sewerage Works (RWSW)	
Consultant	Rodeco	
Year of ex post evaluation	2010 (2009 random sample)	
	Project appraisal (planned)	Ex post evaluation (actual)
Start of implementation	8/1998	7/2003
Period of implementation	35 months	48 months
Investment costs	EUR 5.41 million	EUR 5.29 million
Counterpart contribution	EUR 0.51 million	EUR 0.34 million
Financing, of which FC funds	EUR 4.9 million	EUR 4.95 million
Other institutions/donors involved	--	--
Performance rating	3	
• Relevance	2	
• Effectiveness	3	
• Efficiency	4	
• Overarching developmental impact	3	
• Sustainability	3	

Brief description, overall objective and project objectives with indicators

The project goal was to facilitate the continuous, needs-based supply of safe drinking water to the population of Kavaja town and to the population of the surrounding rural communities of Kavaja and Rrogozhina (the project objective)¹. The aim here was to reduce health hazards for the target population and to make efficient use of drinking water resources (the overall objective). The 30,900 people (6,800 households) living in the villages of the project area formed the target group for the project's rural component. The following indicators were set for the project objective: a 24-hour supply to at least 90% of the target population; volumes of 50 L per person per day (70 L per person per day from 2010 on); compliance with WHO quality standards; and at least 90% of connections recorded and invoiced on the basis of consumption.

¹ The project's title is therefore somewhat inadequate and misleading.

Project design / major deviations from original planning and their main causes

Individual initiatives within the rural component included the renewal, expansion and new build of water supply systems (including providing capacity for the extraction, transport, storage and distribution of water) in approx. 45 villages in 11 districts. The majority of new household connections were fitted with water meters, in order to facilitate consumption-based charging. In addition, periodic support was provided to extend wastewater and sewage disposal. At the start of the project it was assumed that, in order to realise synergies, the smaller utility, Rogozhina Water and Sewerage Works (RWSW), which had fewer than 2,000 connections and was responsible for four of the eleven project districts, would be taken over by the larger supplier, Water and Sewerage Works Kavaja (WSWK). For legal as well as commercial reasons this merger did not take place. Because of this, developments in water supply in the rural areas are presented separately for Kavaja and Rogozhina in the analysis that follows. Furthermore, the development of a well field in Harizaj served to improve the supply of water to Kavaja town. Similarly, the 'well field' component has been considered as an independent element in the following analysis.

Key results of the impact analysis and performance rating

The project contributed to an improvement in supplies to the target population, although it fell short of the values targeted. In view of the high levels of immigration into the region, expectations with regard to water supply penetration rates² were somewhat excessive; with the limited financial means available, a higher number of connections (and hence a higher connection rate) could barely been achieved.

In summary, we assess the developmental effectiveness of the project as follows:

Relevance: improving water supply and wastewater disposal is still a priority area for German-Albanian cooperation. Under the 'National Strategy for the Water Supply and Sewerage Service Sector', the Albanian government continues to make great efforts to improve the poor state of water supply in both rural and urban areas. The project's overall objective - to reduce risks to health - had significance for at least parts of the project and the project region. Moreover, the project was thoroughly suited to contribute to the efficient utilisation of water resources, as well as to improve the general drinking water supply situation both in Kavaja town itself and in the surrounding rural areas of Kavaja and Rogozhina. Also, the Kavaja water supplier's weaknesses as a project agency, which were identified at the start of the project, still represent a major obstacle to development in the project region. However, the supplementary measure addressing this constraint has not been the subject of this evaluation. Taken overall, the project's relevance has been assessed as good (rating 2).

Effectiveness: the project's central goal was the continuous, needs-based provision of safe drinking water to rural and urban populations living in the supply area. An overall assessment of the progress made towards the objectives (measured by means of the target-actual indicators) shows that these supply targets, which formed the centrepiece of the project, were not achieved - neither in the area around Kavaja, nor in the significantly smaller supply region of Rogozhina. Whereas the water supply rate achieved can be seen as reasonable in view of the unrealistically high targets (Kavaja 70%; Rogozhina 77%), the poor level of supply continuity is less impressive

² Due to inadequate base data, caution should be used when interpreting figures for supply rates. Reliable population statistics do not seem to be available at the present time.

(Kavaja 19 hours per day; Rrogozhina 8 hours per day). In Kavaja the fall from 22 hours per day to 19 hours per day is a cause for concern; in Rrogozhina, despite quadrupling from two hours to eight hours per day, supply time is still a long way short of the round-the-clock availability targeted. However, when judging these shortcomings against the original objective, it should be borne in mind that 24-hour supply is in effect guaranteed by the storage of water in roof tanks. Although these intermediate storage vessels, due to contamination, always present a potential hazard to health, it should be pointed out that - in contrast to the last project inspection (close-out inspection in 2005) – regular chlorination at the reservoir and regular water quality inspections (at wells, treatment plants and in the distribution network) do now take place. It is also worth considering that, in any case, because of power outages 24-hour supplies cannot be guaranteed solely by the efforts of the water supplier. Finally, the willingness of consumers to pay, which is reflected in the collection efficiency figures (85% for rural Kavaja and as high as 91% in Rrogozhina), is a clear indication that the population values the improved water supply. With an estimated daily usage of approx. 60 litres per person in 2009, this indicator lies within the target area, although not quite at the 70 litre level targeted for 2010. Although productivity at the Harizaj well field has fallen slightly in recent years, it still supplies some 20,000 inhabitants, which is roughly half the population of Kavaja town. The comparatively low-cost project component dedicated to connecting a heavily populated area of apartment buildings to the sewage disposal system achieved its objectives. Against this background, the project's effectiveness - despite the failings identified - has still been assessed as just reaching a satisfactory level (rating: 3).

Efficiency: considering the population reached, the level of funding deployed was acceptable. In view of the fact that some systems were newly constructed and others were extended or substantially rehabilitated, the specific costs, which ranged from EUR 135 per inhabitant (in Kavaja) to EUR 167 (in Rrogozhina), are considered reasonable overall. In view of the wide scope of the project and the technical and administrative weaknesses of the project agency, consultancy costs for planning services and construction supervision were reasonable. The specific costs for the well field (EUR 51 per inhabitant supplied) were also acceptable. Production efficiency was rated satisfactory for all the components that were assessed. Water losses, at an average of 20% for Kavaja and 34% for Rrogozhina, are considered comparatively low. Similarly, the collection efficiencies achieved - 85% in the area surrounding Kavaja and 91% for Rrogozhina - are seen as positive. Due to low tariff levels and high energy prices, the level of operating cost recovery for both these operators is significantly too low. This is seen as a major problem. Based on calculations for 2009, operating cost recovery at WSWK, the larger utility, came out at 55%. With a recovery rate of 87%, Rrogozhina achieved markedly better figures. However, in 2010 tariff charges in Kavaja were raised; these increases were sizeable, particularly for business customers (25%) and public sector consumers (66%). Despite these positive developments, the inadequate level of cost recovery – which is due not least to the scarcity of water resources, at least in the summer months – has been reflected in an efficiency rating of 'unsatisfactory'. Furthermore, due to the lack of base data, no statements can be made on the allocative efficiency of the well field. As a result, the project's overall efficiency has been assessed as unsatisfactory (rating: 4).

Overarching developmental impact: no specific indicator was set for the attainment of the overall objective. However, during discussions, both the health authority in Kavaja and the district hospital stated that, since this project was implemented, water-borne diseases play practically no role in the Kavaja rural area (supporting statistical data was not available). It is likely, however, that this situation can only be credited as a project effect with some reservations; for even at the start of the project, water-borne

diseases did not constitute a core problem, at least not throughout the region. Intermediate storage in roof tanks, which is necessary to bridge intermittent supplies, could well lead to contamination; this presents additional health risks, despite the regular chlorination of reservoir water. There is no doubt that these improvements in water supply have brought benefits to the connected population in terms of their general quality of life. Without the Harizaj well field, water supplies to Kavaja town would be in a precarious state. However, because well extraction operates here on a 24-hour basis, the groundwater aquifer has been given no time to regenerate. Hence, in having secured the status quo, the project can be seen to have had a positive impact on urban water supplies. A further benefit from the project, specifically in the rural project areas, can be identified: migration to the towns, which constitutes an increasing problem in Albania, has been contained. Contrary to this trend, the project region demonstrates considerable population growth. Therefore, because of the improvements in quality of life for the population in the project area, overarching developmental impact has been assessed overall as satisfactory (rating: 3).

Sustainability: the sustainability of the investments is not guaranteed by the water suppliers alone. Critical factors here are tariff charges, which fail to cover costs - over recent years, these have been repeatedly linked to extreme (five-fold) increases in electricity prices - and the associated unsatisfactory financial performance of the project agency. Admittedly, the water suppliers receive state subsidies to sustain their business; but revenues are insufficient to guarantee proper operation and appropriate maintenance. In addition, central government has signalled its intention to gradually reduce subsidies to the country's water supply companies. However, the government's actions in 2010 give cause for doubt over this declaration; in an extraordinary move, they settled the waterworks' outstanding electricity accounts. Hence, insofar as it is safe to assume that operations will continue to be maintained - by means of subsidies - at least at their present level, and because of the positive signals sent out by increasing tariff levels (in Kavaja), sustainability has been judged as just reaching a satisfactory level (rating: 3).

Overall assessment: based on the above individual scores, the developmental efficacy of this project has been assessed as just reaching a satisfactory overall level (rating: 3).

General conclusions and recommendations

Since the intermediate storage of water (in roof tanks, etc.) represents a widely used technique – not just in Albania – for converting an intermittent service into a de facto 24-hours supply, we recommend that the health hazards caused by intermediate storage should be audited by testing the water in the tanks. This would allow a more precise estimate of any adverse effects that intermediate storage has on developmental impact. The 24-hour supply target can be dispensed with wherever appropriate; at least in those areas where the health hazards from intermediate storage are assessed as very low, and where conditions make round-the-clock supplies from the water supplier seem unlikely.

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

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

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

A rating of 1 to 3 is a positive assessment and indicates a successful project while a rating of 4 to 6 is a negative assessment and indicates a project which has no sufficiently positive results.

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. A rating of 1 to 3 indicates a “successful” project while a rating of 4 to 6 indicates an “unsuccessful” project. In using (with a project-specific weighting) the five key factors to form an overall rating, it should be noted that a project can generally only be considered developmentally “successful” if the achievement of the project objective (“effectiveness”), the impact on the overall objective (“overarching developmental impact”) and the sustainability are considered at least “satisfactory” (rating 3).