

Ex Post-Evaluation Brief

Montenegro: Water Supply and Wastewater Disposal - Adriatic Coast, Phase II



Programme/Client	Water Supply and Wastewater Disposal - Adriatic Coast, Phase II – BMZ-No. 1) 2005 66 000 (interest reduction)*, 2) 2020 91 171 (development loan), 3) 2005 66 190*, 4) 1930 03 332 (training)	
Programme executing agency	Vodacom (implementing organisation)	
Year of sample/ex post evaluation report: 2012/2012		
	Appraisal (planned)	Ex post-evaluation (actual)
Investment costs (total)	EUR 19.0 million** EUR 1.5 million (training)	EUR 17.4 million EUR 1.5 million (training)
Counterpart contribution (company)	EUR 6.4 million ***	EUR 4.8 million
Funding, of which budget funds (BMZ)	1) EUR 4.2million 2) EUR 10.0 million 3) EUR 2.6 million 4) EUR 1.5 million	1) EUR 4.0 million 2) EUR 10.0 million BMZ 3) EUR 2.6 million BMZ 4) EUR 1.5 million BMZ

* random sample; ** Estimate at project appraisal, excl. Budva;*** Estimate, based on the difference between total costs and external financing

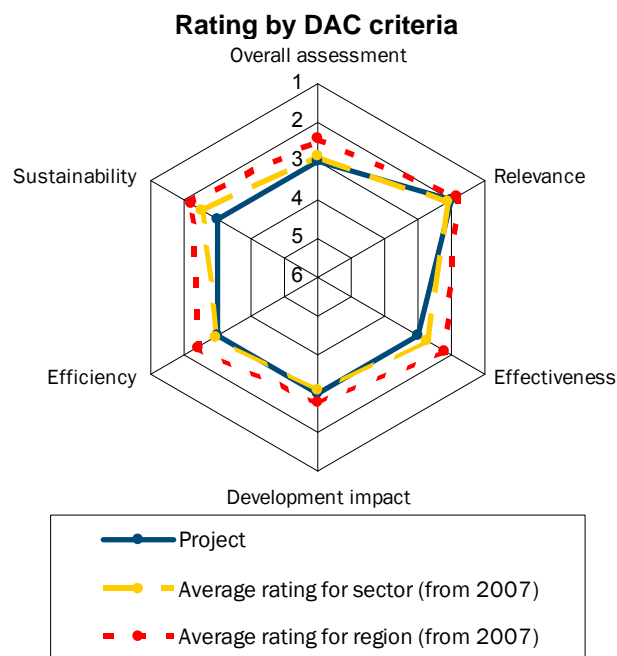
Project description: The project helped to rehabilitate and partly renew the drinking water distribution network in the municipalities of Bar and Budva (where, in line with the partner's request, only minor measures were implemented), as well as Herceg-Novi, Kotor and Tivat. In the latter case, wastewater disposal was improved as well by constructing a sewer main, a culvert and a pumping station. Accompanying technical and commercial training (at both basic and advanced levels) was provided for the staff of the municipal water supply and sewage disposal organisations (or VIKs). Vodacom was set up in 2005 as project-executing agency for Financial Cooperation (FC) initiatives. Vodacom's budget is funded by the municipalities, and its aim is to support the municipalities and the utility companies (VIKs).

Objective: The project objective is to achieve a sustainable, year-round supply of safe drinking water to meet, in particular, the peak demand generated by tourism in the summer months, and to improve the disposal of wastewater. The overall objective is to promote tourism in the coastal region. A second overall objective was defined in the course of ex-post evaluation: for the project to contribute to the structural and institutional stabilisation of the water supply sector serving Montenegro's coastal region. The target group is the urban population of the municipalities of Bar, Budva, Herceg-Novi, Kotor and Tivat.

Overall rating: 3

Sustainability risks were identified in the fields of effectiveness and efficiency. Ongoing Financial Cooperation (FC) initiatives with the same executing agencies are providing further investment and institutional support. This offers a good prospect for those risks to diminish in future.

Of note: Today, Vodacom, the executing agency for FC projects, has a good monitoring system in place and is important as an institution providing advisory services to the municipalities and the VIKs. Looking into the future, it is easy to envisage Vodacom to expand, over the long term, its areas of expertise and to acquire additional responsibilities for coordinating water supplies in the region. This would promote synergies potentially available from closer cooperation between the VIKs which previously have all worked independently of each other.



EVALUATION SUMMARY

Overall rating: Considering the results in the individual areas of relevance, effectiveness, efficiency, overarching impact and sustainability (which are identical for each project), the overall developmental results achieved are assessed as satisfactory. **Rating (both projects): 3**

Relevance: The programme addressed the core problem identified in the intervention sites: inadequate water supply and wastewater disposal, being the result of poor infrastructure maintenance as well as, to a large extent, inadequate infrastructure expansion. The intervention logic assumed at programme appraisal - with better supply and disposal services improving hygiene and contributing to economic growth - is still regarded as valid. The programme also addresses the structural aspects of water supply and wastewater disposal services. Those were not decentralised and transferred to the municipalities until 2006, with unsatisfactory results hitherto. Hence there a second intervention logic remains significant: Programmes providing investment and specific advisory services contribute to the establishment of capable utility companies, which are able to ensure adequate supplies over the long term. Both causal relations are still highly relevant.

Donor coordination in this sector is unsatisfactory. Central government instructs the municipalities to purchase bulk water (coming from Lake Skadar and from Bosnia-Herzegovina) at administrated prices from third parties all year round. This applies even in the winter months, when this water is not needed for supplies. This obligation - among other things - serves to finance the capital and operating costs of the EBRD-funded "Regional Water Supply" project, under which water is transported from Lake Skadar to the coastal region. It is one of the root causes for the financial and economic constraints which the four municipal operating companies have to face. However, this is not considered a major flaw. Sub-Rating (both projects): 2

Effectiveness: The indicators used to measure achievement of outcomes ("to ensure that water supply and wastewater disposal needs are adequately covered on a sustainable, year-round basis") were defined at programme appraisal in 2005. They were subsequently modified in 2008. Those indicators - with the exception of Non-Revenue Water (NRW) - were all met, and in some cases significantly exceeded in each of the four towns.

Indicator	Target	Actual (simple average)
<i>Non-Revenue Water (NRW)</i>	<55 %	72 %
Drinking water quality (% of samples free of E. coli)	>90 %	98.6 %
System availability	340 days per year	340 days
Collection efficiency	65 %	88.6 %
Recovery rate for operating costs	100 %	100 %
Staffing level	10 staff / 1,000 connections	8.3
Time required for breakdown repairs	2 days	2 days

Those excellent results should be attributed not so much to low target-setting during project appraisal, but rather to the dedication of the staff in the utility companies (VIKs) and their firm adherence to municipal operating guidelines. However NRW holds a major business significance for the utility companies' performance. Accordingly, the overall progress made toward achieving the objective is regarded as no more than satisfactory. Sub-Rating (both projects): 3

Efficiency: In order to assess production efficiency, dynamic prime costs were compiled for all four VIKs on a 2010 price base. Discounting by 5 %, actual dynamic operating costs were covered by the respective year's tariff revenues in three of the locations. The exception was Bar municipality, where 94 % of operating costs were covered out of revenue; however, even this figure is quite acceptable. On this basis, we consider the minimum criterion - covering operating cost recovery out of tariff revenues – having been met. Full cost recovery was not achieved in any of the locations. The low level of recovery against total costs confirms the need for fundamental improvements in tariff levels and in the tariff system as well as a substantial reduction in NRW. Failing that, the VIKs will not be able to invest in replacement facilities or expand the drinking water supply system on their own.

Due to high tourism activity the population size fluctuates substantially between summer and winter - the user numbers treble during summer months. Consequently, seasonal excess capacities in the supply system cannot be avoided if peak demand is to be met. Allocative efficiency can therefore only be assessed with certain reservations. During winter months, when no tourists are present, the facilities are oversized and their level of utilisation is comparatively low. With high levels of average individual consumption (at times well above 200 L per person per day in the tourist season), utilisation of the capacity created through project is still considered reasonable. From a micro-economic viewpoint, the project is assessed as satisfactory. Sub-Rating (both projects): 3

Overarching developmental impact: In the 2005 programme proposal, the overall objective of the project (its planned impact) was, firstly, to support the economic development of Montenegro by promoting tourism in the programme region and, secondly, to improve environmental protection and resource conservation. To measure progress made toward the overall objective, the following indicators were selected: tourism's contribution to GDP, swimming water quality and the proportion of water losses incurred in water production. The water quality indicator was quite rightly dropped in 2008: in view of the numerous other potential sources of contamination - it is extremely difficult to attribute an improvement in coastal water quality to the rudimentary improvement in wastewater disposal (with no treatment facility involved). Moreover, such intervention took place in one location only – Tivat. In the course of local ex-post evaluation, it also became evident that measures undertaken by the municipalities or the VIKs alone have very limited influence on the protection of those water resources important to the municipalities – Lake Skadar and Lake Bileća in Bosnia-Herzegovina. Accordingly, the intended impacts in terms of environmental protection and resource conservation are not realistically achievable.

Considering the development of tourism's Gross Domestic Product (GDP) share, the project has contributed to stimulate tourism as intended. According to figures compiled by the *World Travel & Tourism Council* (WTTC), this percentage grew from around 4 % in 2001 to roughly 10 % in 2007/2008; in 2011, it fell back to around 8 %. It is expected to climb to around 15 % over the next ten years. All in all, the country has succeeded in establishing itself permanently as destination in the international tourism market. To that extent, this overall objective can be considered as having been attained.

The project – if only implicitly - aimed to contribute to establishing sustainable institutional structures in the Montenegrin water sector. Accordingly, a second overall objective was defined: the programme should contribute to creating a sustainable structure in the water supply regime serving Montenegro's coastal region. This objective is in conformance with FC ambitions to have a structural impact on the sector. Most importantly, it equally conforms to the Montenegrin partner's priority interest, namely competent utility companies. Furthermore, this overall objective is realistically achievable, since it can be significantly influenced by the executing agency itself. To measure progress in that respect, the following economic and financial performance indicators were chosen for the utility companies: (1) a positive annual result and (2) liquidity performance, measured on *quick ratio* and *current ratio*, in the year 2010. Liquidity ratios indicate to what extent a company is able to meet its current liabilities from cash, receivables and inventories at its disposal at any given time. Inventories are not taken into account under the *quick ratio* measure, in contrast to the *current ratio* measure. Annual results should permit a return on equity generally in line with inflation (as a minimum), and liquidity ratios should conform to the usual international standards (*quick ratio*: ≥ 20 %; *current ratio*: > 100 %).

These indicators were not met to their full extent. In 2010, only Bar demonstrated a positive annual result. In all the other VIKs, the annual results were clearly negative. In terms of liquidity, as measured by *quick ratio* and *current ratio*, not all of the usual minimum standards were achieved in full: whereas the *quick ratio* benchmark was attained in all VIKs, the *current ratio* one was achieved in Bar and Tivat, but not in Herceg-Novi and Kotor. From an overall business and financial perspective, these companies cannot yet be considered to have achieved stability. An additional, albeit purely qualitative indicator for structural impact also deserves mentioning: water utilities are now formally excluded from municipal budgets and have been established as separately funded entities; this has been enshrined in municipal legislation, which is due to be ratified shortly.

Taken altogether, we assess the overall impact of the project as satisfactory. Sub-Rating (both projects): 3

Sustainability: Project sustainability appears threatened by operational shortcomings at utility level, especially in terms of their profitability, as well as by the following ancillary risks:

1. With view to the municipalities' autonomy to design their own water supply and wastewater disposal services, the Montenegrin Government's sector policy is not entirely consistent. It certainly grants the greatest possible degree of autonomy for a municipality-based, decentralised supply regime; however, at the same time, serious deliberations are once again taking place on whether to merge the coastal region utilities into one central enterprise or to commercialise individual operations along private sector lines. This conceptual and strategic instability has a negative impact on the municipalities' long-term, pro-active planning activities (e.g. budget planning) for water supply and wastewater disposal services.
- 2.
3. The municipalities are very committed to retaining the utility companies they own, not least as an explicit symbol of their independence. However, political considerations in particular tend to procrastinate numerous fundamental decisions (e.g. changes to the tariff system and to tariff levels, approving business plans on operations and investment, and political support for collecting receivables). The situation at municipally-owned companies could thus continue to deteriorate, thus necessitating even greater subsidies from municipal budgets.

The risks to programme sustainability that were evident at the time of the evaluation can be found - in equal parts - at the business level, i.e. within the utility companies, and also at the political level, i.e. both at the ministry responsible as well as within the municipalities. Their decisions have a direct impact on the capabilities of the utilities they own. Since the municipalities have a strong interest in retaining their municipally-owned companies as sign of their newly-gained independence, they are expected - albeit with delays - to ultimately take the required decisions necessary. On this basis, sustainability is assessed as satisfactory. Sub-Rating (both projects): 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).