

Ex Post-Evaluation Brief

Albania: Lake Ohrid Environmental Protection Programme - Water Supply and Sanitation Pogradec



Programme/Client	Lake Ohrid Environmental Protection Programme - Water Supply and Sanitation Pogradec 1999 65 229*/2006 65 513 (Sanitation I+II), 2004 65 377 (Water supply), 2000 70 169 (inst. support)	
Programme executing agency	UK Pogradec	
Year of sample/ex post evaluation report: 2012/2012		
	Appraisal (planned)	Ex post-evaluation (actual)
Investment costs (total)	EUR 27.72 million	EUR 33.25 million
Cofinancier SECO	EUR 5.03 million	EUR 7.03 million
Counterpart contribution (company)	EUR 4.70 million	EUR 5.40 million
Funding, of which budget funds (BMZ)	EUR 17.99 million EUR 17.99 million	EUR 20.82 million EUR 20.82 million

* random sample

Project description: The programme aimed at reducing wastewater pollution in Lake Ohrid by improving water supply and sanitation in Pogradec and surroundings. The sanitation component comprised the rehabilitation and expansion of the sewerage system of the city Pogradec, the construction of a treatment with of a wastewater pipeline from Pogradec to the plant. The adjacent village of Tushemisht was also connected. Under the drinking water component, the water supply system of Pogradec, Bucimas and Tusshemisht were rehabilitated (as well as 15% of the grid in Verdove and smaller measures in Remenji). The complementary measure was intended to improve the administrative and financial capacity of the executing agency. The drinking water component was cofinanced by the Swiss SECO.

Objective: Contribution to conserving the Lake Ohrid ecosystem, to reducing health hazards for the population (including tourists) and promoting economic development (above all via tourism). Programme objectives: environment-friendly and hygienically adequate wastewater disposal in the programme area and continuous supply of clean drinking water to the population at socially equitable prices.

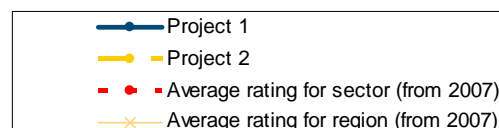
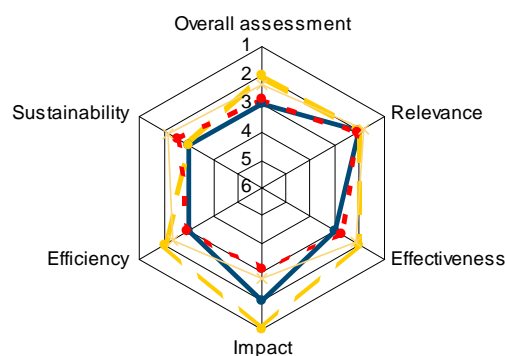
Target group: The permanent and seasonal residents of Pogradec and Bucimas at Lake Ohrid (for drinking water: including the villages Tushemisht, Verdove and Remenji in the municipality of Bucimas).

**Overall rating: Sanitation I: 3
Drinking Water & Sanitation II: 2**

- Structural effect (first cost-effective treatment plant in Albania)
- Considerable contribution to economic development (tourism) through improved water quality
- Timely adjustment of project design in response to imminent failure of original approach
- Urgency of the environmental protection aspect (UNESCO world heritage status) overestimated (limited contribution to solving the problem, no convincing holistic concept).

Of note: Albania has three operational treatment plants, all-(co)financed by German Financial Cooperation (FC). Four other treatment plants (not FC-financed) are not yet operational due to disagreements among the donors, the Albanian Government and utilities in charge (criticism of mistaken design and financially unviable treatment plant operation).

Rating by DAC criteria



EVALUATION SUMMARY

GENERAL CONDITIONS AND CONTEXT OF PROGRAMME

The objective of the programme was to protect the oligotrophic condition with the endemic flora and fauna (esp. fish) of Lake Ohrid on the Albanian-Macedonian border (UNESCO world natural heritage site) against the increasing influx of nutrients and particularly phosphate. A cross-border conservation scheme was adopted in 1999 by both the Albanian and the Macedonian side, with two FC-supported sanitation programmes as core elements.¹

The executing agency, the water and wastewater utility “UK Pogradec”, was founded for the programme by merging three, previously separate units. Since 2007 the utility is owned by the city of Pogradec (approx 70%) and the municipality of Bucimas, who also make up the supervisory board.

The sanitation component appraised in 1999 was to be implemented in parallel with a drinking water component financed by the Swiss SECO (mandated to KfW), but considerable delays occurred up to 2004. As a consequence, the consulting engineer was replaced, the package of measures redesigned and part of the FC sanitation funds reprogrammed for the drinking water component (programme appraisal 2004). It was also decided to carry out the sanitation component in several phases, with the third phase currently underway.

The drinking water and sanitation programmes are closely interlinked and the economic success and acceptance of the sanitation was only made possible by the drinking water component.

Overall rating: The programme's structural effect is particularly noteworthy: UK Pogradec is the first utility to operate a treatment plant in Albania that recovers its operational costs. Key to this was the redesign of the package of measures (above all, a plant design with reduced technical complexity), the steadfast approach of the UK management in collecting receivables – unusual for Albania – and clear FC conditionalities (including temporary suspension of the programme). Despite considerable progress, there is still scope for reducing water losses and raising collection efficiency. The main risk lies in the politically-motivated relationship between UK Pogradec and the owners.

The programme has made a major contribution to economic development in the region (tourism) and to reducing wastewater pollution of the lake; however, the environmental

¹ In an 2011 ex post evaluation, the Macedonian programme was rated as 4 due to institutional weaknesses; however, by virtue of its design - discharging the treated sewage downstream of the lake - it nevertheless contributes to reducing nutrient influx into the lake.

protection aspect (UNESCO world natural heritage status) and the programme's problem solving potential on the Albanian side were overestimated.

Rating for Sanitation I: 3

Rating for Drinking Water and Sanitation II 2

Relevance: The core problem of wastewater influx into the lake and its adverse consequences for the unique Lake Ohrid ecosystem, public health and tourism development (originally secondary aspect) was correctly identified. Before treatment plant commissioning, the lake's shore zone suffered from heavy organic pollution with severe malodorous emissions, frequent skin rashes and cases of diarrhoea among visitors swimming in the lake. Equally, the significance of the drinking water component for the acceptance and economic viability of the sanitation component and the upgrading of the tourism aspect was correctly identified in 2004.

With hindsight, the urgency of the environmental protection aspect appears to have been overestimated. The overall “umbrella scheme” set up through World Bank and the Global Environmental Facility (GEF) cited at programme appraisal has declined in significance due to recent developments. At its time, speedy compliance with relevant EU environmental and hygiene standards also appeared to be particularly urgent for Albania with a view to then imminent accession negotiations. In retrospect, a more gradual approach (as finally adopted) would have been appropriate from the outset. The extent to which the treatment plant can contribute to reducing phosphate pollution is necessary but insufficient. The decision was therefore correct to largely realign the Phase 1 approach of and to postpone the costly phosphate elimination technology until Phase 3, as this procedure would have overstretched the financial and operational capacities of the initially weak utility. So far, only the Macedonian side of the lake has been accorded world heritage status and protecting the lake's ecosystem does not seem to be a priority neither for the Albanian Government nor for Pogradec – unlike its undisputed touristic value. Besides, there is no coherent overall plan for the conservation of Lake Ohrid. Apart from the two FC programmes, only scattered small-scale conservation measures are under way. On both sides, the lake's ecological integrity is furthermore threatened by various kinds of pollution that particularly harm the fish fauna, such as the influx of phosphates via detergents, of pharmaceuticals via fish farms near the lake and plastic waste as well as also due to continued unregulated fishing. In retrospect, health risks related to drinking water and water shortage were also overestimated.

With Albania's Road Construction Programme largely implemented, the government now considers the water sector a development priority in the framework of infrastructure development (above all tourist centres). Today, FC plays a major role in donor coordination and currently finances e.g. the preparation of a master plan for the sector.

Despite a partial shift of emphasis, the underlying intervention logic was generally sound in hindsight. However, the treatment plant's original design was not in line with the utility's

capacity; it would have led to substantially higher operating costs with considerable risks to project success,² whereas the above-mentioned modifications can be seen as crucial to the intervention's success. Actual investment costs were also considerably underestimated. Sub-rating (both programmes): 2

Effectiveness: The objective of the sanitation component was environment-friendly and hygienically adequate sanitary wastewater disposal. The objective of the drinking water component was the continuous supply of clean drinking water to the population at socially equitable prices.

Out of the indicators for the sanitation component, the dry weather effluent quality (< 20 mg BOD/l, currently at about 15 mg) and the treatment plant effluents' microbial pollution (< 1,000 coliform bacteria/100 ml) have now been met (to an initial extent only for Phase I, however); the connections rate to the sewerage system in Pogradec (original target 80%, later reduced to 70%) fell well short in Phase I and - at over 65% - has still not quite been met. Concerning the drinking water component, the envisaged water quality (WHO standards) has been reached; supply security (target: 95% of the population supplied with water 22 hours/day) can be considered met, with about 90% of clients supplied all day, the remaining 10% for approximately 6 hours a day. The ratio of technical and non-technical water losses (non-revenue water) still exceeds the target of 30% - with 39% in 2011 and over 30% in 2012, but fares below the 65% in 2009).

The percentage of connections to the sewerage system and the duration of drinking water supply to areas supplied so far only 6 hours/day will be increased with Phase III.

No indicator was defined for the social acceptability of water tariffs. Within the so-called "block tariff", identical figures apply for each bloc, effectively leading to a unitary price structure. Poor households receive no support in meeting water costs. UK Pogradec also charges a rather high flat rate to households with no water meter (above all poor households in the villages): at a calculated daily consumption of 150 l/person, the monthly fees amount to approx. 7-10% of their income.

Sub-rating Sanitation I: 3

Sub-rating Drinking Water and Sanitation II: 2

Efficiency: Production efficiency: According to SECO's own evaluation (from 2007), the cofinanced drinking water programme is divided into a 'failure phase' up to 2004 and a subsequent 'success phase'. A central factor for the success phase was the above mentioned adjustment. This included the temporary suspension of the programme with clearly stated conditions for its continuation, the replacement of the consulting engineer, the redesign of the intervention package to a treatment plant with lower operating costs and robust, simple technology. Furthermore, most of the largely dilapidated old sewerage

² For at least one of the treatment plants not yet put into operation, inferior design is cited as the main reason by the Albanian Government.

system had to be almost completely replaced, and part of the sanitation funds were reprogrammed for the drinking water component. The final planning was sound and gaps were closed in the follow-on phases. At EUR 337³ for wastewater disposal and EUR 181 for water supply, the specific costs per connection could be kept within reasonable limits.

Allocative efficiency: UK Pogradec is the first (and up to the commissioning of the Korca treatment plant in 2012, the only) utility that recovers its treatment plant's operational costs within Albania, UK Pogradec is ranked as the second best performing Albanian utility after Korça (out of more than 400). The recovery of operational costs was defined as outcome indicator and has been met.⁴ At about 80%, the targeted collection efficiency of 75% has also been more than achieved. Besides favourable preconditions (low operating costs of treatment plant and the new water supply grid), the utility's director took adequate and consistent action against delayed payments, which made a considerable contribution to programme success.

The dynamic prime costs for water/wastewater sold demonstrate that current rates cover operating costs (including debt service). Only 50% of the produced water is, however, actually paid for and UK Pogradec has taken up the challenge and made clear efforts in 2011/12 to reduce administrative water losses.

There is also potential for improvement, following the renewed decline in collection efficiency. The (politically motivated) debt relief announced for delinquent customers amounting to approx. EUR 0.5 million in the course of the local elections in 2011 has proved counter-productive. Equally, the newly acquired role of UK as a 'collector' for other municipal charges) is considered critical, as the higher sums billed ultimately compromise onhe collection efficiency of water fees. The largest debtors are currently the city of Pogradec itself (due to cemetery operations) and the Albanian Government (the police, state residences at the lake).

Sub-rating Sanitation I: 3

Sub-rating Water Supply and Sanitation II: 2

Overarching developmental impact: The intended impacts were to contribute to (1) the conservation of Lake Ohrid, to (2) reduced health hazards for the population (including tourists) and to (3) enhanced economic development (above all via tourism). The bacterial pollution of shore waters (< 2,000 FC/100 ml – previously 1,000,000) was introduced as indicator and yardstick for both health risks and the beaches' attractiveness. This indicator had not yet been met in the first phase of the sanitation component. Recent measurements indicate that today's water quality now only amounts to < 25 FC/100 ml; three problematic inflow points from higher villages that are not yet connected to the treatment plant are still polluted with up to 24,000 FC/100 ml; however, they will be included in Phase III. Thanks to the good water quality in general, Pogradec has developed into an important tourist centre,

³ For comparison: EUR 515 for the first Albanian treatment plant in Kavaja (EPE 2011).

⁴ The Ministry of Finance services the debt.

with increases in visitor numbers estimated at about 30% a year.

Phosphates pose a key threat to the ecosystem. Under the above-mentioned redesign, it was decided to initially opt for a treatment plant with low operating costs and without phosphate elimination. This technology component will be added in Phase III. The contribution to protecting the lake will therefore be delayed, which is acceptable – considering the importance of initially reduced technological complexity for the success and the sustainability of the project.

The outstanding developmental impact from the present standpoint is UK Pogradec's role-model function for Albania's water sector and the concomitant capacity-building effect. This would not have occurred without the timely expansion of the drinking water component. UK Pogradec is the first utility to operate a cost-covering treatment plant in Albania. It is therefore considered to be of particular national importance for Pogradec to retain this role-model function, especially with currently seven other treatment plants under construction or preparation in the country.

Sub-rating for Sanitation I: 2

Sub-rating for Water Supply and Sanitation II: 1

Sustainability: UK Pogradec has good prospects for continuing in the medium-term without additional external financial support (donor side and/or the Albanian Government). To achieve this, the ratio of actually paid water must be increased, however (with collection efficiency and water losses as lever, see above). Challenges persist in professionalising business procedures (e.g. medium-term planning, building reserves for potential [replacement] investments) and properly maintaining the treatment plant (during the mission, faulty trickle filters and signs of corrosion were observed). The maintenance concept envisaged at the completion of Phase I is still only available in draft version.

The main sustainability risks consist in (1) additional operating costs resulting from the phosphate elimination process planned for Phase III (EUR 100,000 a year, to be borne by FC in the initial years) and above all (2) counter-productive political interference in utility management - including staffing decisions at higher levels and the conditioning of tariff adjustments to collection efficiency increases, whilst at the same time withholding tariff payments by the city of Pogradec (who, together with the Albanian Government, is the largest debtor).

Sub-rating (both programmes): 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:

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).