

Summary of Evaluation

Purpose of the evaluation

The purpose of the evaluation is to evaluate a project **Reconstruction of the wastewater treatment plant (WWTP) in the municipality Gradačac in Bosnia and Herzegovina (BaH)**. The project was publicly procured by the Czech Development Agency (CzDA) in 2014 and it was implemented between 2015 and 2017 by VHS Brno company. The main goal of the evaluation is to collect **independent, evidence-based and consistent findings and create recommendations** that could help the Ministry of Foreign Affairs, CzDA and other actor with future implementation of projects in the area of water and sanitation, support of BaH and other projects of the Czech Development Coordination.

Context of the evaluation

The aim of the project was to **reduce the negative environmental and health effects of wastewater** flowing to the river Gradašnica under the WWTP Gradačac. The **modernization, extension and increased realiability of the wastewater treatment** was supposed to be achieved through the reconstruction of the WWTP, trainings of Komunalac's employees and educational activities directed at citizens of Gradačac. In the long-term, full economic sustainability of the WWTP should have been covered by the sewage rates. To this purpose the study concerning the tariffs of the sewage rates was prepared. In the ten years' time, 10 000 equivalent population should have been connected to the WWTP. It is important to emphasize that the project was a **part of a Gradačac municipality's broad strategy to providing drinking water and wastewater treatment**.

Evaluation team

The evaluation is conducted by the evaluation team of Gov Lab Ltd. The team consists of Jan Hněvkovský, Jakub Vrobel, Jáchym Růžička, Tereza Hnátková and Aida Čavdar.

Most significant findings and conclusions

Overall relevance of the project is assessed as **high**. The reconstruction of the WWTP was a highly relevant solution to needs of target groups. Political representation, civil servants at the municipality and the municipal company Kommunalac share a clear and long-term vision of wastewater treatment and a provision of drinking water for the whole municipality. The project contributed to fulfilment of this vision. The questioned citizens and companies regard the reconstruction of the WWTP as highly important as well. The public procurement was fully in line with at the time legislation and enabled to contract a suitable implementer of the project.

Overall efficiency of the project is assessed as **rather high**. The project's schedule was met. Real costs of the project exceeded the planned budget by 3 million CZK. It was mostly caused by the need to build an additional grit separator. All of three planned outputs were delivered at adequate costs. Particularly good communication and cooperation between the implementer and the beneficiary contributed to efficiency of the project. Besides, the beneficiary secured all necessary permits at surprisingly short amount of time. Komunalac's employees showed great enthusiasm into the trainings.

Overall effectiveness of the project is assessed as **rather high**. The levels of water pollution at the outflow of the WWTP are lower than required. The effects on population health cannot be evaluated as there are no necessary data available. The issue with evaluation of the project is also that the indicators at goal and objective levels are not collected. The future challenges remain in areas of sludge treatment and setting sewage rates at levels adequate to fully cover the operation and renewal of the WWTP.

Overall impacts of the projects are assessed as **rather high**. The primary objective of the project was met – fully cleaned water outflows from the WWTP, hence the wastewater from households and companies do not pollute the river Gradašnica. The reconstruction of the WWTP was highly anticipated for a majority of Gradačac’s citizens. It instantly improved the quality of life, mainly by eliminating extensive smell that covered the surroundings of the WWTP. It is placed in the industrial zone; therefore the new land for industrial facilities is available. By connecting to the WWTP, the companies met important environmental standards required for inclusion into the supply chains of western companies. The arguments over the extensive smell with the neighboring Republic of Serbia also stopped. The higher sewage rates are a negative consequence of the project. However, many of the citizens regard it as justified. The project also increased environmental awareness of the citizens.

Sustainability of the project is assessed as **rather high**. The project implementation ended three years ago and since the WWTP has been operated successfully by the Komunalac’s employees. New households have been connecting to the WWTP since the reconstruction, although the speed may be higher. The sewage rates increased over the average of the Tuzla canton, but they still cannot fully cover the operation and renewal of the WWTP. The main issue remains at the relatively lower rates for companies as well as unpaid wastewater from their facilities.

Publicity of the project is assessed as **high**. Requirements for publicity were fully met and the CzDA’s logo is visible for every visitor of the WWTP. The educational activities at local schools were successful and brand awareness of the CzDA remains surprisingly high.

The project’s contribution to **cross-cutting themes** is **high**. Especially in the areas of Environmental protection and Good governance. It was neutral to the Human rights and gender equality.

Recommendations

Recommendations related to the project

Recommendation	Gravity	Addressed to
Ensure the full economic independence of the operation and renewal of the WWTP by sorting out the situation with companies. Possible solutions are increasing the sewage rates and/or setting individual contracts with companies based on the quantity and levels of pollution.	1	Municipality Gradačac, Komunalac
Sort out the sludge treatment in the short term. A possible solution is to add a tool to secure the hygienization of the sludge for a safe agriculture use. For this purpose, the composting or inclusion of additives temporarily increasing the pH value could be used. An alternative could be further drying of the sludge by biological heat. It	1	Municipality Gradačac, Komunalac

is a low-cost possibility for transforming sludge to a fuel that can be further used in cement factories rather than only liquidate at economically unfavourable terms. The costs of such sludge treatment should not exceed 150 EUR per a tonne of dried sludge.		
Accelerate the speed of newly connected households to the canalization. The possible improvement is in both building of the canalization network and the further administrative process of connecting households.	2	Municipality Gradačac, Komunalac

Gravity of recommendations: 1 – most important, 2 – important, 3 – less important

Recommendations related to programme or sector

Recommendation	Gravity	Addressed to
Focus on cleaning one river basin, ideally that goes through both the Federation and Republica Srpska.	1	CzDA, Embassy of the Czech Republic in BaH
Consider directing the aid from the Czech Development Coordination to a regional solution of sludge treatment, besides the reconstructions and constructions of individual WWTPs. A possible solution is to support biogas plants that could effectively use sludge from several WWTPs.	2	Ministry of Foreign Affairs, CzDA
Gather and work systematically with the outputs and experiences from the projects. If something of a high quality emerges, build upon it, and share it among other projects. For example, characters Ekolav and Kapljica have become very well known among pupils in at least the Tuzla canton. We recommend to further work with them and build CzDA's brand awareness around them. The second example from the project can be creating of an overview of the process and all permits necessary that an implementer and/or beneficiary is obliged to obtain to re/construct a WWTP. It could be particularly useful at the formulating phase, especially for the assumptions and risks in the log frame.	3	CzDA, Embassy of the Czech Republic in BaH

Recommendations related to system and process

Recommendation	Gravity	Addressed to
At the identification and formulation phases make sure that the solution delivered by the project is a part of a broader strategy as it was in case of Gradačac.	2	CzDA
While constructing project's indicators, be aware of what the indicators can tell about the success of the project. Use realistic indicators that can be collected by a beneficiary and make sure a beneficiary collects them afterwards. Ideally build upon indicators that a beneficiary already collects before the projects. Make sure implementers better reflect indicators at the goal and objective levels at the	2	CzDA

final monitoring report. We suggest using more “learning indicators” that provide deeper information about the activities. Use indicators stated in the methodological guideline for evaluation of cross-cutting themes of the Czech Development Coordination.		
Pay more attention to development impacts while creating a project’s log frame. Be much more specific at assumptions and risks stated in a log frame.	2	CzDA
At projects that include educational activities, support creating of consortiums and sub-contractors with entities experienced in educational activities. After the public procurement is published, the conditions and expectations can be presented at an open seminar. The cooperation with e.g. the Czech evaluation society might be beneficial. The seminar would at the same time provide an opportunity for networking between entities. A record from the seminar would be published at the profile of the contracting authority as additional information.	2	CzDA