# Final evaluation 2008

# Improvement of Water Supply in the Volta and Eastern Regions, Ghana

Brief Report

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**This report was produced by independent external experts. It reflects only their opinion and assessment.**

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**Tabular overview**

**The evaluation mission**

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| Evaluation period | May 2008 – September 2008 |
| Evaluating institute / consulting firm | CEval – Center for Evaluation, Saarland University, Saarbrücken |
| Evaluation team | Gabriele Struck (International Evaluator); Daniel Kabe (National Evaluator) |

**The development measure**

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| Title according to the offer | KV – Improvement of Water Supply in the Volta and Eastern Regions, Ghana |
| Number | 2002.2118.4 |
| Overall term broken down by phases | Total duration from 07/1998 to 06/2008 (10 years)<br>Support phases:<br>1st support phase from 07/1998 to 06/2002 (4 years)<br>2nd support phase from 07/2002 to 06/2005 (3 years)<br>3rd support phase from 07/2005 to 06/2008 (3 years) |
| Total costs | 18,870,000 EUR. The cost of the technical cooperation amounts to 6,200,000 EUR; within the scope of cooperation with the Kreditanstalt für Wiederaufbau (KfW), the investment volume totals 12,670,000 EUR. |
| Overall objective as per the offer, for ongoing development measures also the objective for the current phase | The continual supply of hygienically sound drinking water to the populations of selected small towns in the Volta and Eastern regions, in accordance with their requirements. |
| Lead executing agency | Community Water and Sanitation Agency (CWSA) |
| Implementing organisations (in the partner country) | RODECO Consulting GmbH<br>Community Water and Sanitation Agency (CWSA)<br>District Assemblies (DAs)<br>District Water and Sanitation Teams (DWSTs)<br>Water and Sanitation Development Boards (WSDBs) |
| Other participating development organisations | Cooperation initiative with KfW (KV – Water Supply Volta and Eastern Regions I (1998 66 096), II (1999 65 344) and III (2003 65 510) |

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| Target groups as per the offer | The target group is the population of 29 small towns in the Volta and Eastern regions. The proportion of the population that lives predominantly from agricultural production is significantly above 30%; women make up an important part of the target group. |

**The rating**

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| Overall rating<br>*On a scale of 1 (very good, significantly better than expected) to 6 (the project/program is useless, or the situation has deteriorated on balance)* | The evaluation team rates the programme overall as satisfactory (3); this represents an adequate result; this is below expectations, but the positive outcomes are prevalent. |
| Individual rating | Relevance: 3; Effectiveness: 2; Impact: 2; Efficiency: 3; Sustainability: 3 |

The object of the final evaluation is the GTZ-supported programme "KV – Improvement of Water Supply in the Volta and Eastern Regions", which is also known as the Eastern and Volta Region Assistance Program (EVORAP), in Ghana. The programme was a cooperation initiative in conjunction with the Kreditanstalt für Wiederaufbau (KfW). The technical cooperation component was overseen largely by RODECO Consulting GmbH, commissioned by GTZ. The project was carried out in three support phases between July 1998 and June 2008. The lead executing agency was the national Community Water and Sanitation Agency (CWSA) (a regulatory and controlling body, responsible for water supply in the rural areas and small towns). The implementing organisations were the District Water and Sanitation Teams (DWSTs) – appointed by the District Assemblies (DAs) (district administrative bodies and owners of the water installations) – and the Water and Sanitation Development Boards (WSDBs) (operators of the water installations at a local level). The latter were set up within the framework of the project. The target group of the programme was the population of 29 small towns in the Volta and Eastern regions. More than 30% of the target population lives mainly from agricultural production; women made up an important part of the target group. The overall objective of the initiative was: "The continual supply of safe drinking water to the populations of selected small towns in the Volta and Eastern regions, in accordance with their requirements." Two indicators were formulated for the overall objective: (1) "The population of 29 small towns has access to drinking water for at least 10 hours per day (regional average), and the downtime of the supply systems is below 20 days a year following expiry of the guarantee period"; and (2) "Consumption of drinking water per person per day rises from 5 to 10 litres between 06/2004 and 06/2007." In the final phase, a third indicator was added to the overall objective, although it referred more to an output: (3) "The regional CWSA regularly have at their disposal O&M (operation and maintenance) data from 29 WSDBs for planning and management decisions ("professional database")."

The German input to the programme through technical cooperation consisted of the provision of international and local long- and short-term specialist staff, along with non-cash benefits, local subsidies, and training measures. The cost of the technical cooperation amounted to €6,200,000. Within the scope of cooperation with the KfW, an investment volume of €12,670,000 was reached for the construction of water systems in the participating areas. The total costs of the German contribution amounted to €18,870,000. During the 3rd phase, the initiative was also financially supported by the Department for International Development (DFID). The partner's input consisted primarily of providing office and conference space in Accra (national - CWSA), Ho (regional - CWSA Volta region) and Koforidua (regional - CWSA Eastern region), as well as qualified specialists at national, regional and district levels

to provide support for project implementation. The districts and municipalities together had to provide 10% of the investment costs for the water installations.

According to the concept and the results chain underlying the programme, the inputs were supposed to be used to carry out activities in the form of consultation and training at the national, regional and local level, focussing on operation and management of small-town water supply installations, as well as on hygiene education and sanitation, organisational development and knowledge management, and the rehabilitation of drinking water supply networks in the selected small towns. This should result in achievements in the form of qualified personnel within the CWSA, the DAs/DWSTs and the WSDBs, along with "best practice" methods and instruments for operating and managing water installations, and for installing and restoring drinking water supply networks, as well as contributions towards improving the underlying conditions within the sector (water policy, model byelaw). The utilisation of the achievements should lead to decentralised, municipal set-ups which ensure the operation and sustainable management of the restored drinking water supply networks, providing the local population with safe drinking water in the vicinity of their homes. The DWSTs should take on their role as owners of the installations, and, regulate the WSDBs by means of the newly developed "best practice" methods.

In terms of its impact, the programme was intended to contribute to a qualitatively and quantitatively improved drinking water supply (overall objective level). In terms of its indirect impact, the project was intended to contribute to an improvement in the hygiene and health situation of the population, and thus to an improvement in quality of life. As regards its highly aggregated impact, the programme was ultimately aimed at contributing towards the following Millennium Development Goals (MDGs): MDG 1 (creation and improvement of income opportunities), MDG 2 (achievement of universal primary education), MDG 4 (reduction of child mortality), MDG 5 (improvement of maternal health) and MDG 7 (ensuring environmental sustainability; in particular sub-goal 10: access to safe drinking water).

The final evaluation was carried out in Ghana between 31/05 and 21/06/2008. In Accra – at a national level – as well as at the regional and local level group interviews and intensive individual interviews were conducted with employees of the participating organisations, and in the Volta and Eastern regions with representatives of the target group. In total, 187 people were interviewed. The evaluation team consisted of two external evaluators, one international and one local. The judgment of the evaluation is based on the five success criteria relevance, effectiveness, impact, efficiency and sustainability. While sustainability is rated on a 4-point-scale (from 1 = very good sustainability to 4 = inadequate sustainability) the other criteria are rated on a six-point scale (from 1 = very good rating, significantly better

than expect to 6 = the programme is useless, or the situation has deteriorated on balance). These criteria were agreed within the Development Assistance Committee, the Organisation for Economic Cooperation and Development (OECD-DAC) The programme is also evaluated (but not rated) with regard to its contribution to poverty reduction and the Millennium Development Goals, promotion of gender equality, promotion of sustainable development, and subject-specific success criteria.

It can be stated that the specialist qualification of staff on all levels of partner institutions improved as a result of programme activities. Thus the effectiveness of project executing agencies and participating partner increased. For the first time, an organisational development process was carried out at institutional level, which contributed to an improvement in self-reflection, team building and inter-institutional communication.

On the whole, the evaluators came up with similar or complementary rating and judgments, independently of one another. In its overall rating, the evaluation team rated the programme as satisfactory (3). This reflects an adequate result, which is below expectations, but with predominantly positive outcomes.

The individual success criteria were rated as follows: The programme's relevance was emphasised by all interviewees. Relevance examines the "extent to which the aims of the programme correspond with the needs of the target groups, the policies of the partner country and of the partner institutions, global development goals, and with the fundamental development policy orientation of the German government." The EVORAP project supported central development issues of the partner country through the quantitative and qualitative improvement of drinking water supply and the involvement within the scope of the decentralisation process. At national, regional and local level, suitable contributions were made towards creating legal framework conditions, through consultation with the Water Directorates (WDs) and the development of the municipal bylaw on managing water installations, which came into force in February 2008. The project was relevant regarding the MDGs 1, 2, 4, 5 and 7, sub-goal 10. However, given the insufficiently integrated wastewater element, the sector strategies of the German Federal Ministry for Economic Cooperation and Development (BMZ) were not fully taken into consideration. It can also be observed that the EVORAP water system is not sufficiently utilised, particularly during the rainy season, by the target groups in many areas, given the freely available alternative water sources. The expectations that were pinned on the project have largely been met, even though, in part, the relevance of water supply as a charged service did not become apparent to the target population. The criterion relevance is thus rated as satisfactory (3).

Effectiveness refers to the "extent to which the direct results (programme objectives) of the programme are achieved (target-performance comparison)." Within the scope of the programme predominantly positive effects have been observed. One positive direct result to be emphasised is, the fact that, in most participating areas, sufficiently well-managed water installations were established, providing the population access to safe drinking water on an almost daily basis. Water consumption increased during the course of the programme, from an average of 5 to 9.5 litres per person a day. The target indicator had been set at 10 litres per day. The MOM (maintenance, operation, monitoring) system was installed in the districts and regional CWSAs, but general practical experience in operating the system seems to be still lacking. The data still do not always lead to the required management decisions. The overall objective has been achieved and the effectiveness is thus rated as good (2). However, little successes of the responsible authorities in regulating the use of alternative, unsafe water sources influence the appraisal negatively.

"Impact" (overarching development policy effects) refers to the "extent to which the programme contributes to the achievement of the targeted overarching impacts, and to the occurrence of other indirect effects." In terms of impact, the programme was to help, improving the hygiene and health situation among the population of the Volta and Eastern regions, and thus to enhancing quality of life. This positive indirect effect is reflected in a reduction of water-induced illnesses in almost all participating areas. According to the statements of many interview partners, illnesses such as typhus, bilharzias, Guinea worm (dracunculosis), malaria and diarrhoea have declined. The hygiene situation in individual families has been improved, in part thanks to the educational measures of hygiene advisors commissioned by the WSDBs. However, in order to significantly improve the hygiene situation, wastewater disposal and latrine construction in particular need to be advanced further. Thus, a lot of work remains to be done in this area. An important positive indirect effect is the reduction of water transport times. Women and children especially benefit from this. According to the statements of target group representatives, productive activities performed by women have increased. It is also reported that children are performing better in school. The criterion "impact" is rated as good (2).

Efficiency is a "measure of the suitability of the resources employed for a programme relative to the results that it achieves (outputs and impacts)." Efforts were directed towards efficient implementation. However, in some cases the project interventions were unable to reach the desired degree of efficiency, as, for example, regarding the coordination of donors, especially at a local level, as well as regarding project management, transparency and information flow within the participating partner and executing organisations. At the start, a lot of effort had to

be put in to convincing municipalities and districts to provide the required 10% share. The programme was implemented at a strategically favourable time, as it was able to contribute towards developing the framework conditions (consultation with Water Directorate (WD), development of the model byelaw). The time period for the activities within the scope of the decentralisation process was too short-sighted, though. More time would have been necessary in order to ultimately not only attain all goals, but to consolidate them as well. The rating of the criterion efficiency is thus satisfactory (3).

Sustainability is a "measure of the probability that the positive results and impacts of the programme remain beyond the end of the support period." It can be noted that different aspects of sustainability within the programme are to be appraised extremely differently. On the one hand, the introduction of economically viable water rates, the structural anchoring of the operation of the installations within the municipalities, and the commencement of the bylaw, suggest sound sustainability of outcomes. On the other hand, due to underlying financial conditions of districts and the capabilities and motivation of district staff, there is justified doubt as to whether they will be able to sufficiently safeguard their role as owners. The programme is rated as satisfactory sustainable (level 3). The (hitherto positive) effectiveness of the programme in terms of development policy will very probably decline significantly, yet remain positive.

As regards gender, it can be established that women and men benefited from the project to an equal degree. The successful integration of women into the WSDBs in particular is, in the context of Ghana, innovative, and is rated a success. Approximately 40% of WSDB members are women. Poverty orientation was demonstrated in particular by the enhancement of the local self-administration structures and the creation of new jobs. The promotion of sustainable development is recognisable in the holistic approach of technical, organisational and political advice, as well as in the multi-level model.

The following overarching conclusions can be derived from the programme: It was a largely positive programme and it should be emphasised that, alongside all the critical aspects, such high investments in drinking water supply of small towns were done for the first time in Ghana. Consequently, safe drinking water is now available, and the new water installations are self-managed by qualified municipal organisations at a local level in over 90% of the 29 participating areas. Significant successes of the project are: (a) Access to clean drinking water for approx. 219,000 people in the Volta and Eastern regions; (b) Decentralised operating and management structures; (c) Successful gender mainstreaming through the integration of women in the WSDBs at local level; (d) Legal framework conditions that contribute to safeguarding the results; (e) A "maintenance and operation" (M&O) system with

database and (f) sector-specific training material, which should in future be used as “best practice” (g) on a nationwide basis; (h) Reduction in water-induced illnesses and thus (i) improvement in quality of life. The project also had indirect effects on the MDGs 1, 2, 4, 5 and 7, sub-goal 10. Factors limiting success are: (a) The uncertain future of suitable monitoring of the water installations and of the WSDBs by the official owners – the district administrations; (b) The lacking acceptance of water rates and insufficient use of the installations by the population. (c) The many alternative, unsafe water sources, which are available freely, especially during the rainy season; (d) The challenge of coordinating the activities of the numerous donor organisations within the water sector in Ghana; (e) The precarious financial situation of the participating authorities; (f) The continuing high water losses, which have not yet been satisfactorily dealt with.

In sum, it can be established that the project has made a contribution to the decentralisation process of the Ghanaian government, and has given important impetus to the water sector. However, for the smooth operation of the installations, improvements would be desirable in the areas of management, coordination among institutions, and maintenance of the installations, along with efforts in the field of public relations. Elements of wastewater disposal have been virtually invisible.

Important recommendations are: (a) The continuation of support for implementing the model bylaw with the help of the GTZ decentralisation project, (b) Increased campaign and public relations work at a local level, in order to increase the acceptance of water charges, and; (c) Improvement of donor coordination.