**Central African Republic: Rural Water Supply**

**Ex post evaluation**

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| **OECD sector** | 14030/Basic drinking water supply and basic sanitation | |
| **BMZ project ID** | 1996 65 357/Sample 2007 | |
| **Project executing agency** | Ministry of Mining and Energy | |
| **Consultant** | Cooperation project with GTZ | |
| **Year of ex-post evaluation report** | **2009** | |
| | **Project appraisal (planned)** | **Ex-post evaluation (actual)** |
| **Start of implementation** | Q 4 1996 | Q 3 1997 |
| **Period of implementation** | 36 months | 51 months |
| **Investment costs** | EUR 2.7 million | EUR 2.7 million |
| **Counterpart contribution** | EUR 0.15 million | EUR 0.15 million |
| **Financing, of which Financial Cooperation (FC) funds** | EUR 2.6 million | EUR 2.6 million |
| **Other institutions/donors involved** | GTZ: EUR 2.1 million | GTZ: EUR 2.5 million |
| **Performance rating** | 2 | |
| **Significance/Relevance** | 2 | |
| **• Effectiveness** | 2 | |
| **• Efficiency** | 2 | |
| **• Overarching developmental impacts** | 3 | |
| **• Sustainability** | 2 | |

The cooperation project of German Financial and Technical Cooperation, Rural Water Supply, was selected in the 2007 sample for ex post evaluation. The final inspection took place in spring 2002. Due to the onset of hostilities since autumn 2002 and the ongoing precarious security situation in the project area, the situation of the project was no longer under the direct control of KfW and its personnel were unable to conduct a local ex post evaluation. A large part of the installations was presumed to have been destroyed or no longer in use. To be able to bring the project to completion nevertheless, we commissioned a study by a non-governmental organisation still operating in the project region, COOPI from Italy, in February 2009. Under the supervision of an experienced evaluation expert, local personnel were despatched to assess the condition and usage of almost all the individual measures. The condition of 193 of 204 of the wells built as part of the cooperation project was inspected locally; the remaining villages cannot be visited by local staff even today without unreasonable risk. Under the given circumstances, we consider this study as a suitable basis for the following findings of ex post project evaluation. Information on the role of government

institutions in particular in connection with the project cannot, however, be adequately ascertained due to the collapse of sovereign control over the project area.

**Brief description, overall objective and project objectives with indicators**

The objective of the cooperation project with GTZ was the adequate supply of sufficient drinking water of satisfactory quality to the rural population in the Ouham-Pendé Prefecture. This was to contribute to reducing health hazards due to water-transmitted diseases (overall objective). German Financial Cooperation funds (FC) financed the construction of deep wells with hand pumps. The German Technical measures (TC) by GTZ included selection of locations, construction planning and supervision, setting up user committees, training craftsmen for the repair and maintenance of the pumps and hygiene awareness measures.

The indicators for the project objective were:

- At least 70% of the wells are in proper condition 2 years after commissioning.
- Water quality meets WHO standards.
- At least 80% of villagers obtain about 25 l per capita per day.

The attainment of the project objectives was considered to be equivalent to achieving the overall objective. A spot check of developments in water-induced diseases by GTZ was also planned.

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

The FC component of the project consisted in the construction of 204 deep wells with India Mark II hand pumps, including superstructure with drainage gutter and soak away. Due to cost savings and the provisions made for contingencies and price increases, far more wells were built with the available resources than the originally planned 120 during a project term extension of 1 year. A uniform type of pump was used that had already proved effective in the country and had also been used in drinking water supply measures. This facilitated spare parts supply and the organisation of maintenance and repair.

In the TC component, the site locations were selected by means of preliminary socio-economic studies and construction planning and supervision. A major component of the project was building sustainable operating capacity, particularly by setting up user committees and training craftsmen for the maintenance and repair of the pumps. In addition, hygiene awareness measures for the population were carried out, latrines built and water quality monitored to maximise health impacts.

The project area, which also comprised Ouham Prefecture at appraisal, was confined to Ouham-Pendé Prefecture after consultations with the Agence Française de Développement to avoid overlaps with rural drinking water supply projects.

After project completion, serious hostilities broke out as of the autumn of 2002 with the intermittent expulsion of large parts of the population in the project area, which is why the follow-on phase for strengthening the user committees and monitoring water quality could not be carried out as planned.

**Key results of impact analysis and performance rating**

The overall objective of reducing water-induced health hazards cannot be verified for lack of data. The planned spot checks of water-induced diseases could not be carried out due to the civil war. It is plausible, however, to assume that the project has had

beneficial health impacts. In addition to the wells, the hygiene awareness measures and the installation of latrines have contributed to this.

The project sub-objective of an adequate *amount* of all-year drinking water supply for the target group was almost attained. The indicator for this was the proper condition of 70% of wells 2 years after commissioning. At the time of inspection at the beginning of 2009, the wells had already been in operation for 8 to 12 years. Of these, 54% were operating smoothly and another 17% delivered sufficient water for the most part, though intermittently. Thirteen per cent of the wells permanently delivered too little water and 15% were completely inoperational.

No data was available on the project sub-objective of adequate supply in terms of *quality.* As a rule, however, bore wells can be expected to deliver good water quality due to the type of construction. Nor was any data available on usage by the population.

The target group of the project were very poor villagers (approx. 60,000). Setting up user committees is part of the self-help approach in poverty reduction. As drinking water supply is a task entrusted to women and girls, they benefit in special measure from the shorter distances to the wells, affording them greater scope for economic and social activities or more time for school education.

User committees are still actually active at 61% of the wells, i.e. they levy charges and use these to have repairs carried out. For another 25% of the wells, the organisational capacities of the user committees are still in place, but are not in current use. The user committees are well established where they have already been engaged in repair activities and have been able to gain positive experience. Fees are usually collected when repairs are needed. There are, however, also a smaller number of user committees that levy monthly charges as originally planned. Repairs have already been made at 58% of the wells, mostly by local craftsmen with the spare parts also purchased locally. A maintenance agreement has been concluded for only 14% of the wells. Nevertheless, the continuity of most user committees and their successful repair measures attests to the sustainable success of the self-help approach. There is, however, a risk of a greater need for repairs with the increasing age of the pumps.

Considering the poor health situation in Central African Republic, rural drinking water supply can be accorded high relevance. Target group needs were properly addressed. The self-help approach of the user committees has proved effective, particularly in a country with very weak government institutional capacity. We assess relevance as good (Subrating 2).

As to the effectiveness of the project, the key the question is whether the rural population has been supplied with enough drinking water of sufficient quality. The fact that 54% of the wells are in good condition and another 17% are largely operational already attests in our estimation to a good performance in view of the already long operating times and the very adverse general situation. The villagers have organised due repairs in user committees without external support, which shows that they make use of the wells to meet their needs and are keen to keep them operational. Although no information is available on the quality of the water delivered, due to the technical layout of the wells there is no reason to assume that serious deficits have arisen here. We therefore judge the effectiveness of the project as good (Subrating 2).

We assess the efficiency of the project overall as good (Subrating 2). Thanks to the efficient execution of construction works and the favourable geological conditions, the building costs amounting to EUR 12,500 are below EUR 16,000 as estimated at project appraisal. Substantially more wells could therefore be built than originally planned.

As regards health status, it is difficult to assess the overarching developmental impacts, but we may assume that beneficial effects have been achieved. Moreover, the project has contributed to strengthening the village communities, which is particularly important in the midst of disintegrating government institutions. We therefore assess the overarching developmental impacts as sufficient (**Subrating 3**).

We assess the sustainability of the project as good (Subrating 2), as despite the very inimical general conditions most of the wells are operational. On the one hand, this is attributable to the robust pump technology and on the other, to the ability of the target group to organise the requisite repairs in user committees. We assume that this self-help capability will also continue in future. It is, however, likely that increasing problems will arise with water delivery due to the low level of maintenance services, which could result in a slight decline in effectiveness.

We assess overall developmental performance as good (Rating 2).

## General conclusions

The project shows that a suitable uniform pump technology applied by several donors in keeping with local needs and conditions that facilitates repair and spare parts procurement in combination with the self-help operational approach of user committees is capable of achieving sustainable effects even under the most adverse circumstances of warfare and weak statehood.

**Notes on the methods used to evaluate project success**

**Assessment criteria**

Projects are evaluated on a six-point scale, the criteria being relevance, effectiveness, overarching developmental impact and sustainability. 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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| Developmentally successful: ratings 1 to 3 | |
| Rating 1 | Very good result that clearly exceeds expectations |
| Rating 2 | Good result, fully in line with expectations and without any significant shortcomings |
| Rating 3 | Satisfactory result – project falls short of expectations but the positive results dominate |
| Developmental failures: ratings 4 to 6 | |
| Rating 4 | Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results |
| Rating 5 | Clearly inadequate result - despite some positive partial results, the negative results clearly dominate |
| Rating 6 | The project has no impact or the situation has actually deteriorated |

Sustainability is evaluated according to the following four-point scale:

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| Rating 1 | Very good sustainability | The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase. |
| Rating 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.) |
| Rating 3 | Satisfactory sustainability | The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall.<br>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. |
| Rating 4 | Inadequate sustainability | The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and an improvement that would be strong enough to allow the achievement of positive developmental efficacy is very unlikely to occur.<br>This rating is also assigned if the developmental efficacy that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria. |

**Criteria for the evaluation of project success**

The evaluation of the developmental effectiveness of a project and its classification during the ex-post evaluation into one of the various levels of success described in more detail above focus on the following fundamental questions:

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| Relevance | Was the development measure applied in accordance with the concept (developmental priority, impact mechanism, coherence, coordination)? |
| Effectiveness | Is the extent of the achievement of the project objective to date by the development measures – also in accordance with current criteria and state of knowledge – appropriate? |
| Efficiency | To what extent was the input, measured in terms of the impact achieved, generally justified? |
| Overarching developmental impact | What outcomes were observed at the time of the ex post evaluation in the political, institutional, socio-economic, socio-cultural and ecological field? What side-effects, which had no direct relation to the achievement of the project objective, can be observed? |
| Sustainability | To what extent can the positive and negative changes and impacts by the development measure be assessed as durable? |