

Burkina Faso: Rehabilitation of Health Centres

Ex-post evaluation

OECD sector	12191 – Medical Services	
BMZ project ID	1993 65 560	
Project-executing agency	Ministère de la Santé	
Consultant	GOPA	
Year of ex-post evaluation	2005	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	06/1994	04/1995
Period of implementation	24 months	44 months*
Investment costs	EUR 4.6 million	EUR 4.0 million
Contributions of the project country	not quantified	EUR 0.3 million
Financing, of which Financial Cooperation (FC) funds	EUR 4.6 million	EUR 3.7 million
Other institutions/donors involved	-	-
Performance rating	4	
• Significance / relevance	5	
• Effectiveness	4	
• Efficiency	4	

* Some construction work was not completed until end of 2004/early 2005

Brief Description, Overall Objective and Programme Objectives with Indicators

The basic-needs-oriented programme was intended to contribute to improving the health situation of the population particularly in five of the approximately 50 provinces of Burkina Faso (overall objective). This was to be achieved through an improved health care delivery for the predominantly rural population of the programme regions (programme objective). The programme comprised the rehabilitation and expansion measures (operating theatres) and the supply of medical and technical equipment for five hospitals, the supply of medicine, medical consumables and medical-technical equipment for health centres, vehicles for some of these facilities and equipment for health centres with small, digressive maintenance funds. The measures covered those provinces in Burkina Faso in which health care was previously financed from German DC funds (DED/GTZ: minimal rural health services).

The indicator established for measuring the overall objective was a 10% increase in the utilisation of the health stations against the three-year average of the representative preceding years.

The following indicators were agreed to measure the achievement of the programme objective:

1. Income increases achieved from medicine sales proceeds during the lifetime of the programme were to be documented in the 3 "improved health centres" (CMA, Centre Médical Amélioré) and 2 regional hospitals (CHR, Centre Hospitalier Régional) (20% of basic supplies in the 1st, 40% in the 2nd and 60% in the 3rd year); 80% of all health

- stations (CSPS, Centre de Santé et de Promotion de la Santé) supplied with medications on average report income of 50% from medicine sales one year after delivery of basic supplies;
2. The medical equipment supplied was to be 90% operational in the third year after delivery;
 3. In the 3rd year after rehabilitation the buildings were to be in operational condition according to established standards.

From the present point of view, however, we consider the original indicators not to be appropriate for evaluating the achievement of the overall objective and of the programme objective. The indicator for the overall objective rather appears to be an indicator for the programme objective, and even for this objective it is too general. The programme objective indicator 1 is a criterion for efficiency while programme objective indicators 2 and 3 constitute indicators of programme results.

We therefore propose to use the original indicator for the overall objective as a general indicator for the programme objective. In addition to this indicator we consider it appropriate to apply the following sub-indicators in order to better estimate and differentiate the achievement of the objective:

- Increase in yearly bed occupancy between 1998 and 2004 and current occupancy rates
- Increase in operations performed each year between 1998 and 2004
- Increase in yearly doctors' visits in the hospital between 1998 and 2004

Given the scarcely demonstrable chain of cause and effect, particularly within a rehabilitation programme, the indicator for the achievement of the overall objective can be given only in an approximate way. We have used "the share of Caesarean sections in relation to the total number of births performed" as an approximate benchmark of health care delivery. This indicator is to be utilised as an estimate of the rate of performance of necessary operations and thereby as a proxy indicator of improved health in the region (overall objective).

Programme Design / Major Deviations from the original Programme Planning and their main Causes

The following measures were planned under the programme:

- (1) rehabilitation of 2 regional hospitals (CHR) in Gaoua and Fada N'Gourma, repair and enlargement of the 3 health centres (CM) in Titao, Solenzo and Gorom-Gorom into "improved health centres" (CMA) through surgical units, installation and rehabilitation of electricity supplies in all 5 rehabilitated facilities;
- (2) repair, replacement or renewal of medical-technical equipment of the rehabilitated facilities;
- (3) supply of medications, medical consumables, equipment and vehicles for 150 health stations in the programme area;
- (4) establishment of small, digressively financed maintenance funds for the five rehabilitated facilities;
- (5) Consulting services to support the implementation of the measures, preparation of a maintenance conception for the rehabilitated facilities, establishment and supervision of the medicine funds and advice for their administration.

(1) In accordance with the programme conception the two regional hospitals in Fada N'Gourma and Gaoua were rehabilitated and the three health centres in Gorom-Gorom, Solenzo and Titao were enlarged through the addition of surgical units. The construction work in Gorom-Gorom and Fada N'Gourma, however, was not completed until the end of 2004 and early 2005. The reason was that the construction firm contracted in 1999 failed to meet its contractual obligations and the dissolution of the contract was heavily delayed.

The remaining construction work (operating theatres and supply infrastructure) was financed by the Ministry of Health of Burkina Faso. Because of the delays the costs almost quadrupled, at EUR 145,000 (inflation).

(2) The repair of existing equipment in the CHR Fada N'Gourma and Gaoua, which was planned at programme appraisal (PA), did not take place because either the equipment was in poor condition or the repair service of the hospitals or the state maintenance service DIEM (Direction des Infrastructures, de l'Equipeement et de la Maintenance) were not in a position to perform these repairs for lack of technical capacities. This is why only replacements were made.

The deliveries of furniture, instruments and equipment for the five facilities were already concluded at the time of the final inspection in 1999, although some of them could not be put to use until much later. Currently approx. 95% of the installed equipment is fully functional. The medical and technical equipment supplied is generally adequate, and the facilities are far better equipped than comparable facilities elsewhere. However, the maintenance is unsatisfactory as it is insufficiently funded.

(3) Several changes regarding medications, medical consumables, equipment and vehicles to be supplied to the health centres occurred in the course of the programme as against the project conception in place at the time of appraisal. Medications were delivered to only 10 of the originally planned 15 districts because not all the districts met the prerequisites established in the implementation agreement of the programme appraisal report (existence of a medication fund to be controlled by trained personnel and a local administrative committee). The supply of medical consumables to health centres, in turn, was expanded from 150 to 231 standard packages for health stations (CSPS) on the basis of the results that were delivered by the analysis of needs carried out at the start of the programme. The deliveries were carried out as scheduled. A need for new vehicles could not be reasonably ascertained, so that this measure was not financed.

(4) The digressive maintenance fund for buildings and equipment scheduled to be implemented in accordance with the programme appraisal report was not set up. Despite persistent efforts on the part of KfW the sum of EUR 100,000 planned for this fund was not made available.

(5) The consulting services were awarded to the firm GOPA on the basis of a competitive bidding process limited to firms domiciled in Germany.

An implementing unit under the responsibility of the Ministry of Health was created for the planning, tendering and implementation of the measures. The local counterpart contribution of providing an office and office staff that was scheduled to be rendered was only inadequately fulfilled. The personnel was either not qualified or only insufficiently available. The implementing unit proved to be scarcely competent overall and in several cases presented itself as extremely uncooperative (for instance in the dissolution of the contract with the building contractor in Gorom-Gorom and Fada N'Gourma).

In accordance with the programme appraisal report, small and medium-sized local enterprises were selected for the building measures. During implementation the selected small enterprises turned out to have considerable structural weaknesses in the preparation and organisation of their work, the procurement of material, personnel, the quality of their work and financial capacities. These difficulties were aggravated by the shortage of building materials resulting from the construction boom as well as lengthy administrative procedures and the processing of contractors' invoices.

In this programme we rate the services of the consultant GOPA as not satisfactory. Considerable improvements were not made until KfW demanded them. The establishment of maintenance funds and the advisory services to the health care facilities in the administration of the medication fund as planned under the programme conception were not implemented (see above). Moreover, repeated problems occurred in the course of the programme in the coordination between the two parties responsible for the construction and supply components. As a result the consultant was not able to offset the weaknesses of the executing agency and the small construction contractors so as to enable the building measures to be completed on schedule. More intensive backstopping would have been useful in this regard. What deserved credit was the efforts made by the consultant to supervise the construction sites, which were far apart from each other.

In retrospect we rate the programme conception to be no longer appropriate. It showed serious deficiencies which adversely influenced the implementation - in addition to the deficiencies of the involved institutions and enterprises. First, it lacked an assessment of the target group's willingness and ability to pay, which resulted in excessively low capacity utilisation of most healthcare facilities; also lacking were measures to increase their acceptance among the population. Further design flaws included the lack of consideration of training needs at the management level, the unfavourable geographical distribution of the locations and a superficial risk analysis.

The complementarity of the measures to German TC must be rated positive. It paved the way for influencing the decentralisation in the health sector of Burkina Faso which, however, still has not been successfully completed (for instance the establishment of a decentralised administrative committee) and the national sector policy in general. A concerted procedure with other donors would have been necessary in this field.

The support originally planned for the operating phase at the time of project appraisal was largely dispensed with because of the generally poor efficiency of the Ministry of Health. The balance of EUR 102,000 was originally intended for the financing of spare parts and consumables. Because no order was ever placed despite repeated reminders the balance was reprogrammed for use in the Social Marketing Project PROMACO II (1996 66 207) following consultation with the BMZ. The FC amount was reduced from EUR 4.6 million to EUR 3.7 million as a result of reductions in programme components.

Key Results of the Impact Analysis and Performance Rating

The functioning of the five centres is currently given but we see high risks to maintenance both in the short term and in the long term. The building maintenance fund that was planned according to the programme appraisal report was not established during the programme period. In the meantime a national maintenance conception has been developed. However, this conception has numerous deficiencies such as inadequate provision of funding and lack of competencies at the decentralised level. Some of the impacts on the functioning of the programme facilities can already be felt today. For example, in Gaoua various medical devices have already started to work improperly for lack of funding for maintenance, making them unreliable.

The health facilities continue to be heavily dependent financially on the state. The running costs of the facilities visited are being subsidised 75% to 80% by the state. Revenues they earn, amounting to 20% to 25%, consist of fees for treatment (approximately 1/3) and the sale of medications (approximately 2/3). Despite massive state subsidies the financial resources of the facilities are insufficient to ensure satisfactory operation in the long term. We estimate that the available funds cover merely 60% of the funds needed for proper operation.

The analysis of the tariff system for treatment showed that rates are far from cost-covering and are being heavily subsidised by the state. Nevertheless, a substantial share of the population cannot afford medical treatment in the hospitals.

The supply and distribution logistics for medications in Burkina Faso are satisfactory. In the rehabilitated facilities the availability of essential medications is 95%. They are delivered through the central medicine distributor CAMEG. Although prices are fixed below the purchase price demand for medication is low.

The human resources requirements for the operation of the health centres and regional hospitals and the programme region are fulfilled. However, higher availability of specialised medical doctors in the two regional hospitals (CHR) is desirable.

The referral system in the programme regions has improved in the past years as a result of the improved technical equipment in the CMA and CHR. In 2004 the referral rates in the five programme hospitals were between 3% and 9% (share of cases referred out of all in-patient cases). Altogether, however, the functioning of the referral system continues to be insufficient. The standard referral rate in West Africa, by experience, was to be around 20%. For instance, there is no formal system for referring a patient from a CSPA to a CHR. The possibilities for the referral of inhabitants of rural and poor areas are particularly limited.

Even if the first foundations for an administrative autonomy of the peripheral health facilities were created in the framework of the decentralisation of the Burkinan health sector, great deficiencies remain. Local administrative committees (Comités de Gestion - COGES) were created in the past years. Their tasks include controlling the budget of the health facilities and deciding on charging fees for treatment and on the sale of medicine. In actual terms, however, the functioning of the committees is still weak. The decentralised resources and competencies continue to be low while the central state still exercises great influence on almost all areas of the regional and local level.

Most of the main risks identified at the time of project appraisal, that is, the lack of willingness to decentralise the health sector and the persistence of structural deficiencies, have materialised. At the time of project appraisal, the structural deficiencies identified included mostly the lack of technical and financial maintenance capacities as well deficiencies in the distribution of personnel and medications. It is true that the distribution of personnel and medications has improved overall. But the technical and financial maintenance capacities continue to pose a high risk to the long-term operation as they are still insufficient, as described above.

The programme objective was to improve health service delivery to the mostly rural population in the project regions. The general indicator established at the time of programme appraisal for the achievement of the programme objective was a 10% increase in the use of the health stations. This indicator was generally met. Since programme appraisal the utilisation of the health stations has increased by over 10% on average. With regard to the sub-indicators the following statements can be made (see Annex 2 for detailed information):

- (a) The number of surgical interventions did rise substantially in the course of time (e.g. by 185% in Fada N’Gourma) but is still low in relation to the population (e.g. 134 operations in Fada N’Gourma in 2004, with a population of 318,451). This is also due in part to the fact that some of the operating theatres went into operation very late as a result of the delays in implementation.
- (b) The bed occupancy rate increased from 1998 to 2004 between 16% and 35%, in Fada N’Gourma it fell by 11%. The total bed occupancy rate was between 17% and 36% in 2004. Thus it continues to be very low and cannot be rated sufficient.
- (c) The number of medical consultations in the supported CHR and CMA increased between 1998 and 2004 by an average of 27.5%, but only a small portion of the population is using this offer (4.7%).

On the basis of the sub-indicators it can be stated that the utilisation of the capacities continues to be very low despite a 10% rise and that it is far from meeting actual needs. This is illustrated particularly by the low number of operations performed in relation to the total number of inhabitants. Moreover, the availability of health services has been delayed by around five years in two facilities (Gorom-Gorom, Fada N’Gourma). We therefore consider the programme objective not to have been achieved sufficiently.

The programme objective was to contribute to improving the health situation of the population particularly in five of the approximately 50 provinces of Burkina Faso. The number of Caesarean sections performed gives an indication on the achievement of the overall objective. According to a study by UNFPA, UNICEF and the WHO the share of Caesarean sections in the total number of births should be between 5% and 15%. As reliable figures are not available for all programme regions we based our rating on the information provided by the CMA in Solenzo. A total of 5,008 births and 70 Caesarean sections were performed in its catchment area in 2004. This is 1.4%, significantly below the recommended percentage. We therefore estimate that the programme was able to make only a minor contribution to improving the health situation of the people in the programme regions (overall objective).

Burkina Faso is one of the world's poorest countries and a good 50% of its population is considered poor according to the national poverty line. The target group of the programme was the predominantly poor rural population - particularly women and children - in the villages and central towns of the programme region (approximately 1 million inhabitants). As a large proportion of the population will presumably still not be able to afford medical services the target group was not reached to the desired extent. The improvements to the health centres and hospitals had the desired positive impact on the women living in the programme region, particularly during pregnancy and childbirth.

The protection of the environment and natural resources was not an explicit part of the programme conception. As a complement, waste incinerators were erected at all five locations, and they are ready for operation. They are in use only in Gorom-Gorom, however. Sewage disposal is not ensured in any of the facilities either because the sewers from the operating theatres are not connected to the treatment plants. Proper disposal of waste and waste water is therefore not ensured in the rehabilitated facilities.

Participation/good governance in the form of decentralisation represented a sub-goal in the conception but could only be implemented to an inadequate degree.

In a summarised assessment of the developmental effectiveness achieved by the programme we have arrived at the following evaluation of the programme "Rehabilitation of Health Centres":

- The programme objective was achieved only to a limited extent. The low capacity utilisation in the facilities in relation to their catchment area deserves criticism as it is the result of an inaccurate estimate of demand. The enormous delays of up to five years until the start of operations occurred mostly at the expense of the target group, which had to wait longer than planned to receive improved health care. We rate the effectiveness as slightly insufficient (rating 4).
- We consider the specific production costs (production efficiency) as inadequate. The substantial delays and resulting cost increases deserve a negative rating. Another negative result is the inadequate cost recovery in the operation of the facilities. A positive aspect in the assessment of programme efficiency is the increased revenues from the sale of medications of an average of 60% in the CMA and CHR. Overall we rate the efficiency of the investment as slightly insufficient (rating 4).
- Considering the continuing low acceptance and capacity utilisation of the rehabilitated facilities as well as the low number of operations performed, the contribution to the overall objective (to improve the health situation of the population and the programme region) clearly has not been as expected. The programme has considerable conceptual shortcomings. The significance/relevance of the programme therefore has to be rated clearly insufficient (rating 5).

In summary, the overall developmental effectiveness of the programme is rated slightly insufficient (rating 4).

Lessons Learnt

- Before awarding construction contracts to small and medium-sized local enterprises, which is generally to be applauded from the aspect of development policy, the level of qualifications of the potential contractors should always be appraised in advance. Complex tasks should also be awarded to sub-contractors in appropriate cases.
- In countries with a weak infrastructure the selection of locations for construction or rehabilitation of larger health care facilities should also follow logistical characteristics in a given demand setting. Longer distances lead to higher costs for building contractors and for the supervision of construction by the consultant and executing agency, for which reason a regional concentration should be preferred already at the time of planning.
- When appraising a healthcare project with relatively costly services to be rendered in a rural setting the ability and willingness of the target group to pay for the services should be examined in advance in order to adapt the programme conception and size to the expected demand.
- The success of a social infrastructure project depends, among other things, on the acceptance by the local population of the facilities to be created. This should be examined under the preparatory studies that precede the project or programme. If these studies identify a lack of public acceptance the programme conception should include a component to raise the population's awareness and ascertain to what extent the services can be financed.
- Where there are clear sector weaknesses (lack of decentralisation, weak maintenance structures) the programme should be integrated early into a sector-wide conception that involves other donors.

Legend

Developmentally successful: Ratings 1 to 3	
Rating 1	Very high or high degree of developmental effectiveness
Rating 2	Satisfactory developmental effectiveness
Rating 3	Overall sufficient degree of developmental effectiveness
Developmental failures: Ratings 4 to 6	
Rating 4	Overall slightly insufficient degree of developmental effectiveness
Rating 5	Clearly insufficient degree of developmental effectiveness
Rating 6	The project is a total failure

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 concentrate on the following fundamental questions:

- Are the **project objectives** reached to a sufficient degree (aspect of project **effectiveness**)?
- Does the project generate sufficient significant **developmental effects** (project **relevance** and **significance** measured by the achievement of the overall development-policy objective defined beforehand and its effects in political, institutional, socio-economic and socio-cultural as well as ecological terms)?
- Are the **funds/expenses** that were and are being employed/incurred to reach the objectives **appropriate** and how can the projects' microeconomic and macroeconomic impact be measured (aspect of **efficiency** of the project concept)?
- To the extent that undesired **(side) effects** occur, are these tolerable?

We do not treat **sustainability**, a key aspect to consider for project evaluation, as a separate category of evaluation but instead as a cross-cutting element of all four fundamental questions on project success. A project is sustainable if the project-executing agency and/or the target group are able to continue to use the project facilities that have been built for a period of time that is, overall, adequate in economic terms, or to carry on with the project activities on their own and generate positive results after the financial, organizational and/or technical support has come to an end.