

Malawi: Machinga District Hospital

Ex-post evaluation

OECD sector	12 230 / Basic health	
BMZ project numbers	1989 66 467 (main project); 1994 66 384 (supplementary project)	
Project executing agency	Ministry of Health and Population	
Consultant	DIWI, Essen (building) DKI, Düsseldorf (equipment) Hannes Ostermann, Niederwinkling (additional measures)	
Year of evaluation	2002	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	1st quarter 1990	4th quarter 1992
Implementation period	75 months (incl. supplementary project)	51 months (incl. supplementary project)
Investment costs	8.18 + 1.07 million EUR	8.23 + 0.98 million EUR
Counterpart contribution	--	--
Finance, of which FC funds	9.25 million EUR	9.21 million EUR
Other institutions/donors involved	GTZ	GTZ
Performance rating	3	
• Significance/Relevance	3	
• Effectiveness	3	
• Efficiency	5	

Brief description, overall objective and project purposes with indicators

The main project comprises the erection of a hospital for basic care with 223 beds in Liwonde, the capital of Machinga District, and the construction of two health centres (Mbela and Phimbi). The project included medical equipment for the new buildings. Originally, the measures were planned for Machinga District only. Due to an administrative division of the district in 1998 after completion of the facilities, the two health centres are now located in Balaka District. Supplementing the main project, 17 new advice centres for family planning were attached to existing health centres in Machinga District and fitted out with elementary medical equipment and basic general equipment.

The **overall project objective** was initially to contribute to improving the state of health of the population in Machinga District. Through the supplementary measures in family planning, the project was also supposed to contribute to reducing population growth in the district. Due to the complex impact matrix, the project appraisal refrained from wording indicators for the overall objective level.

The **purpose** of the main project was the qualitative and quantitative improvement of medical care in Machinga District. The indicators for purpose achievement were:

- 90% of all curative measures can be carried out at provincial level.
- Occupancy in the district hospital amounts to at least 70%.
- About 50 treatments are conducted daily at the health centres Mbela and Phimbi.

The supplementary measure was to add family planning to the medical services in Machinga District (project purpose). The following indicators were defined for measuring purpose achievement:

- At least 50 counselling sessions a week per family planning centre
- Increase in prevalence of modern contraceptives to at least 20% by 1999

Project design/Major deviations from original project planning and their main causes

The following deviations from the original conceptual design occurred: The original layout for the hospital in line with Malawi standards was changed and the built-over plot was enlarged. The added buildings, above all the maternity ward and the maternal counselling tract, but also the staff housing and additional utilities are expedient additions to the overall complex. Instead of the scheduled refurbishment of three health centres, two new centres were built (Mbele and Phimbi) including houses for staff.

The supplementary project comprised the erection of 17 counselling units for family planning, which were finished at the beginning of 1997.

As part of the additional measures at the hospital financed from remaining funds, the following additional building and renovation measures at Machinga hospital will be carried out: renovation of the old OPD building, erection of accommodation for relatives including kitchen and toilet, erection of an isolation ward, renovation of 10 staff houses, construction of 2 new staff houses, construction of access thoroughfare to OPD and related outdoor works.

Key results of impact analysis and performance rating

After six years of operation, despite frequent turnover of key personnel and difficulties with funding allocations and staff availability, the district hospital is still being run properly and responsibly. So it performs its function as a secondary hospital for the population in Machinga District, who would otherwise have no access to health care at the first referral level. The health centres also operate as intended and ensure access to primary care despite the difficult overall conditions. The family planning centres enjoy high acceptance amongst the population and make the intended contribution of advising a large number of women in family planning.

Assuming the facilities are operating properly, the hospital does not cause any significant environmental pollution. In normal medication use and with rare use of chemical cleaning agents, large amounts of toxic substances are not likely to be produced.

The project has a high poverty relevance. Since poverty has worsened recently in particular due to recurrent drought and famine periods, free access to public facilities is again the only possibility of health care for many people. Counselling in the family planning centres addresses women of childbearing age in particular, who suffer especially in poor rural populations under the burden of a large number of children. Moreover, the preventive and curative public health services also primarily address the health of mothers and children at primary and secondary level in Malawi. The project thus has beneficial gender impacts.

At the project appraisal stage, major project risks, above all in human resource development and operating input availability, were underestimated. It was assumed that government reforms

in the health sector would be purposively implemented and the development partners (primarily also the World Bank) would contribute to improving operating conditions. Due to a steady deterioration in the general conditions and the evident impossibility to implement donor-induced reform programmes, this expectation was not met. In part, the TC projects also failed to have the anticipated synergy effect. In the course of project implementation, we have increasingly pointed in our reporting to the high sustainability risks. To counter this, in many discussions with the MOHP on improving operation and maintenance and the personnel situation, definite recommendations were made based on the findings of the short-term expert, to which the MOHP was amenable. As a result, the ministry has also made efforts to remedy the lack of hospital staffing and has initially improved clinical care by providing external physicians. The KfW recommendations were not, however, taken up where additional funds were needed. This is why initial maintenance agreements were concluded with private-sector companies with FC funds to secure maintenance of the investments and guarantee functioning facilities at least for a certain time (total of 5 years). Our misgivings from the outset about the higher follow-on costs due in part to an overgenerous interpretation of the building measures were not taken into account by the Malawi side. No action was taken in response to a proposal by KfW in the course of the project of having an operating and finance plan drawn up by a consultant.

Measured against the agreed indicators, projects' purposes were achieved; most indicators were surpassed by a large margin. Since startup in September 1996, the Machinga district hospital's capacity has been continually overutilized. About 8000 - 9000 out-patients and 1400 in-patients are treated a month. At some 300 in-patients a day, capacity utilization is approximately 180%. The hospital therefore operates far in excess of capacity. On the one hand, the high occupancy is attributed to the hospital's good reputation. On the other, however, the HIV/AIDS epidemic places a heavy general burden on health facilities in Malawi. Approximately 70% of in-patients in Malawi hospitals are estimated to be HIV-positive. The health centres Mbela and Phimbi are also overutilized at present with a user rate of more than 150 and 200 patients a day respectively.

Almost all curative treatments at primary and secondary level can be carried out in Machinga District (project appraisal indicator: 90%). Only a few special cases for tertiary care (such as neuro-surgery or gastrointestinal endoscopy) are referred to the central hospitals Blantyre and Zomba.

Given the still uncertain finances for operating and maintenance costs and the ongoing deterioration in the general conditions (extreme shortage of qualified staff, sluggish decentralization, limited autonomy of hospitals, etc.) there is, however, a high sustainability risk. Accounting for above-average use of the facilities by national and regional standards and the maintenance of care under very adverse general conditions, we nevertheless judge the **effectiveness** of the project to be sufficient (Subrating 3).

Considering the layout deficits, the already apparent damage resulting from building faults and the high specific costs per bed and m², we gauge the production efficiency to be insufficient, despite compliance with cost estimates for the most part. Due to the deficient, deteriorating sectoral conditions overall and government cutbacks in already insufficient budget appropriations, the allocation is not efficient. We therefore rate the **efficiency** of the project as a whole as clearly insufficient (Subrating 5).

In hindsight, the project design was commensurate with the problem and appropriate for making a contribution to improving the health situation in Machinga District. So far, the district hospital has been properly run despite the shortage of personnel and funds and is held in high esteem in Malawi as a showcase hospital. Nevertheless, certain caveats must be made as the politically motivated above-average provision of the hospital with medication, etc. is at the expense of the rest of the system. The developmental relevance therefore merits a rating of satisfactory. The project has improved the population's access to qualitatively acceptable health facilities and stemmed the deterioration in health. Nonetheless, the health indicators have worsened as a

result of the spreading HIV/AIDS epidemic and poverty-related illnesses. Due to the impossibility to attain the overall objective and the considerable risks for project sustainability, significance is thus subject to substantial reservations. Overall then, we attest the project sufficient **significance** and **relevance** (Subrating 3).

Weighing up the above key criteria, we accord the project overall a **sufficient degree of developmental effectiveness** (Rating 3). Clearly, though, sustainability, meaning continued operation by the Malawian side on its own, cannot be expected. By general standards of performance rating in FC, the project does not thus actually deserve to be assessed as effective in development terms. Crucial to the decision to come to a favourable assessment nevertheless is that in the very difficult environment in Malawi and particularly in the health sector as a priority of German development cooperation, sustainability in the narrow sense is not practicable and BMZ is thus also considering financing the follow-on costs of the development project under certain conditions.

General conclusions applicable to all projects

In future German-Malawi cooperation in the health sector, the priorities should be placed on maintenance and rehabilitation as well as training and strengthening local capabilities. We recommend a more strategic approach in implementing community-based interventions, e.g. by deploying NGO networks, to raise the effectiveness of basic health programmes and harness available resources at municipal level. Consideration should be given to limited-term, degressive finance for recurrent costs of maintaining existing facilities contingent on definite steps by the Malawi side.

We endorse assistance for a SWAp by future German development cooperation in specific concert with donor interventions in the health sector, provided there is a minimum budget for recurrent costs in district health services and greater autonomy for the hospitals, above all their application of user fees. Budget finance by German development cooperation in the shape of a basket fund should only be considered under the proviso of transparent and effective budgetary policy and supervision.

Legend

Developmentally successful: Ratings 1 to 3

Rating 1 Very high or high degree of developmental effectiveness

Rating 2 Satisfactory degree of 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 a project's "developmental effectiveness" and its classification during the final evaluation into one of the various levels of success described in more detail below 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 project's microeconomic and macroeconomic impact be measured (aspect of **efficiency** of the project conception)?
- 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 its own and generate positive results after the financial, organizational and/or technical support has come to an end.