# Ex post evaluation – Tanzania

**Sector:** Health / Basic health infrastructure (CRS code: 12230)
**Project:** District health care in the Mtwara region, phase II
BMZ no. 2001 65 761*
**Implementing agency:** Mtwara Regional Administration, represented by the Regional Medical Officer


### Ex post evaluation report: 2018

| | | Plan as of appraisal | Actual |
|---|---|---|---|
| Investment costs (total) | EUR million | 2.92 | 4.82 |
| Counterpart contribution | EUR million | 0.00 | 0.00 |
| Funding | EUR million | 2.92 | 4.82 |
| of which budget funds (FC) | EUR million | 2.05 | 2.65 |
| of which budget funds (DED) | EUR million | 0.87 | 2.17 |

*) Random sample 2015

**Summary:** In the second phase of the District Health Improvement Programme (DHIP II), FC funds were used to refurbish and improve one regional hospital (Ligula Regional Hospital) and three district hospitals (Masai, Newala and Tandahimba) on the basis of hospital development plans. The measure was linked to the first phase of the DHIP, which involved the refurbishment and equipping of 23 basic health stations in the Mtwara region and the construction of one maintenance workshop between 1997 and 2003. The project was designed as a cooperative programme with the German Development Service (DED; now part of GIZ). By providing multiple development assistants, DED endowed the executing agency with the human resources needed to support the areas of programme management, district health management, hospital administration, construction and refurbishment measures, maintenance, and transfer of clinical skills.

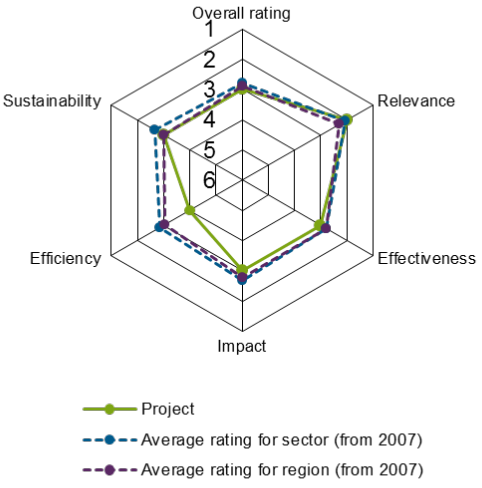
**Objectives:** The measure's development objective (impact) was to contribute to improving the population's health in the programme region, particularly among poor people, women and children. The programme objective of the second phase of the DHIP was to improve health-care services at hospital level and increase their utilisation by the target group (outcome).

**Target group:** The target group was the users of the promoted health facilities in the programme region of Mtwara.

## Overall rating: 3

**Rationale:** The measure contributed to the improvement of health care services at hospital level and their utilisation. However, there are still problems in the area of maintenance. Meanwhile, other challenges identified during the project appraisal concerning the provision of treatment at a suitable standard (including an unreliable supply of medicine, staff shortages, limited budgets at facility level) continue to apply.

**Highlights:** Although the hospitals' services are formally open to all members of the population, poorer members' access is normally restricted in practice due to their limited ability to pay. This is mainly because the cost-exemption rule is not always applied effectively.



# Rating according to DAC criteria

## Overall rating: 3

### Relevance

Mtwara is a poor and remote rural region of Tanzania. At the time the measure was conceptionalised (2001), the poor condition of the infrastructure and equipment, the chronic lack of staff, and the insufficient supply of medicine and consumer goods were some of the core problems in the health sector. The measure addressed these problems but focused solely on health infrastructure in order to improve the health stations in the Mtwara region and thus improve the quality of supply. After mainly basic health stations were refurbished during phase I, the focus of phase II was to construct and refurbish hospitals. This process was based on hospital development plans. Due to a limited availability of funds, the focus was placed on financing basic infrastructure for the hospitals (water and power supply, as well as wastewater and solid waste disposal) and on financing basic refurbishments and new construction work in central hospital areas (e.g. maternal and child care, maternity unit). The aim was to establish important prerequisites to ensure the proper operation of the hospitals and increase job appeal by constructing homes for staff.

At the beginning of the project, the health sector was one of the focal areas in the development cooperation with Tanzania, while also being a priority sector in Tanzania's poverty alleviation strategy. The health sector remains a priority in German-Tanzanian bilateral cooperation to this day. However, the focus within this sector has now shifted. Current FC projects are geared more towards the demand side and the establishment of health insurance systems.

The concept's underlying chains of cause and effect are largely plausible. The measures applied (basic infrastructure plus construction and refurbishment measures) were therefore designed to create the basic infrastructure prerequisites for effective hospital operations, and also to contribute to the improved quality of the hospitals' health services, ultimately improving the health situation, particularly for poorer members of the population. However, as it is faced with ongoing structural problems, such as insufficient financing, staff shortages and supply problems with medicines and consumer goods, this approach has certain limits as it only addresses one aspect of the improved treatment quality. The project concept did not concentrate enough on access to health services, particularly for poor members of the population (see Effectiveness). Considering the limited funds for financing this measure – and the resulting need for a focus – coupled with the parallel activities in this sector that accompanied the measure (including the health basket to support a more extensive reform programme), the relevance can still be rated as good, despite the restrictions described.

**Relevance rating: 2**

### Effectiveness

Six indicators were used to assess the achievement of the project objective “Improvement to health services at hospital level and their increased utilisation”. The indicators were assessed based on data/statements from the hospitals supported and other sources, as well as on observations during on-site visits. The achievement of the programme objectives defined during the project appraisal can be summarised as follows[1]:

[1] The indicators themselves were not defined and given values until the implementation process. For this reason, there is no baseline.

| Indicator | Status PA, Target value PA | Ex post evaluation |
|---|---|---|
| (1) Increased number of outpatients in the promoted institutions, number per year | n.a. | In the discussions, all of the hospitals stated that their patient numbers had increased in recent years. However, no information was provided on the number of outpatients. For this reason, only a limited conclusion can be drawn on the development of ambulatory care.<br>**→ Indicator probably fulfilled; but appraisal is difficult.** |
| (2) Average occupation rate of all hospitals | PA: 60%<br>Target value: >/= 60% | The overall impression from the visits was that the outpatient areas of the promoted hospitals are used to a sufficient extent relative to the target figure. However, differences were observed between the stations and between the individual hospital areas. In total, utilisation levels could still be increased. Albeit requested, no data was provided by the hospitals regarding annual figures on outpatients, the average bed occupancy rate, and on the usage of selected specific. As a result, the statement in this evaluation is primarily an anecdotal snapshot from the time of the visit.<br>**→ Indicator probably fulfilled; but appraisal is difficult.** |
| (3) All hospitals use at least 5% of their annual budgets for maintenance. | Target value: at least 5% | The programme hospitals did not provide any information concerning their exact maintenance budgets. Visits and discussions revealed that very little budget is provided for maintenance in the hospitals. The maintenance situation surrounding equipment and buildings is generally defective. The target of a 5% maintenance budget was therefore missed.<br>**→ Indicator not met.** |
| (4) An average of 80% of new staff housing is used by key medical staff. | Target value: 80% | At the time of the evaluation mission, all staff housing was in use and primarily occupied by key staff (medical doctors, assisting medical officers). All health stations attributed a great deal of importance to staff housing when it came to increasing job appeal, retaining staff over the long term, and keeping critical staff within calling distance in the event of emergencies outside of normal working hours.<br>**→ Indicator met.** |
| (5) All hospitals have concluded maintenance contracts with the zonal workshops by 2008. | Target value: 100% | The supported maintenance concept intended to have a central maintenance workshop at regional level (“zonal workshop”), which finances itself by providing services to hospitals and supporting the districts. However, this concept could not be successfully implemented. The main reason for this was the lack of financing for the maintenance workshop's services. |

| | | |
|---|---|---|
| | | However, the physical maintenance workshop still exists and employs two technicians. They act as maintenance technicians for the regional hospital and perform occasional repair and maintenance work on an ad-hoc basis at district level. No routine maintenance takes place, and preventive maintenance in particular is neglected.<br>**→ Indicator not met.** |

The objective and indicator achievement situation is mixed overall, which can mainly be traced back to shortcomings in the area of maintenance, a central element in the development objectives. In spite of the issues with repair and maintenance, the majority of the refurbished or new buildings visited were in an acceptable condition.[2] However, the maternity unit at the regional hospital had a leaking roof and large-scale water damage on the ceiling. The sanitation facilities for patients in the maternity unit were broken and the sink in the staff toilets was also out of order. At the time of the visit, neither of the regional hospital's two incinerators were working. Individual stations also had problems with their water supply. In all of the hospitals visited, the status of the equipment and machinery was problematic, with a number of devices out of operation. In addition to the aspects set out in the impact matrix, the continued unreliable supply of medicine and the lack of skilled staff (especially the lack of specialist doctors) present additional challenges for the provision of treatment options at a suitable standard of quality at hospital level. There were also significant shortcomings in terms of hygiene standards at the hospitals. In view of the strong population growth in Tanzania and the further expansion of insurance and coverage in the Tanzanian health sector, the usage rate of the programme hospitals is expected to remain stable or increase in future. The hospitals' utilisation rates therefore still have room for improvement, though this would require better hygiene standards.

The measure's target group are the users of the supported hospitals, who mainly come from poorer, more rural sections of the population. Although the hospitals' services are formally available to all members of the population, access is restricted in practice as a result of poorer users' limited ability to pay. This is because some poor people are not able to use health services to a full or sufficient extent due to the fees charged. While the Tanzanian health system waives costs for pregnant women, mothers, children under 5 and the very poor, this rule is not always applied consistently. Often the effectiveness of the cost-exemption rule is limited by the fact that users of health-care facilities have to pay for missing medicines and consumer goods or specialist services themselves. In certain circumstances, there are also problems with identifying poor population groups (targeting). Long distances and transport costs can also act as obstacles to access. This is especially relevant for people who live in remote rural areas. However, the feedback on this issue varied.

The effectiveness is therefore rated as just about satisfactory.

**Effectiveness rating: 3**

### Efficiency

Due to problems with project implementation, the project term was delayed from the original plan of 36 months to 78 months at the time of the project completion report (PCR) . This led to a significant rise in the project's total costs, most of which can be attributed to increased staffing costs at the German Development Service (DED). Major building problems detected during the PCR, partly caused by the use of local companies (instead of larger national ones) and partly by insufficient supervision of works, led to further cost increases for the investment measures. Under the project appraisal, the plan was to boost the

[2] *) The main construction measures under the regular programme implementation phase were completed in mid-2008. More extensive improvement work in Newala and Masasi was not completed until early 2015 and the buildings were found to be in a good condition.

local economy in Mtwara and use more local, small-scale building companies, including female-led cooperatives, to implement the measures. This resulted in significant differences in the quality of the building work. At the same time, unexpected staff difficulties at the German Development Service (accident involving a DED architect, problems with the work permit for the replacement DED architect, loss of some local architects) meant that work supervision and quality assurance were not always performed to the requisite standard. As a result, the assessment of the district hospitals in Masasi and Newali during the PCR revealed some major defects with the completed building work, including one roof structure that was at risk of collapsing. TheBMZ approved an increase of EUR 0.5 million for the completion of the necessary reworks (which were finished in early 2015). However, during the implementation phase, a lack of coordination with other donor organisations led to an FC-financed guard house at Tandahimba district hospital and a waste incinerator at the regional hospital being torn down just after completion and then rebuilt according to the adapted construction plans. The additional costs for this work were absorbed by other sources.

Owing to the long programme term, the problems with the construction standards, and the inefficient coordination with other donors, the total costs are considered to be too high.

Problems still exist in relation to the referral process and the adequate use of the reference system. When selecting which facility to visit, patients often use the criteria of the expected treatment quality and accessibility as a basis for their decisions. There is also a tendency for the upper reference levels to be overused (particularly in the area of ambulatory care). On the other hand, the facilities do not apply a consistent approach to referral letters.

In summary, the measure's efficiency is rated as unsatisfactory in view of the poor production efficiency (costs/output) and the existing inefficiency with regard to the upper levels of the reference system.

**Efficiency rating: 4**

### Impact

The development objective defined at PAwas to contribute to improving health in the Mtwara region, particularly for poor population groups, women and children. No indicators were formulated for this objective. During the ex post evaluation, the mortality rates for babies, mothers and children in the Mtwara region were used as indicators.

| Indicator | Status PA | Ex post evaluation |
|---|---|---|
| (1) Maternal mortality rate (per 100,000 live births) | Tanzania:<br>2001: 813 / 100,000*<br><br>Mtwara:<br>n.a. | Tanzania:<br>2015: 398 / 100,000**<br><br>Mtwara:<br>2012: 579 / 100,000** |
| (2) Mortality rate for babies under the age of 1 (per 1,000 live births) | Tanzania:<br>2001: 76.2 /1,000*<br><br>Mtwara:<br>2002: 126 / 1,000** | Tanzania:<br>2015: 41.5 / 1,000*<br><br>Mtwara:<br>2012: 45.2 / 1,000** |
| (3) Mortality rate for children under the age of 5 (per 1,000 live births) | Tanzania:<br>2001: 123 / 1,000*<br><br>Mtwara:<br>2002: 212 / 1,000** | Tanzania:<br>2019: 59 / 1,000*<br><br>Mtwara:<br>2012: 62.3 / 1,000** |

Sources: *) World Bank Indicators **) Population and Housing Census 2002 / 2012

At national level, the indicators confirm a clear improvement in the health situation for mothers and children over the past 11 years. Only a small amount of disaggregated data is available at regional level; the implementing agency provided little to no reliable information. However, data available from the national statistical authority's household census from 2012 suggest that the positive national trend also applies to

Mtwara. Nevertheless a lack of baseline data means that no statement can be made concerning the development of maternal mortality and the household census shows that the rate in Mtwara was still very high in 2012.

The generally positive development of indicators can be traced back to a variety of donor support initiatives, which often focused on relevant aspects of mother-child health care as part of the Millennium Development Goals and were implemented using a variety of instruments. The measure evaluated here contributed by implementing construction and refurbishment projects in four of the region's six hospitals, focusing on the provision of basic infrastructure and support for central hospital areas (including mother and child units). The facilities at the upper reference levels are important pillars for the treatment of cases beyond basic health care for the region's roughly 1.3 million residents. It is therefore assumed that the measure has contributed to the positive trends as a whole, even though the correlation of effects is somewhat weak due to the measure's limited scope and the wide range of other (socio-economic) factors inside and outside of the health system.

**Impact rating: 3**

### Sustainability

With reference to the future usage of the promoted health facilities, no major changes are currently expected over the medium term. A more consistent and stricter application of gate-keeping mechanisms to promote the use of the primary and secondary levels would lead to less strain being placed on the higher reference levels. At the same time, anticipated insurance programmes and their further development/expansion are due to play a greater role in the future in relation to the (greater) utilisation of health services on offer, despite the fact that insurance coverage is currently limited in the country. A large portion of health expenditure in Tanzania is still financed by external donor financing and private spending by households (out-of-pocket). Over the medium term, the health system will remain heavily dependent on external contributions. The state health budget and income generated by user fees and insurance systems are not high enough to cover the running costs for basic health care[3]. At the same time, some parts of the population are too poor to pay for their own insurance, meaning that their insurance premiums (would) have to be financed or subsidised by state or donor funds. Tanzania also has one of the highest population growth rates in the world (around 3.13% in 2015) anddemand for health-care services will continue to rise in coming years. The scope of external financing and the number of active donors in the health sector, on the other hand, have been on a slight downwards trajectory over recent years.

The recruitment of medical staff for the upper reference levels in both a sufficient quantity and at a sufficient standard of training (including specialist doctors) will remain a challenge in the rural region of Mtwara in future. In spite of attempts to improve the incentives for staff (e.g. staff housing), there is still no convincing strategy for effectively addressing this issue. In turn, this will remain a challenge for providing adequate treatment options at the upper reference levels.

The FC project aimed to improve the maintenance culture. However, the on-site visits made it clear that the maintenance situation in all of the facilities visited was still inadequate and presents a major challenge. The programme hospitals set aside very little budget for maintenance, which is why equipment and buildings are only maintained to a limited extent. The plan for a cost-covering workshop could not be implemented successfully. The region only has two technicians in total for the maintenance of complex equipment. No routine maintenance takes place and preventive maintenance in particular is neglected. In addition to the low maintenance budget, it appears that the problem is enhanced by a lack of understanding that a consistently executed maintenance system and regular preventive maintenance are needed for both the buildings and their equipment. Furthermore, the hospitals' management teams do not follow up on maintenance enough.

---

[3] Health expenditure per capita has risen consistently in Tanzania in recent years and is currently around USD 52 (World Bank, 2014). Only limited up-to-date data is available on the breakdown of health expenditure by source (government/donors/private). Data from the 2011/2012 fiscal year is broken down as follows: government 22%, donors 48%, households 25%, other private sources 4% (Health Financing Profile Tanzania, May 2016).

In summary, the anticipated stable/increasing utilisation of the hospitals combined with major deficits in the field of maintenance, a strained staffing/budget environment, and heavy reliance on donor financing in the sector as a whole result in a sustainability rating of just about satisfactory.

**Sustainability rating: 3**

## Notes on the methods used to evaluate project success (project rating)

Projects (and programmes) are evaluated on a six-point scale, the criteria being **relevance, effectiveness, efficiency** and **overarching developmental impact**. The ratings are also used to arrive at a **final assessment** of a project's overall developmental efficacy. The scale is as follows:

| | |
|---|---|
| **Level 1** | Very good result that clearly exceeds expectations |
| **Level 2** | Good result, fully in line with expectations and without any significant shortcomings |
| **Level 3** | Satisfactory result – project falls short of expectations but the positive results dominate |
| **Level 4** | Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results |
| **Level 5** | Clearly inadequate result – despite some positive partial results, the negative results clearly dominate |
| **Level 6** | The project has no impact or the situation has actually deteriorated |

Rating levels 1-3 denote a positive assessment or successful project while rating levels 4-6 denote a negative assessment.

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

Sustainability level 1 (very good sustainability): The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.

Sustainability level 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).

Sustainability level 3 (satisfactory sustainability): The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. 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.

Sustainability level 4 (inadequate sustainability): The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and is very unlikely to improve. This rating is also assigned if the sustainability that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

The **overall rating** on the six-point scale is compiled from a weighting of all five individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a "successful" project while rating levels 4-6 denote an "unsuccessful" project. It should be noted that a project can generally be considered developmentally "successful" only if the achievement of the project objective ("effectiveness"), the impact on the overall objective ("overarching developmental impact") and the sustainability are rated at least "satisfactory" (level 3).