

Pakistan: Children's Hospital Quetta

Ex-post evaluation

OECD sector	12191 – Medical Services	
BMZ project ID	1) 1989 65 643 (investment in fixed assets) 2) Various Studies and Experts Funds for personnel support (operational assistance)	
Project-executing agency	Government of Balochistan, Department of Health, Operating organization: "Children's Hospital Quetta Ltd. (CHQ)"	
Consultant	EOPS-Consultant, Bad Homburg	
Year of ex-post evaluation	2005	
	Project appraisal (planned)	Ex-post evaluation (actual)
Start of implementation	Q 1 1990	Q 2 1991
Period of implementation	40 months	91 months
Investment costs	1) EUR 14.3 million 2) -	1) EUR 21.73 million 2) EUR 1.93 million
Counterpart contribution	1) EUR 5.1 million 2) -	1) EUR 5.88 million 2) -
Financing, of which Financial Cooperation (FC) funds	1) EUR 9.2 million 2) -	1) EUR 15.85 million 2) EUR 1.93 million
Other institutions/donors involved	none	none
Performance rating	4	
• Significance / relevance	4	
• Effectiveness	4	
• Efficiency	4	

Brief Description, Overall Objective and Programme Objectives with Indicators

The objective of the project was to contribute to maintaining and improving curative health care for the children living in Balochistan Province up to the age of 15 including refugee children (especially infants and toddlers). In this way, it was to contribute to improving the health of this target group (overall objective). Key project measures included the construction of a new children's hospital (Children's Hospital Quetta/CHQ) with 116 beds and an integrated day clinic in the provincial capital of Quetta, the delivery and installation of medical/technical equipment as well as consulting services. The personnel support (operational assistance) served to develop and implement the operational concept and to offer professional support to the hospital's private operating organization.

The infant and child mortality rates at the time of the project appraisal were included in the overall objective. Indicators to measure achievement of the project objective and quantitative target levels were finally defined in the 2000 progress report. They are based on the bed occupancy rate and length of stay in the hospital, the development of the treatment of

hospitalized patients and outpatients, vaccination rates and mother-child advisory sessions. The target figures are compared to the actual figures in the section covering the impact analysis.

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

According to the original project design, a one-story children's hospital with 75 beds and a day clinic with 35 beds were to be built. Additionally, the existing children's unit of the public Sandeman Hospital was to be rehabilitated and integrated into the children's hospital. During the elaboration of the final design this rehabilitation proved to be more extensive than planned and was therefore cancelled.

Under the current design, a children's hospital was constructed to provide second-level medical services with a total of 116 beds, an emergency unit, an outpatient area, two operating rooms and one minor surgery room, a newborn intensive care unit and an intensive care unit for older children. Equipment was also installed for all major areas of function diagnostics. A nurses' residence with 40 units was added to the hospital. The operation of the CHQ was transferred in 1998 to a private-law operating agency: a service provider agreement, a type of leasing contract, was concluded between the provincial government of Balochistan and the agency.

Since all levels of management as well as the medical personnel of the private operating agency were not sufficiently qualified to run the CHQ properly, funding was provided for comprehensive basic and advanced training measures for the personnel and for the managers to improve their competences in order to ensure the long-term operation of the hospital. However, at the time of the ex-post evaluation, i.e. 4 years after the personnel support came to an end, with the exception of the nursing services the training measures no longer had any noticeable, sustainable impacts.

From today's point of view the project design seems slightly overdimensioned owing to the high number of alternative offers by other hospitals in Quetta. Solely the intensive care units for newborns and children are frequently in use. This relatively small share of the total investment would not have justified the construction of a new hospital, however; rather, it could have been integrated into an existing hospital, for example.

Due to various delays during the implementation phase, the children's hospital could not take up partial operation until late 1998; since mid-2000 it has been fully operational. The total cost of the investment in fixed assets increased by 57% from EUR 14.32 million to EUR 21.73 million. We consider this to be high, yet find it acceptable overall in view of the good services offered by the hospital. There were no signs of misappropriation of funds.

Key Results of the Impact Analysis and Performance Rating

At the time of the ex-post evaluation the Children's Hospital Quetta (CHQ) was in good condition. However, of the 4 regular stations with 26 beds each, only 2 are being used. With regard to how the individual units are functioning, it can be noted that:

- The outpatient service is functioning adequately, as is the 24-hour medical stand-by service. However, the emergency care unit, which has a fully equipped operating room, has obviously never been used.
- Without exception, the patients in the regular stations are clinically in need of treatment. This applies in particular to the intensive care units.
- The physical therapy unit is fully equipped, yet its capacity is far from being sufficiently used. The same also applies to the x-ray equipment and parts of the laboratory.
- Enough drugs are available and they are being used rationally.

- The x-ray and ultrasound equipment is well maintained. The maintenance agreement concluded with the company Siemens that was financed out of FC funds until November 2004 played an important role in ensuring the maintenance of this and other medical equipment.

The CHQ staff currently comprises 236 members; thus the hospital is overstaffed in view of the low use of its capacity. It proved to be problematic to recruit qualified specialists (e.g. a qualified children's surgeon for the remote province) as well as a sufficient number of qualified nurses.

The CHQ's financial situation has developed satisfactorily in the meantime. In its 2002/03 financial statements it stated earnings of approx. KEUR 840, compared to KEUR 694 for expenditures. Its cash reserves that have accumulated since 1998 add up to around EUR 1.75 million. However, it generated only 50% of its earnings itself. The remainder was provided in the form of a grant from the government of Balochistan and, to a lesser extent, from FC contributions for the maintenance contract. Since the grants from the provincial government and FC will cease, despite having liquidity reserves the CHQ will be obliged to increase its earnings in the future by increasing occupancy as well as the number of treatments. The same applies to the maintenance contract (approx. KEUR 160 p.a.), which is indispensable for the CHQ to function well. It will have to finance this contract on its own in the future.

Measured against the ability of the population to pay, the treatment fees charged by the CHQ are relatively high, yet they are low in comparison with those of other private hospitals. The medical care offered by state hospitals is generally free of charge, albeit of low quality.

The project objective was to maintain and improve curative health care for the target group. As regards the achievement of the corresponding target indicators the following applies (the year 2000 is considered as the 1st year of operation):

- a) The bed occupancy rate was to be 50% in the 1st year of operation and 75% in the 2nd year. The current figures for 2003 and 2004 are 23.8% and 28.3%, respectively. The very low occupancy rate after 5 years of operation shows that the hospital is still not fulfilling its purpose as planned.
- b) The length of stay in the hospital was estimated at 5 days on average. The actual rate of 2.3 days is too low for a second-level children's hospital. As the length of stay for intensive care treatment is typically longer, this indicates that mainly simpler cases are receiving treatment.
- c) As regards inpatient treatment (target: increase by 20% between 1st and 2nd year of operation) a marked rise can be noted, from 3,017 patients in 2000 to 3,642 patients in 2001 and to 4,821 patients in 2003. On the basis of adequate total capacity utilization of 75%, however, the figure for a 5-day stay would have to be 6,351 (for a 3-day stay even 10,585) inpatients. In contrast, occupancy rates in the newborn intensive care unit and the intensive care unit for older children are quite good. According to the pediatricians, demand is much higher for these services throughout Balochistan, yet it is often times not satisfied owing to the limited number of breathing machines. There is no comparable facility in the entire province. The number of operations stated at the time of the ex-post evaluation again reveal insufficient use of capacity. Minor interventions dominate among the operations.
- d) The indicator defined for outpatient treatment (target: 20% increase between the 1st and 2nd year of operation) was achieved, yet it has been declining since 2003.
- e) With few exceptions, the vaccination rate at the hospital has risen continually overall since 2000. The indicator (20% increase between the 1st and 2nd year of operation) was not achieved until 2003, however. Owing to the objective potential in the region in terms of the number of people receiving vaccinations, after 5 years of operation these rates are also too low.
- f) Mother-child advisory sessions are carried out on a smaller scale, although they were not quantified. The hospital management does not count them as part of the range of services of the CHQ.

In terms of achievement of the project objective, the following statements can be made:

- The target figures for the three target indicators occupancy rate, length of stay and mother-child advisory sessions were clearly missed.
- The target figures for the three target indicators inpatient treatment, outpatient treatment and vaccinations were achieved, albeit with delays in some cases, yet they are too low and, in the case of outpatient treatment, the figure has begun to decline.

The children's hospital does not – as assumed during the project appraisal – play a prime role in the field of curative health care for children in Quetta Province; only its intensive care units play a key role. The population goes to and in some cases prefers other public and private hospitals. From a humanitarian perspective as well the hospital has not attained high development-policy relevance with regard to the Afghan refugees in the province as hoped for during the project appraisal. The refugees prefer to go to a hospital run by Afghans. What is more, the CHQ is not sufficiently integrated into the provincial reference system. Other health facilities are barely interested in working together with the non-for-profit children's hospital.

The overall objective of the project was to contribute to improving the health situation of the children of up to 15 years living in Balochistan Province. During the project appraisal the infant and child mortality rates were defined as indicators, yet they were not quantified. Owing to the complex interrelations, on the level of the overall objective these indicators offer almost no information about the impact of the individual project. Due to the above described low level of utilization of the capacity and/or low demand, overall the CHQ can contribute only minimally to improving the health situation of the target group (overall objective).

The creation of a private-law, not-for-profit agency to operate the hospital was assigned a pilot function. As a result of the still contentious composition of the Board of Directors, heavy clan influence for ethnic reasons throughout Balochistan Province, and deficiencies on the management level, the impact of this arrangement cannot yet be assessed conclusively. The current situation with the expiring contract between the operating agency and the government of Balochistan as well as the dispute over board appointments illustrate that there are currently considerable deficits standing in the way of the success of the overall project.

The number of refugee children being treated was set at around 30% during the project appraisal. The number of patients arriving from outside of Quetta was over 40% at that time. Today, 15 years after the project appraisal and 5 years after the hospital began operating, 60% of the patients are from Quetta and the surrounding area, with Afghan refugee children accounting for just under 40%. The grant of funds from an Islamic help fund for poor people clearly shows that the efforts of the CHQ to provide medical care, especially for the poor population, also find recognition among Pakistani society. Yet, poverty reduction was not part of the project design. As no discrimination of girls was noted, the design did not contain any gender-specific measures.

The CHQ does not have any negative environmental impacts: The waste incinerator that was installed constitutes a valuable contribution to ecological waste disposal and environmental hygiene, particularly in connection with infectious hospital waste. The waste is being disposed of properly. The x-ray technology is state-of-the-art and contains sufficient radiation protection.

Most of the risks identified during the course of the project did indeed occur:

- Strong influence of ethnic loyalties on the hiring of personnel
- Uncertainty regarding the timely and complete disbursement of the operational grants from the Pakistanis
- Change in provincial influence within the CHQ due to a change of government
- Difficulties in recruiting sufficient qualified personnel

From today's perspective the low utilization of capacity is the main problem facing the management.

We consider the developmental effectiveness of the Children's Hospital Quetta to be slightly insufficient overall (rating 4) and justify this on the basis of the subcriteria of effectiveness, efficiency and significance/relevance:

- In key areas the CHQ did not achieve the project objectives. Thus, the project's effectiveness is rated slightly insufficient (rating 4).
- We consider the specific production costs (production efficiency) as still adequate. A critical point is the poor rate of use of nearly all of the functions offered by the CHQ, even after several years of operation. Overall we classify the efficiency of the investment as slightly insufficient (rating 4).
- The relevance of the CHQ was high at the time of the project appraisal, yet at the time of the final evaluation this mainly applied to the areas of intensive care of infants and of children (unique characteristic province-wide). In view of the low level of utilization of the capacity of the CHQ, its contribution to the achievement of the overall objective (improvement in the health situation of the children in Balochistan) did not fulfil the expectations. Therefore, the CHQ's significance/relevance are classified as slightly insufficient (rating 4).

Lessons Learnt

- In health projects, the goals of covering costs from (treatment) fees and reaching out to poor target groups on as broad a scale as possible are frequently conflicting, and such a conflict is impossible to resolve. In such cases, during the project appraisal it should already be stated which goal is the primary goal and what effects this will have on the poverty situation and possibly on the financing structure and/or the need for subsidies.
- In a health system in which public, private and non-profit hospitals develop independently of one another, a coordinating institution is needed (e.g. health administration or main operating agency of a hospital) to prevent competition over market shares but to offer instead a broader (division of labor) range of specialized treatments.

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 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 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.