

Ex post evaluation – India

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Sector: Basic health infrastructure (CRS Code 12230)
Project: Secondary Hospitals Karnataka Phase II* – BMZ 2002 65 074
Programme-/Project executing agency: Government of the state of Karnataka, represented by the Department of Health and Family Welfare (DoHFW)



Ex post evaluation report: 2014

		Project A (Planned)	Project A (Actual)
Investment costs (total)	EUR million	17.90	17.22
Own contribution	EUR million	3.60	3.21
Funding	EUR million	14.30	14.01
of which BMZ budget funds	EUR million	14.30	14.01

*) Random sample 2014

Description: The project comprised the rehabilitation, expansion and equipping of 13 secondary hospitals in the Gulbarga region of the Indian state of Karnataka. Further measures included the purchase of medicines as well as carrying out training activities on equipment maintenance and to ensure the environmentally friendly disposal of waste. The project continued on directly from Phase I with the same content, and was implemented alongside the World Bank's "Karnataka Health Systems Development & Reform Project" (KHSDRP), which covered all the other districts of the state and also included accompanying consultation measures throughout the entire state.

Objectives: Improving the quality and efficiency of secondary health care in the Gulbarga region (project objective) was designed to help improve the health standards of the largely poor population in the region.

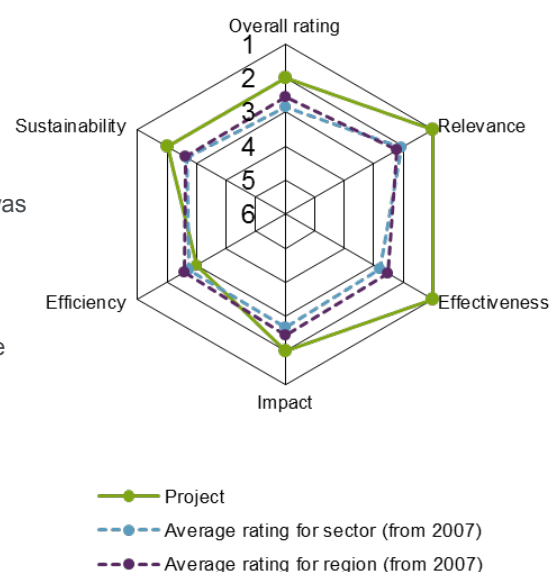
Target group: The target group was the mostly poor, rural population in the Gulbarga region, especially women and children.

Overall rating: Note 2

Rationale: All of the original health policy goals were achieved at the level of the overall objective. This is attributable to the supportive framework of a reform programme implemented and financed under strict conditions. The project objectives were largely achieved. Even though the efficiency of the project implementation was only satisfactory, this is compensated for by the good assessment of the other criteria.

Highlights: Embedding the project into an overarching reform programme that provided important stimulus regarding fees, maintenance budget, emergency care and waste disposal.

Exemplary disposal and recycling of waste – with the help of private companies – supervised closely by a national institution.



Rating according to DAC criteria

Overall rating: 2

General conditions and classification of the project

The government of India (GoI) and the government of Karnataka (GoK) have increased their contributions to the health sector significantly since the appraisal of the project, with yearly growth rates of 40 % and 15 % respectively between 2005 and 2012. The contributions of the National Rural Health Mission (NRHM) are particularly important, an organisation that since 2006 has provided hospitals in medically under-served regions with operational and maintenance resources that can be used directly and flexibly, as well as financing a range of programmes that improve accessibility to health care services for the very poor, particularly mothers and children. The project is therefore integrated into a comprehensive reform programme, aiming to improve and distribute services in order to reach the poor population as extensively as possible and improve their state of health.

Relevance

The core problem was correctly identified and the right measures were taken. The project measures were embedded in a reform programme with effective synergies between the project and the reform measures. The results chain is plausible considering the important assumptions made at that time (sufficient human resources, operational and maintenance budgets), without which the measures could not have been successful across the board.

The project's targets complied with India's national healthcare reform policy to improve the NRHM's rural healthcare services, and were part of the reform programme of the state of Karnataka, which aimed to improve district health and achieve the MDGs. The project complied and complies with the fundamental principles of the healthcare policy established by the project-executing agency and the federal government. It was also ideally suited to contributing to the improvement of the population's health in the region of Gulbarga.

Relevance rating: 1 (excellent)

Effectiveness

The project objective included the improvement of the quality and efficiency of healthcare services as well as the more effective utilisation of secondary hospitals in the region of Gulbarga, particularly for women and children. The attainment of the project objectives defined at the project appraisal (PA) can be summarised as follows:

Indicator	Ex post evaluation
1) Increase in number of patients: a) Outpatients, increase by 10 % (patients/1.000 inhabitants) b) Inpatients (2001: 78,680) and treated emergency patients (2001: 7,000), increase by 10 % (patients/1,000 inhabitants)	a) Karnataka total 2013: 63 million; Outpatients/1,000 inhabitants: increase from 121 (2008) to 695 (2013), or 574 % b) Karnataka total 2013: 2.7 million inpatients/1,000 inhabitants: increase from 2.03 (2008) to 42.74 (2013), or 2.135 % Indicator significantly exceeded The project was part of a comprehensive reform programme, in which the financed hospitals, amongst others, played a leading role.

<p>2) Improvement in occupancy rate of beds to 65 % (2001: 50-55 %)</p>	<p>Karnataka: no data available in HMIS</p> <p>Project hospitals: between 132 % (Sedam), 78 % (District Hospital Gulbarga) and 11 % (Gurumitkal)</p> <p>Indicator fulfilled for six out of seven visited hospitals</p>
<p>3) Proportion of professionally assisted births rises to 35 % (2001: 30 %)</p>	<p>98 %</p> <p>The project was part of a comprehensive reform programme, which resulted in a significant increase of attended births within the public sector.</p> <p>Indicator significantly exceeded</p>
<p>4) Reduction in vacant positions in hospitals (medical, paramedical and other staff) by 50 %</p> <p>(no original data available)</p>	<p>The problem of staff shortages is less acute, yet still poses a tremendous challenge in remote locations. On average, 77 % of all positions were filled in the seven hospitals visited</p> <p>Indicator largely fulfilled</p>
<p>5) The hospitals increase their income by applying patient fees.</p> <p>At the time of the PA, no patient fees were collected</p>	<p>All hospitals collect fees on the basis of a fixed nationwide scale of charges. Nevertheless, only patients above the poverty line have to pay, and additional exceptions are made for pregnant women, births, children up to five years and HIV/AIDS patients. As a result, the income at the level of smaller municipal hospitals ranged from EUR 2,500 to EUR 7,500 per year, while at district level the income of EUR 170,000 per year was very relevant. However, fees are not regularly adjusted to inflation.</p> <p>Indicator fulfilled</p>

The demand for services and the utilisation of the public project hospitals is steadily increasing. The inpatient capacity utilisation of hospitals is satisfactory, while that of outpatient services is good. Almost all the hospitals are currently expanding their bed capacities (up to 100 %). That said, the utilisation of the bigger buildings depends on the supply of qualified staff. In past years, clear progress has been achieved here as well. For that reason and considering that the increased number of patients is far beyond expectations, the project's effectiveness is rated very good.

Effectiveness rating: 1 (excellent)

Efficiency

The following indicators are applied for the efficiency of implementation and the allocation of funds: duration of implementation, costs compared to planning as well as the proxy indicator "utilisation" of buildings and equipment, satisfaction of patients and staff. A cost comparison per m³ of renovated room or per bed does not seem appropriate as the construction services included highly diverse tasks, such as renovation, demolition or new construction. The quality requirements and low-maintenance technical execution of the FC project were adopted as standard by the World Bank and nationally financed construction projects.

The implementation was significantly delayed due to problems with construction companies, property disputes and the need to carry out rehabilitation work and construction parallel to ongoing operations in the hospitals. This led to a delay of 41 months (around twice as long as initially planned).

Due to a strong general increase in costs in the planning phase (e.g. steel by 320 %) only 13 instead of the planned 21 hospitals could be included in the project. This is equivalent to about 5 % of all secondary

hospitals in the federal state of Karnataka. In light of the cost trends and inflation, though, the output is still considered acceptable.

The utilisation of the financed buildings and equipment – excluding the Bellary hospital – is considered good. Overall, the seven project hospitals visited are used by 900,000 outpatients and 55,000 inpatients each year (2013). The Bellary district hospital remained vacant for about two years after its completion because the district and the university were at loggerheads over its usage. In the meantime, the DoHFW has come to a decision favouring the university and use of the facility began six months ago. It can be assumed that full utilisation will be achieved by the end of 2014 as the job postings for staff have already been advertised. Medical equipment has been used at the university hospital since the handover and has now been transported back. The capacity of the hospital in Gurumitkal is very underused with only 11 % inpatient bed occupancy, not least because of the lack of doctors in this remote region. Nevertheless, many outpatients are treated here. The occupancy rate of the hospitals is good on average, which also indicates a plausible selection of intervention levels by the national project-executing agency. From individual conversations with patients (but not a representative sample) we can conclude that basic healthcare services are now perceived to be appropriate. Criticism was mainly levelled at the limited privacy during treatment. As a result we rate the overall efficiency as satisfactory.

Effectiveness rating: 3 (satisfactory)

Impact

The overall developmental objective was to improve the health of the poor rural population in the region of Gulbarga, as measured based on the following indicators:

Indicator	Ex-post evaluation*
Maternal mortality rate (MMR)	MMR decreased from 228 (2001) to 144/100,000 (2013), or 37 %
Infant mortality rate (IMR)	IMR decreased from 70 (2001) to 36/1,000 (2013), or 49 %
Neonatal mortality rate (NMR)	NMR decreased from 52 (2001) to 32/1,000 (2013), or 38 %
Mortality rate in rural regions (MR)	Rural MR decreased from 10% (2001) to 8 % (2013), or 20 %

*) Figures refer to the federal state of Karnataka. No disaggregated values were available for the project region.

All indicators show a significant improvement in the health of the population of Karnataka. The values determined at the ex-post evaluation are significantly higher than the target envisaged during the project appraisal (reduction by at least 5 %), due to the approximate four-year delay in completing the project and the still positive trend in indicator values. The impact of the KfW-financed project cannot be assessed in isolation from the overall impact of the comprehensive reform activities by the GoK and GoI to reach the poor. In this context, the following should be mentioned in particular:

- **Establishment of outpatient clinics**
- **eHealth approaches (particularly remote diagnoses to support smaller municipal clinics)**
- **Mother and child tracking system (monitoring of every pregnancy/child up to five years of age)**
- **"108 Emergency Scheme"** (ambulance system supported by World Bank)
- **Home visits and information by "accredited social health activists"**

- Incentives to give birth in clinics (financial support, transport, post-delivery kit)
- Comprehensive family planning programmes.

These programmes were implemented better and better over time, and secure the impact of the FC-financed project. At the same time, the good infrastructure at secondary level, to which the project made a significant contribution, facilitates the successful implementation of these programmes. As part of the FC financing (phases I and II) a total of 35 hospitals were rehabilitated at the secondary level in Karnataka, while together with World Bank financing, 200 out of a total of 240 were rehabilitated.

On the other hand there is still a high proportion of private health care services available (private and clerical service providers, traditional healers), which mostly charge for their services. According to estimates this makes up more than half of the utilised services in the healthcare sector in Karnataka. Since the PA this proportion has only fallen slightly. The main reason for this could be the lack of patient focus. The absence of individual, respectful treatment was mentioned here above all, as well as the lack of privacy for patients in public facilities (e.g. six delivery tables in a row without curtains in between).

Impact rating: 2 (good)

Sustainability

a) GoI and the federal states have significantly increased their funding for the healthcare sector since the appraisal of the project, from 5.5 % to 9.5 % of the federal budget, from 0.9 % to 4.1 % of GDP and therefore from 4.9 to 20.3 USD/capita/year (2012). Since 2005, health expenses in Karnataka (GoI and NRHM) have risen threefold in absolute terms, whereas the contribution by NRHM accounted for 15 % in 2012.

b) A fee system was introduced across the state, which is now well established and accepted by patients. However 75 % of the population in Karnataka is classified as poor by definition, and therefore holds a "below poverty line" (BPL) card that exempts them from medical fees. At the same time, more than 60 % of the population uses alternative private services (rural healers, private clinics). Therefore a much larger proportion of the population is willing and able to pay for healthcare services than is currently the case. Fees have not been adjusted since 2000, which means they are becoming increasingly insignificant. They are publicly described as "play money" by the DoHFW and are unpopular in politics (concession towards the World Bank and German FC). Nevertheless, these fees play an important role for the hospitals as they can use them flexibly.

State hospitals have a bad reputation among the population due to their bad services in the past, despite the fact that their services are now comparable or even far better than those of the private sector. This is to be improved from now on by ensuring better staff availability and supply of medicines as well as a generally greater focus on services and transparency. The first measures have already been taken (cf. section on Effectiveness)

c) Financial sustainability depends almost completely on the budget allocations by the GoI and GoK. In past years these have increased steadily and reliably, and currently ensure operation and maintenance activities in a satisfactory manner. Also, independent academics consider the free provision of healthcare services (as well as education and drinking water) to be an indispensable cultural component for the Indian welfare state. This could jeopardise sustainability in the event of a shift in political priorities. New and increasingly relevant income sources for district hospitals now include company healthinsurance systems as well as fees from medical colleges for the practical training of their students (nurses and doctors).

d) The GoK has established an efficient Health Management Information System (HMIS) and continues to improve the quality of data and usability of eHealth approaches.

e) The outsourcing of waste disposal is a sustainable concept, as disposal companies refinance themselves from their income acquired through recycling.

f) For the maintenance of equipment, an efficient system has been established awarding annual maintenance contracts to competent companies.

g) Governance of the sector with lengthy GoI and GoK procedures to allocate funds and recruit staff seems to be problematic. Complex, decentralised structures at district and the lower municipal level also contain many interfaces, and barely leave any decision-making authority at the hospital level. This complicates efficient patient-oriented management.

Sustainability rating: 2 (good)

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

Ratings level 1-3 denote a positive assessment or successful project while ratings level 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. Ratings 1-3 of the overall rating denote a "successful" project while ratings 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" (rating 3).