

Ex-post evaluation

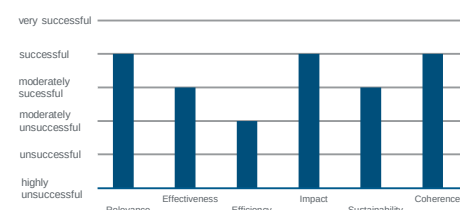
District health, Nepal

Title	District health		
Sector and CRS code	Basic health infrastructure, 12230		
Project number	2002 65 959		
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)		
Recipient/Implementing agency	Ministry of Finance (MoF)/Ministry of Health and Population (MoHP), Nepal		
Project volume/ Financing instrument	EUR 2.54 million / budgetary grant		
Project duration	03/2004 – 03/2021		
Year of report	2023	Year of random sample	2023

Objectives and project outline

At outcome level, the aim was for the supported healthcare facilities to offer needs-oriented healthcare services with improved quality, particularly in the area of reproductive health, and for the population to use them more frequently. This was intended to contribute to stabilising the health situation in the project areas (impact level). To achieve this, selected public healthcare facilities were rehabilitated, expanded and equipped.

Overall rating:
moderately successful



Key findings

The project demonstrated development efficacy, but is rated as “moderately successful” for the following reasons:

- Improving mother-child health in Nepal remains of great relevance and is one of the highest priorities of the Nepalese MoHP.
- The supported healthcare facilities fulfil their supply mission and are used by the population. The government’s “*Safe Motherhood Programme*” provided important impetus with regard to care for mothers and children – and thus the use of services.
- However, there were considerable delays during project implementation – due to a lack of capacity, complex framework conditions and price increases – resulting in the original design to be only implemented in part and resources that could have had additional effects to be left unused.
- Critical with regard to sustainability are the lack of maintenance concepts and the inadequate public financing of the healthcare system.
- From today’s perspective, it should be taken into account that some areas that were still considered remote during the appraisal period now have access to higher levels of care through the construction of roads and bridges. The increasing burden on higher levels and the resulting lower frequency in the use of lower levels of care would have to be considered accordingly.

Conclusions

- Preventive as well as corrective maintenance of the healthcare facilities are necessary to prevent major damage and ensure sustainable use.
- In the sense of a holistic approach to sustainable development, it is necessary to take into account elements of structural quality (such as infrastructure, personnel and technical equipment) as well as aspects of process quality (such as hygiene, application of standards, waste management and administration).
- Adequate management, in particular *leadership*, of the individual healthcare facilities is an important factor with regard to the quality and organisation of the services offered.

Ex-post evaluation – rating according to OECD-DAC criteria

Overall context

Developments in Nepal's healthcare sector

With the signing of the Alma-Ata Declaration in 1978 and the most recent Astana Declaration, the government of Nepal demonstrates a continuous drive to reform primary health care. Nepal's *first long-term health plan* (1975–1990) focused on the development of district health services with the focus on family planning, the expansion of health services for mothers and children and cross-sectoral coordination with food and drinking water supplies. After the revolution in the 1990s (People's Movement), a health reform process (National Health Policy, 1991) was initiated to extend the health system to the rural population. However, this was significantly hampered by the ten-year armed conflict (1996–2006) between the Communist Party of Nepal (Maoists) and the Nepalese government.

At the time of the project appraisal (PA) in 2002, health indicators were still worrying – despite significant improvements – and revealed that the health system, in particular, did not meet the needs of women and children in a satisfactory manner. A major problem was the low utilisation rate of public healthcare facilities. The socio-cultural barriers of the population – particularly in the reproductive health sector – and the lack of adequate quality and need-based health services were considered to be the cause. This, in turn, was due to understaffing and a limited range of medical services, the poor condition of buildings and the lack of medical equipment. The two latter aspects were addressed by the project being evaluated (see summary of the project).

The subsequent, *second long-term health plan* (1997–2017), emphasised equal access and ensuring the quality of services for all – in particular improving the health of those whose health needs are often not met (especially women and children, rural populations and the poor). Part of the plan aimed to provide an Essential Health Care Package (EHCP) in 1999 in 20 different areas through the district healthcare departments. The Government's Health Sector Strategy in 2004 (Health Sector Strategy: An Agenda for Reform) admitted that the original EHCP was not affordable for the government in view of the country's scarce availability of resources and proposed to focus on providing four main areas of basic care within the Essential Package of Health Services (EPHS): safe maternity and family planning, child health, control of communicable diseases and increased outpatient care. This was the aim of the 2004–2009 Nepal Health Sector Programme Implementation Plan.¹ The subsequent plan for the implementation of the 2010–2015 Nepalese Health Programme updated and expanded the EPHS.² Since 2013, the newly defined Basic Health Care Package (BHCP) has included not only curative but also preventive services such as vaccinations. Following the completion of the first two sector programmes, the need for a broader strategic framework was recognised in order to maintain the achievements of the health sector while aiming for universal health care (2015/16–2021/22 Nepal Health Sector Strategy).

The 2007 Interim Constitution declares for the first time in Nepal's history that every citizen is entitled to free basic medical care by the state and makes "health for all" a fundamental right.

The "Aama Surakshya" Programme

Since 1997, the government of Nepal has pursued the goal of reducing the morbidity and mortality of mothers and newborns and improving their health as part of the "*Safe Motherhood Programme*" within the second long-term health plan. An important part of the strategy to improve mothers' health is to encourage women to give birth in a healthcare facility. For example, the introduction of the *Maternity Incentive Scheme (MIS)* in 2005 provided

¹ Government of Nepal, MoHP (2019). Situation Analysis of Health Financing in Nepal. MOHP, World Bank, WHO, GIZ, Kathmandu, Nepal.

² This included the introduction of new reproductive health and child health services, as well as new mental health, oral health, environmental health and community-based newborn care programmes, and a community-based nutritional counselling and support programme. In addition, a non-communicable diseases component was added to respond to demographic and disease changes and ensure free access to medicines (Government of Nepal, MoHP (2019). Situation Analysis of Health Financing in Nepal. MOHP, World Bank, WHO, GIZ, Kathmandu, Nepal).

financial incentives for childbirth in state healthcare facilities, in which a contribution was made to transport costs depending on the geographical location.³

In addition to contributing to transport costs, access to free deliveries was introduced in selected districts in 2006 and the programme was renamed “*Safe Delivery Incentive Programme*”(SDIP). State healthcare facilities in the 25 districts with the lowest Human Development Index (HDI) received a premium for each delivery, regardless of the complexity of the delivery or length of stay.⁴ Health workers in the SDIP districts also received a financial incentive for deliveries in the healthcare facility, including home births.⁵

In 2009, free childbirth delivery was introduced in healthcare facilities for all women nationwide. The fees for all types of births, including caesarean section, were eliminated, and the programme was changed to the “*Aama Surakshya Programme*”.⁶ This programme now also included accredited facilities of non-governmental organisations (NGOs) and of some private non-profit organisations.

The current “*Aama and New Born Programme*” offers women additional cash incentives for attending four prenatal check-ups⁷ as well as basic care for sick newborns. Women are still granted a contribution to cover transport costs for institutional childbirths, depending on the geographical area, and healthcare facilities are given incentives to provide these services.⁸

More recent developments

Overall, over the past two decades, Nepal has made remarkable progress in improving general health indicators and, in particular, in the medical care of mothers and newborns (see Impact chapter). Despite progress, health indicators are still not able to stand up to international comparison, and differences in the quality of and access to services remain between regions.

The severe earthquake in 2015 significantly reversed the country’s development, with serious impacts on the health sector. Overall, the reconstruction of destroyed healthcare infrastructure, in which German DC was also involved, is not yet complete.⁹

As part of the announcement of the federal constitution in 2015, a new administrative structure was established in Nepal with seven provinces, 77 districts and over 753 municipalities. Since then, the federal system has been gradually developing. In order to adapt the health system to the new federal structure, the responsibility for the administration of basic care has been decentralised. This creates both new perspectives for improving healthcare and challenges, as local levels are often not yet familiar with their new tasks.

The right of citizens to free basic medical care by the state was enshrined in Article 35 of the 2015 Nepalese Constitution and legitimised by the Public Health Service Act, 2075 (2018). Nevertheless, Nepal’s healthcare sector remains underfinanced and lacks a sustainable financing strategy. The share of the health budget in the total national budget for 2022/23 is 6.9% and remains low. Out-of-pocket (OOP) expenditure, amounting to around 54 % (WHO 2020) of total healthcare expenditure, continues to be a high burden for the poor population in the event of illness. Around half a million of Nepal’s population are pushed below the poverty line every year due to expensive healthcare alone.¹⁰

The Nepalese government wants to improve access to medical care through the free benefits package (BHSP) for state basic care, the ongoing *Aama programme* and through the national health insurance.

The Federal Ministry for Economic Cooperation and Development (BMZ) has been supporting the Nepalese health sector since 1994. Together with the TC components “Reproductive Health” and “Maintenance in the Public Health Sector” of the “Health Sector Support Programme”, the project being evaluated formed a cooperative

³ Payments to women varied according to geographical location: NPR 1,500 in the mountains, NPR 1,000 in the hills and NPR 500 in the Terai region to account for the higher travel costs in the mountainous regions. The payment was intended to contribute to the transport costs to reach a healthcare facility, but was not intended to fully compensate women for all travel expenses incurred.

⁴ The premium for childbirths was set at NPR 1,000.

⁵ The financial incentive includes a payment of NPR 300.

⁶ Payments to healthcare facilities have now been differentiated according to the type of delivery and the size of the healthcare facility.

⁷ In 2012, the “4 ANC” program, which offered women incentives for four pregnancy check-ups, was merged with the Aama program.

⁸ <https://mohp.gov.np/program/safe-motherhood-programme/en>

⁹ The National Reconstruction Authority (NRA), which originally coordinated the reconstruction of Nepal after the earthquake, was closed in the 2021 reporting year. The Department of Urban Development and Building Construction has been assigned responsibility for the completion of all remaining works.

¹⁰ MoHP: Nepal National Health Accounts 2017/18

project to expand community participation, improve reproductive health services and develop maintenance services in the project area.

Project summary

In order to contribute to improving the health situation – in particular in the area of reproductive health for the rural population – the project rehabilitated, expanded and equipped public healthcare facilities in selected project areas.

The project's target group is the entire population living in the project region. Improving access to and performance of public healthcare facilities should benefit in particular the high proportion of poor population groups who rely on public health in remote rural regions. By focusing the project on improving reproductive health, the aim was to reach women who were previously underserved by the health system, in particular.

Map of the project country incl. project areas



Note: The project areas are highlighted in blue. Source: own presentation (KfW Development Bank based on Openstreetmap.org, Global Administrative Database (GADM) V.4.1)

Breakdown of total costs

*According to the PCR, the actual costs of the overall project cannot be precisely quantified. Due to delays and the overlapping of different TC programme phases, it is not possible to clearly distinguish between TC cooperation contributions. With regard to the partner country's own contribution, both the Ministry of Health and Population (MoHP) and local administrative bodies are expected to contribute to the FC measures. However, there is no overview of this.

		Investment (planned)	Investment (actual)
Investment costs (total)	EUR million	9.2	/*
Counterpart contribution	EUR million	2.02	/*
Debt financing	EUR million	8.98	/*
<i>of which BMZ funds</i>	<i>EUR million</i>	<i>8.98</i>	<i>/*</i>
<i>(FC contribution)</i>	<i>EUR million</i>	<i>3.48</i>	<i>2.54</i>
<i>(TC contribution)</i>	<i>EUR million</i>	<i>5.50</i>	<i>/*</i>

Rating according to OECD-DAC criteria

Relevance

Alignment with policies and priorities

Adequate mother-child care was and still is one of the highest priorities of the Nepalese MoHP. At the time of the PA, the project was in line with Nepal's development policy objectives, as presented in the second long-term health plan (1997–2017), which addressed inequalities in health care and aimed to improve health, in particular for those whose health needs were often not met. In particular with regard to improving mother-child health, the project was in line with the “*Safe Motherhood Programme*”, which focused on strengthening the infrastructure for the provision of services in the field of reproductive health, as well as the “*National Safe Motherhood Plan*” (2002–2017), which included improved obstetric emergency care and, from 2002, neonatal care.

At the time of the PA, the project was in line with the health sector concept of the German Federal Government and corresponded to the priority approaches formulated in the priority area strategy paper on health for Nepal (2001). The core topics of “health, social protection and population policy” were and are one of the three agreed priorities of German-Nepalese development cooperation, linked to the aim of overcoming social inequalities.

The measure's aim to reduce inequalities through equal access to health services is also reflected in the goals of the German Federal Government's Gender Equality Development Action Plan (2021) and Nepal's current health sector strategy, which aims for an equitable system for the provision of health services.

Alignment with needs and capacities of persons concerned

Since the state health system was unable to provide adequate medical care, especially for mothers, and especially for those in the rural population, particularly disadvantaged districts were selected to receive support. The project addressed the lack of a sufficiently high-quality and need-based supply of healthcare services at various levels of care and thus a core problem.

The project's target group is the entire population living in the project districts. Gender impact potentials and obstacles were discussed as part of the target group analysis and taken into account in the project's design to the extent that there was a focus on the area of reproductive health in order to reach women who were previously underserved by the health system to a particular extent. By improving medical care, amongst others, in rural areas, the project took into account particularly disadvantaged and vulnerable parts of the target group. However, there was no targeted addressing of women of specific ethnicity, who are part of the particularly vulnerable group.

From today's perspective, it should be taken into account that some areas that were still considered remote at the time of the PA (2002) have now gained access to higher levels of care through the building of roads and bridges. The resulting increasing burden on higher levels and lower use of lower levels of care would have to be considered accordingly (see chapter on effectiveness and efficiency).

Access to medical care remains difficult for certain groups of women – partly due to difficult geographic access, cultural beliefs and a lack of awareness of obstetrical complications. In this respect, from today's perspective, the use of telemedicine technologies could have a supportive effect and unfold further gender impact potentials. Telemedicine avoids the often time-consuming travel, making it easier to take time away from duties and obligations at home, reducing costs and thus also enabling women living further away from a healthcare facility to report their sexual and reproductive health problems. However, it must be noted that telemedicine in Nepal could only provide very rudimentary support and is barely functional, even today, due to the lack of an internet connection.

Suitability of project concept

The design and underlying chain of effects, according to which the use of needs-oriented health services with improved quality (outcome) – in particular in the area of reproductive health – contributes to improving the health situation in the project region (impact), seems fundamentally comprehensible.

By expanding, rehabilitating and equipping facilities at different levels of care, the often poor condition of buildings and their inadequate supply of medical equipment should be addressed to achieve improved, demand-oriented care at output level. The achievement of targets at outcome level is plausibly based on the assumption that the improved supply will lead to higher user rates of public health facilities by the population living in the project districts, in particular, women. It also appears plausible that the use of an improved, need-based reproductive health service (prenatal and postpartum care, professional birth care) contributes to improving health and reducing maternal and neonatal mortality (impact). Overall, the impact logic requires that, in addition to functional infrastructure and equipment, sufficiently qualified personnel and medicines are available, facilities are managed effectively and efficiently, and equal access is guaranteed for all parts of the population.

Overall, the design of the measure with a view to reducing social inequalities follows a holistic approach to sustainable development, in which the use of health services offerings contributes to improving women's lives in the long term. With regard to the economic dimension of sustainability, it is positive to note that the desired improvement in the quality of public health services and their use by the population enables institutions to increase their revenues and thus their cost recovery ratio in the best case. However, the long-term existence of the structures created depends largely on adequate maintenance concepts (see chapter on sustainability). From the point of view of the ecological dimension, the establishment of waste management planned later on would have been beneficial (see chapter on efficiency). From today's perspective, it seems that elements of structural quality have improved (although potential still exists), but aspects of process quality (such as maintenance, application of standards, waste management and administration) should take on greater conceptual importance – under consideration and possibly adjustment of the financial framework.

In 2001, the ongoing FC and TC projects were combined under the umbrella of the "Health Sector Support Programme (HSSP)", leading to the project becoming part of the DC programme in the health sector of Nepal. Overall, the project appears to be suitable to contribute to the objective of the DC programme in terms of its design. It sought to improve the health and nutritional status of the Nepalese population, in particular the poor and disadvantaged.

Reaction to changes/adaptability

Initially, the design also included infrastructure measures in the Accham and Doti districts. Due to the precarious security situation in Accham and Doti, implementation delays and cost increases, implementation did not take place.

Rating summary:

Relevance is rated as high, both from the point of view of the appraisal and from today's perspective. However, more than 20 years have passed between the time of the PA and the evaluation; during the long period under review, other aspects (such as process quality, increasing burden on higher levels) that have gained conceptual importance came along.

Relevance: 2

Coherence

Internal coherence

In regards to health insurance, there were special contextual links with the TC components "Reproductive Health" and "Maintenance in the Public Health Sector", which started in 1998. For example, TC attempted to increase awareness of health care in the Doti, Accham and Bardiya project areas through educational measures as part of the "Reproductive Health" component of the HSSP in order to reduce socio-cultural barriers with regard to the use of healthcare facilities. The TC component "Maintenance in the Public Health Sector" contributed to improving the inadequate condition of buildings and technical equipment with regard to maintenance by using the experiences of the districts at the central level to stimulate legal and organisational changes. Both TC components played an important supporting role for the FC project.

The project continues to complement the following FC projects in Nepal:

- Family Planning II/HIV-AIDS-Prevention (BMZ No. 2001 65 068), which aimed to improve the population's supply of contraceptives and their access to HIV/AIDS-STD prevention measures.
- Health insurance Basic Health Programme III (BMZ No. 2004 65 971), which was intended to contribute to improving the quality of basic health services.
- Health insurance Sectoral Programme for Health and Family Planning (BMZ No. 2006 66 305), which aimed to improve health care, particularly for disadvantaged population groups – by funding basic medicines, contraceptives, social franchise approaches in the field of sexual and reproductive health, maintenance of medical equipment involving the private sector, minor infrastructure measures, building warehouses to expand a decentralised department, demand-oriented logistics system as well as accompanying consulting services.
- Supporting the Nepalese government in implementing the national sectoral programme for health by providing co-financing via a common basket mechanism financed by international donors (BMZ Nos.: 2010 65 440 -NHSS 2010–2015, 2014 67 851- NHSS 2015/2016- 2021/2022, BMZ-No.: 2020 68 450 Emergency Coronavirus Aid), see external coherence.
- Improvement of mother-child health in remote areas (BMZ No. 2014 68 248, ongoing) through the rehabilitation/new construction of health infrastructure, improvement of electricity, water and wastewater supply, hygienic conditions, equipment, communication options, contraceptive supply and project-related education and training measures in selected health facilities in the province of Sudurpashchim.

In addition, TC supports the ongoing health sector programme by institutionalising statutory health insurance, promoting specialists in the health sector, strengthening the health management of sub-national government units as part of the federal health system and harmonising information systems in the health sector.

Overall, the project aimed to achieve the (then) health-related Millennium Development Goals (MDGs) in Nepal and is therefore consistent with international standards and norms to which German DC is committed. Against the background that women still have a subordinate position in Nepal, the project promoted gender equality by expanding health services, especially for women.

External coherence

In addition to German DC, DFID, JICA, SDC, UNFPA, UNICEF and WHO also implemented district health programmes. The "Nepal Safe Motherhood Programme" (NSMP) supported by the British DFID, which began in April 1997 and aimed to improve the infrastructure – for comprehensive obstetric emergency care and the corresponding training of healthcare personnel – is particularly relevant for FC/TC health insurance. Since the NSMP

was classified as a priority programme by the government, this FC measure complemented the partner's own efforts.

At the time of the PA, the main donors in the health sector were the World Bank and DFID, which were later the only ones to participate in community budget financing. In the beginning of 2004, a Memorandum of Understanding on cooperation in the sector of 12 donors, including German DC, was signed with the Nepalese partner side. A common health sector strategy was also formulated (Health Sector Strategy: An Agenda for Reform), which formed the basis for joint planning and design. Joint Annual Programme Reviews (JARs) have now contributed to improved donor coordination. Since 2012, German FC has supported the National Sectoral Programme for Health in the form of basket funding.

Rating summary:

In summary, it can be stated that the project supported the partner's own efforts and complemented the measures within German DC as well as the activities of other donors.

Coherence: 2

Effectiveness

Achievement of (intended) goals

The objective at outcome level was for the supported healthcare facilities to offer improved quality, need-based health services – especially in the field of reproductive health – and for the population to use them more frequently.

The initially formulated indicators for assessing target achievement at outcome level were not given any base values at the time of the PA and there was only sporadic follow-up in subsequent years. With the adoption of the National Health Programme II (2010–2015), indicators were, from 2014 ongoing, modified to be coherent with the national objectives. For this reason, the planned tabular presentation of the indicators over time with values at the time of the PA, PCR and EPE is omitted.

As part of the EPE, an extended list of indicators is formulated at the level of the healthcare facilities for which trends are presented over time – if the data situation permits. Specifically, the “number of outpatients and inpatients” (Indicator 1), the “bed occupancy rate (relative to each of the three hospitals)” (Indicator 2), the “number of inpatient births” (Indicator 3 a), the “number of caesarean sections” (Indicator 3 b) and the “number of obstetric complications that are treated” (Indicator 4), respectively at the level of the individual supported healthcare facilities, are considered. For these indicators, time series data from the last five years, i.e. from 2017/18 to 2021/22, were provided for evaluation by the MoHP. In addition, data could be collected for some of the indicators for healthcare facilities at secondary and tertiary level on the basis of the annual reports of the DoHS for the project implementation period.¹¹ The perception of prenatal care and postnatal examinations is presented at country level.¹²

Contribution to goal achievement

Healthcare in Nepal is financed both publicly and privately with paid services. The public sector healthcare facilities follow a hierarchical supply structure: The first point of contact for basic health services is (sub) health posts (HPs)¹³. Each level above the HPs is the reference point of a network ranging from primary healthcare centres (PHCCs) to secondary level hospitals and specialised tertiary care centres, especially in Kathmandu.

For the period 2021/22, the network of public healthcare facilities comprises 125 hospitals, 188 PHCCs, and 3,775 HPs.¹⁴ The National Health Policy of 1991 paved the way for increased investment in the private sector, resulting in a rapid increase of private healthcare facilities since then. In 2021/22, 2,155 facilities were counted.

¹¹ In later years, the annual reports were converted to national values.

¹² There is no need to formulate separate indicators for the individual healthcare facilities, as the data are incomplete.

¹³ These are the reference centres for the activities of the Female Community Health Volunteers (FCHVs) as well as community-based institutions such as Primary Health Care Outreach Clinics (PHC-ORCs) and Expanded Program on Immunisation (EPI) clinics.

¹⁴ MoHP (2022): National Joint Annual Review Report 2021/22.

At the time of the PA, the majority of the healthcare facilities in the Bardiya and Dhading project districts were in very poor condition. The situation was particularly serious in the district hospital in Dhading, which was damaged by an earthquake and whose main building was at risk of collapsing, as well as in the district hospital in Bardiya, which was very outdated at the age of 34 (at the time of the PA). At Bheri Hospital, the reference hospital for the Bardiya district, among others, there were serious general structural and utility deficiencies (e.g. water supply, wastewater disposal, electricity supply, waste disposal, etc.). In addition, the existing capacity was not sufficient to meet the high demand in the field of obstetrics, so there were plans to build an additional obstetrics department. The equipment in the healthcare facilities was generally insufficient and the existing equipment was often not functional. A major reason for the poor condition of the buildings and equipment was the large lack of proper maintenance services.

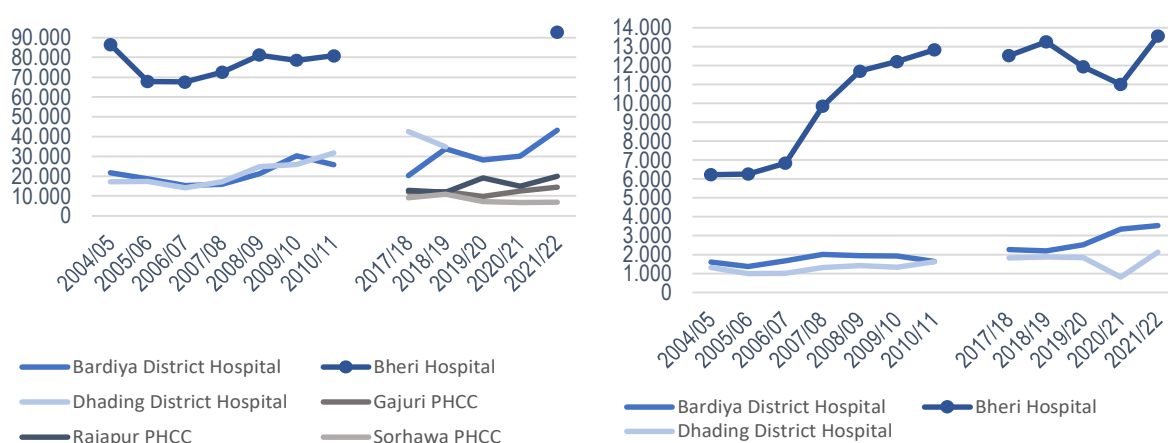
At output level, six public healthcare facilities in the districts of Bardiya and Dhading at various levels of supply were rehabilitated, expanded and equipped with FC funds as part of the project (Phase I) between 2006 and 2009/2010, but with a significant delay (see chapter on efficiency). This included the Bheri Hospital,¹⁵ the Bardiya and Dahing district hospitals at the higher care level (tertiary and secondary) as well as the three PHCCs Gajuri, Rajapur and Sorhawa (primary level). In addition, (sub-)Health Posts (S-HP) were supported under the responsibility of the TC programme, for which a so-called “Start-up Fund” was set up. Repairs within the warranty period (DLP, Defect Liability Period) were carried out between 2010 and 2011 at Dhading District Hospital. The procurement of the medical equipment first took place in 2013. Initially, infrastructure measures were also planned in the Accham and Doti districts (Phase II). They were ultimately cancelled due to the precarious security situation in Accham and Doti and the fact that, in addition to considerable implementation delays, there were also cost increases already in Phase I, which resulted from unforeseeable price increases and numerous adjustments to the initial design. For example, at Dhading District Hospital, considerably more structural damage was found due to earthquakes (1988) than was known at the time of budget planning. The technical equipment at Bheri Zonal Hospital was also found to be inadequate for the operation as a reference hospital, particularly in central service areas such as sterilisation, the operating tract and waste disposal. In addition to the construction of a new birth unit, further infrastructure measures were therefore included in order to ensure satisfactory quality of care. The HPs in Gajuri (Dhading District) and Sorahawa (Bardiya District) received an “upgrade” to PHCC status through the MoHP, although the physical infrastructure for necessary facility outputs did not correspond to this level. In order to nevertheless ensure functionality, significant additional investments were required. As a result, there was already a higher cost estimate for the measures to be implemented in 2002 and 2003.

The project addressed bottlenecks existing at the time of the PA by expanding, rehabilitating and equipping selected healthcare facilities (poor condition of buildings and under-equipping with medical devices). As part of the evaluation, all six healthcare facilities were visited, and four HPs¹⁶ supported under the responsibility of the TC programme were selected, while the focus of this evaluation remained on the six healthcare facilities implemented under the responsibility of FC. With regard to the use of the healthcare facilities by the population, the picture is as follows: The local inspection of all healthcare facilities and the collection of data on the number of patients (outpatient and inpatient (Indicator 1), see Figure 1) show that the healthcare facilities basically fulfil their mission of providing care and the population uses the facilities. Apart from the Sorhawa PHCC, the trend is positive overall. It is particularly striking that the number of patients treated in hospital almost consistently doubled in the three hospitals over the years (2004/05 to 2021/22). The construction measures were largely implemented between 2006 and 2009. However, a significant increase in the number of users after completion of work cannot be identified on the basis of available data. It is therefore obvious that population growth in general, the improved transport infrastructure to reach a healthcare facility (higher level), the introduction of national health insurance, as well as other internal and external factors (see discussion below) have positively influenced the use of health services.

¹⁵ At the time of the PA still Bheri Zonal Hospital. After the country switched to a federal structure, the hospital was renamed Bheri Provincial Hospital, reporting to province no. 5. In accordance with the decision of the Nepalese Government, the hospital was left in the Federation under the name Bheri Hospital.

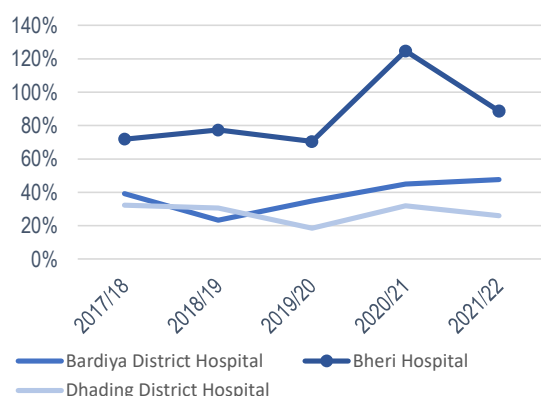
¹⁶ The rehabilitation of 15 (S)HPs financed through the start-up fund, which was less complex in terms of volume and also technically less complex, was carried out under the leadership of TC. In addition to the funds of the project to be evaluated, other TC and FC projects also flowed into the start-up fund and other (S)HPs were supported, among other things. An exact attribution of the funds paid in by the project to be evaluated to specific (S)HPs could not be established ex post, so that four (S)HPs, all of which were financed by the start-up fund, were considered as examples during the visits.

Figure 1: Number of outpatients (left) and inpatients (right), Indicator 1.



Source: DHIS-2, DoHS Annual Reports; own presentation.

Figure 2: Bed occupancy rate, Indicator 2.

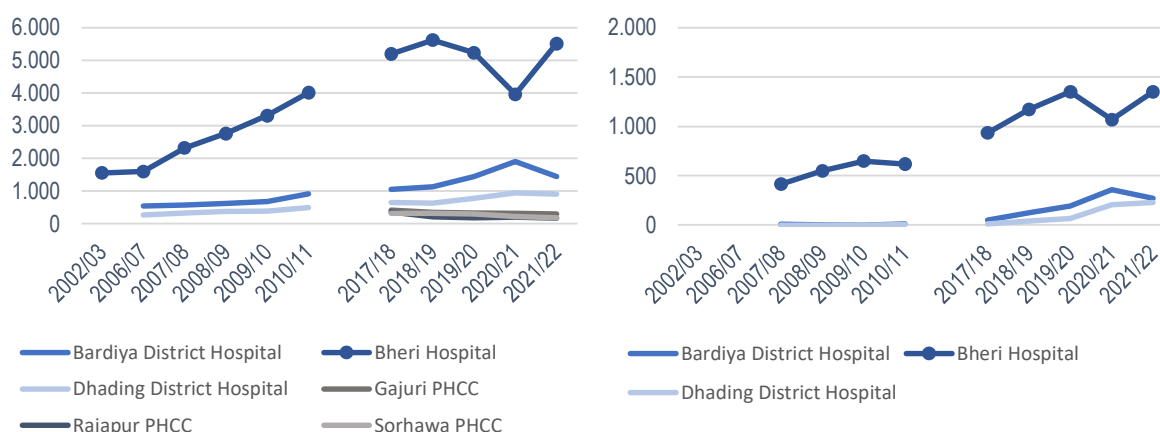


Source: DHIS-2, own data.

The bed occupancy rate (Indicator 2) in 2021/22 was 89 % at Bheri Hospital and 48 % and 26 % at the Bardiya and Dhading district hospitals, respectively. The observation is confirmed by the trend over the last five years – with the exception of extreme bed utilisation at Bheri Hospital due to COVID-19 in 2020/21 (see Figure 2). According to the MoHP, an occupancy rate of 80 % is considered satisfactory – in this respect, the capacity utilisation in the two district hospitals is low and is economically inefficient. During the on-site visits, the short length of stay of patients, who cannot afford to stay away from home for a long time, was mentioned as a reason for low utilisation.

Against the background of high maternal and neonatal mortality rates, the project aimed in particular at improving access to health services for this previously underserved group. At national level, there is a significant increase in institutional births: While in 1996, only 8 % of Nepalese women gave birth in a healthcare facility, it was possible to increase the rate nearly tenfold (80 %) by 2021. The number of births (Indicator 3 a)) in the three supported hospitals reflects the picture at national level (see Figure 3, left): Thus, a generally positive development over the years can be observed on the basis of the available data. The birth decline at Bheri Hospital in 2020/21 is closely related to the establishment of a COVID emergency ward that prevented women from being hospitalised (for fear of becoming infected). On the other hand, there is a declining trend at the level of the three supported PHCCs, for which data are available from 2017 onwards. A possible explanation for this could be that women bypass primary healthcare facilities to deliver at higher level healthcare facilities due to easier access (improved road infrastructure and transport options) and perceived better quality of care (access to caesarean sections, specialists). This leads to overcrowding of higher-level facilities, which in turn affects the quality of supply. To overcome these challenges and provide patients with the best possible quality, it is advisable to review the staff situation in departments with high patient traffic, such as in maternity wards as well as trying to reduce the overuse of the latter by means of a need-based referral scheme from primary to higher levels (see chapter on “Efficiency”).

Figure 3: Number of institutional births (left, Indicator 3 a)) and number of caesarean sections (right, Indicator 3 b))



Source: DHIS-2, DoHS Annual Reports; own presentation.

To measure access to obstetric (emergency) care, the number of caesarean sections (Indicator 3 b)) performed only in hospitals and the number of obstetric complications treated (Indicator 4) in all six supported healthcare facilities are considered. For the interpretation of the number of caesarean sections, the following should be noted: As long as caesarean sections are performed for medical reasons, they can be a primary obstetrical measure to save the mother and her newborn from pregnancy and birth-related complications. However, caesarean delivery is a major surgical procedure and can be associated with complications. It is estimated that 5–15 % of pregnant women experience a complication during pregnancy and childbirth, but not every complication requires a caesarean section. Against this background, the World Health Organization (WHO) recommends an appropriate national rate of caesarean delivery of 10 to 15 per 100 live births. This threshold is intended to allow access for women who require a caesarean section. A national rate of less than 5 % suggests a problem with access to caesarean sections. However, if the caesarean section rate in the population tends to exceed 15 %, this may be due to a broader indication. However, higher caesarean section rates are also associated with increased use of often limited resources. According to the DoHS Annual Report (2020/21), a slow increase in caesarean section rates has been observed in recent years. For example, the national average – in terms of institutional births – increased from 17.60 % in 2016/17 to 20.50 % in 2020/21. However, the significance of institutional caesarean section rates is low, especially if these are reported from reference hospitals that treat a large proportion of referred obstetric emergencies. The evaluation simplifies the use of the “number of caesarean sections in each supported healthcare facility” as a proxy indicator for access to emergency obstetric care. As shown in Figure 3 (right), the number of caesarean sections for Bheri Hospital and the two district hospitals in Bardiya and Dahing has increased over the years. A fundamental weakness of the indicator is that it does not indicate pre-existing maternal high-risk factors. For example, there is a possibility that doctors generously indicate caesarean section, even if there is no medical necessity, which can dilute the indicator with regard to obstetric emergency care.¹⁷

Obstetrical complications were treated in all visited healthcare facilities (Indicator 4). However, there is no clear trend in terms of an increase or decrease in treated complications.

In addition, to reduce the risk of morbidity and mortality for mother and child, pre- and postnatal care is important. Complications can be detected early as part of antenatal care (ANC). For example, the MoHP recommends four¹⁸ ANC visits: in the fourth month (12–16th week of pregnancy), in month six (20–24th week of pregnancy), in the eighth month (28–32nd week of pregnancy) and in month nine (36–40th week of pregnancy). Overall, the number of women who completed four or more ANC visits in Nepal increased from 9 % in 1996 to 81 % in 2021.

The majority of maternal and neonatal deaths occur during birth and in the first 24 hours after delivery. Therefore, rapid postnatal care (PNC) is important for both the mother and the baby to manage any complications after delivery and to give the mother important information on how to care for herself and her baby. While in 2001, only 17 % of women underwent a postnatal examination within two days of delivery, an increase to 70 % was

¹⁷ As a reference for an increasing number of caesarean sections in Southeast Asia, see: Betrán et al. (2016): The Increasing Trend in Caesarean Section Rates: Global, Regional and National Estimates: 1990–2014, PLoS ONE 11(2).

¹⁸ The WHO now recommends eight visits.

achieved in 2021. Due to lacking availability of full data, no separate indicator at healthcare facility level was formulated.

Overall, it must be attested that the project has fundamentally contributed to achieving the objectives of particularly disadvantaged or vulnerable groups. On-site visits also revealed that users are primarily among the poorer population, while at the same time we can see that wealthier women or those with a better educational background are increasingly using private institutions.

However, physical accessibility remains critical in terms of guaranteeing equal access. Therefore, the availability of BEMONC facilities (HP, PHCC) as a first-line clinic for normal births with the possibility of referral to hospitals (CEMONC) within two hours is important so that poorer women from rural areas also have access to specialist birth care.

In addition, the fact that women are often unable to decide by themselves where they want to give birth is a complicating factor. Barriers to care are often complex and embedded in social norms and cultural beliefs that affect women's mobility.

Overall, it appears undisputed that the project's measures have contributed to the maintenance and improvement of health services used by the population. However, the interaction of all impact factors is decisive with regard to target achievement. This includes internal factors such as the development of staffing, equipment and the associated medical service spectrum as well as changes in external framework conditions e.g. under the *Safe Motherhood Programme*, in particular with regard to care for mothers and children.

Staffing requirements Staffing presents a mixed picture. First of all, it should be noted that the number of sanctioned posts is generally insufficient to operate the facilities. The MoHP's Health Facility Survey (HFS, 2021) also shows that only seven out of ten approved positions are occupied in public healthcare facilities – with the occupation of sanctioned positions varying significantly depending on the category of medical personnel, the level of care and geographical location. While approximately 70 % of the approved positions for nurses and paramedics are occupied, only less than half of the specialised medical positions (consultants, physicians/general practitioners, medical officers) are occupied. The shortage of staff is increasing significantly in the lower levels of care as well as in geographically remote areas.¹⁹

Given the low number of approved (and also occupied) positions, the institutions visited hired staff through community or own funds. In this case, federalism gave the healthcare facilities more opportunities to fill positions if necessary, so that on-site visits gave the impression of a satisfactory staffing level. However, the additional positions created are temporary and salaries are often lower than those of the sanctioned posts. This implies a horizontal wage inequality with potentially demotivating impetus. However, in one hospital, specialists were paid twice the official salary to keep them there. Incentives and higher salaries for working in remote locations should be considered to avoid vacancies and frequent staff changes (often doctors are sent to remote positions for two years but leave straight after these two years. This does not contribute to the development of strong teams and medium to long-term visions/designs).

It was not possible to assess the competencies and quality of the services provided in the healthcare facilities in more detail. Nevertheless, it was assured that nurses received regular training.

Infrastructure. The buildings are used for their original purpose, but some show signs of deterioration (see Sustainability chapter). As some institutions have seen an increase in patient numbers in recent years, they are reaching their limits, especially with regard to the increased space requirements in the emergency department and outpatient clinic. As already mentioned, the number of childbirths in higher-level institutions also increased. Compared to the constraints in the hospitals, especially the tertiary hospital, the majority of the visited PHCCs and HPs had clean and well-organised delivery rooms where patients' privacy could be ensured.

Toilets were available in all healthcare facilities near the delivery room and in most cases in a clean or acceptable condition. Water and electricity were available in all healthcare facilities.

¹⁹ MoHP (2021): Health Facility Survey (2021), Table 3.24.

²⁰ This includes: (1) parenteral administration of antibiotics, (2) parenteral administration of oxytocin or other uterotonic drugs, (3) parenteral administration of anticonvulsants for hypertensive pregnancy symptoms, (4) assisted vaginal delivery, (5) manual removal of the placenta,

Materials (medicines, medical consumables, vaccines) and equipment. The visits showed that most facilities are adequately equipped. Basic medications were available and there were no major supply bottlenecks. This applies in particular to emergency obstetric medications that have been checked on-site. The equipment required for the individual supply levels appears acceptable, even if certain bottlenecks occur in some cases. Ultrasound and X-ray equipment was available at PHCC level and above. Two facilities contained still packaged devices that would have been necessary in daily clinical life. However, it can be assumed that equipment and devices are used as intended.

Range of services with regard to obstetrical emergency measures and neonatal care. Facilities providing deliveries should be prepared to provide the most important Emergency Obstetric and Newborn Care (EmONC) services to manage any complications. The HFS 2021 shows that in total, only 3 % of all facilities performing normal delivery performed all seven basic EmONC (BEmONC) signal functions²⁰ in the three-month period prior to the survey. This is because care is almost exclusively provided at hospital level (with the exception of some PHCCs). For example, BEmONC measures were applied in 45 % of hospitals at state/province level, in 10.4 % of hospitals at local level, in 10.5 % of private hospitals and in 1.1 % of PHCCs. Visitation of all three PHCCs showed that these facilities fulfilled six BEmONCs signal functions, with no assisted vaginal delivery being offered.

Comprehensive Emergency Obstetric and Neonatal Care (CEmONC)²¹ is only provided in 38.3 % of state/provincial hospitals, 6.9 % of local hospitals and 9.6 % of private hospitals, according to HFS 2021.²² The three visited hospitals at secondary and tertiary level performed all nine CEmONC signal functions.

Influence of external framework conditions. The government's *Safe Motherhood Programme* is intended to provide important impetus with regard to care for mothers and children and thus the use of services. As described at the beginning, women have been granted a contribution to transport costs since 2005 in order to provide incentives for delivery in state birth centres. In 2006, women in 25 selected districts with the lowest Human Development Index (HDI) also received access to free obstetrics, and the financial incentives for the services included in the offer was also extended to the HR side of the healthcare facility itself. Since 2009, all women across the country have been given the opportunity to give birth free of charge. Under the current *Aama programme*, women also receive cash bonuses for four pregnancy check-ups and a free basic health care for sick newborns.

The increase in institutional births can be observed in all three geographical zones, although differences remain (see Figure 4, left). The observation also applies to the increase in institutional births, taking into account economic status. All wealth quintiles show a significant increase in the rate of institutional births – although the reduction in the gap between the highest and the lower quintiles over time depends on the baseline level of wealth (see Figure 4, right). This may be a possible indication that financial barriers on the demand side have been significantly reduced, but the transaction costs for the poorest are still significant. With regard to the project to be evaluated, the increase in births in the healthcare facilities was already observed before the completion of the construction work. It can therefore be assumed that the refurbishment and expansion have certainly contributed to the functionality of the hospitals, whereas the *Aama programme* provided a significant impetus to increase institutional birth rates.

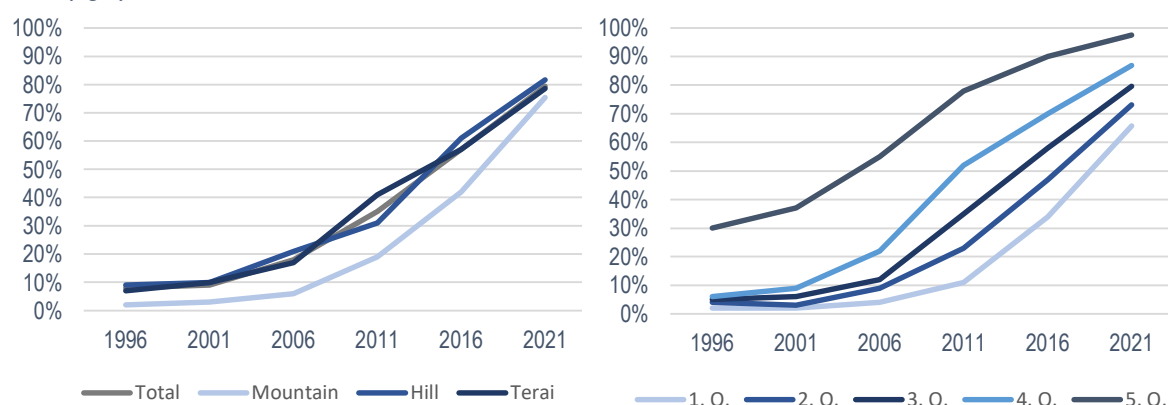
²⁰ This includes: (1) parenteral administration of antibiotics, (2) parenteral administration of oxytocin or other uterotonic drugs, (3) parenteral administration of anticonvulsants for hypertensive pregnancy symptoms, (4) assisted vaginal delivery, (5) manual removal of the placenta,

(6) removal of retained products of conception and (7) resuscitation of newborns.

²¹ In addition to the BEmONC services, at least one caesarean delivery and at least one obstetric blood transfusion were performed in the three months prior to data collection.

²² MoHP (2021): Health Facility Survey (2021), Table 7.6.

Figure 4: Proportion of institutional births in the three geographical zones (left) and taking into account economic status (right)



Source: DHS Nepal; own presentation.

Quality of implementation

The MoHP was responsible for the project, with the implementing institution at national level being the “Department of Health Services” (DoHS) reporting to the Ministry. At district level, the relevant implementing institutions were the corresponding District Development Committees (DDCs) and the District Health Offices. For the implementation of the larger and complex structural expansion and rehabilitation measures, it was agreed with the MoHP/DoHS that the Town Development Fund (TDF), supported by an international consultant (IC), becomes active. For the financial monitoring, regular reporting to the IC was planned, which was responsible for the overall monitoring of quality (of all measures implemented) and finances.

Neither the DoHS nor the TDF had sufficient capacity to complete their tasks on time. The DoHS was not able for example to fulfil its tasks (comparison of the submitted proposals with required national plans and standards due to frequent personnel changes and in some cases non-existent standards or standards still in the process of being created). It also required lengthy discussions and coordination to develop MoUs and contracts between all parties involved. The TDF hired a local consultant to design and supervise the construction measures, but despite the satisfactory quality of his work, he was overwhelmed by the simultaneous design of six complex infrastructure measures. The international consulting office provided support for the TDF from Germany and was unable to fulfil its tasks. The contract was terminated accordingly.

Unintended effects (positive or negative)

Adherence to hygiene standards is important to prevent infection. This is done by preventing contact with infectious material or other sources of danger, including instrument sterilisation and waste management. When it came to sterilising instruments, there was often no space for proper sterilisation, especially in facilities at the lower levels of care. While the decontamination (cleaning and disinfection) was undertaken at the place of use (e.g. in the delivery room), the autoclave was located in rooms that were frequently used for other functions (nursing ward, corridor). As a result, there was often no separate sterilisation area with clear zones for decontamination and sterilisation – dirty and clean areas. Considering the space constraints, measures should be taken to ensure proper sterilisation of the equipment, including a dedicated room for the autoclave to avoid infection.

While the autoclaves for preparations of instruments were often outdated and small, the autoclaves for processing infectious solid waste were in some cases more modern and significantly larger. Nevertheless, significant hygiene bottlenecks were visible in many of the visited healthcare facilities (e.g. used syringes lying around or open waste pits without barriers), so that damage to personnel could not be ruled out. Few of the facilities had adequate waste management including sterilisation and separation in a dedicated solid waste area. Inadequate waste disposal endangers the environment, patients, staff and the general population.

There were good examples of waste disposal at Bheri Hospital, Bardiya District Hospital and Khairapur HP, some of which were funded by other donors. These could serve as examples for other hospitals in these provinces.

Rating summary:

The healthcare facilities have been rehabilitated to enable further use, and partly expanded to offer better healthcare services. Irrespective of complex impact relationships, it can generally be assumed that *this has made a positive contribution* to the availability and use of health services in the project region. However, the extent to which this contribution was significant cannot be assessed conclusively due to the large number of influencing factors and the limited availability of data. However, it is obvious that changes to the framework conditions through the government's *Safe Motherhood Programme* had a significant impact on the perception of health services in the field of mother-child health. Overall, only a part of the originally planned measures were implemented (i.e. the implementation of more complex infrastructure measures at larger facilities in the Achham and Doti districts was dispensed with) and the procurement of medical equipment was carried out to a minimal extent. The latter was cushioned by the fact that the procurement was carried out by NHSP II. It would have been desirable if important aspects of hygiene (especially sterilisation) and waste management had been addressed. In view of this situation, the effectiveness of the project is rated as moderately successful.

Effectiveness: 3**Efficiency****Production efficiency**

Cost increases resulted from significant implementation delays and resulting price increases in the construction measures as well as a number of adjustments to the initial design (as described under Effectiveness). As already discussed, there was a lack of sufficient capacity on the partner and implementation side to complete the tasks on time.

The construction phase itself was characterised (at all locations) by road blockades, bandas (forced strikes) and demonstrations due to political unrest, as well as delivery difficulties and heavy rainfall during the monsoon period, and was delayed. In addition, in the construction phase (Phase I), defaulting local construction companies (Dhading District Hospital) were added. Overall, this meant that the initially planned implementation period from 2002 to 2004 was postponed to 2006 to 2009/10.

Procurement of medical machinery was also delayed, partly due to lengthy coordination processes. In the end, only 0.7 % of the total cost was spent on equipment, compared to ten times the cost in the original design. When the tender was finally to take place, the difference between the estimated cost and the bid price was more than 15 %, which led to the Nepalese government not accepting the bid. The tender and procurement for a small part of the medical equipment took place at the end of 2013.

After completion of the described construction measures and procurements, there were still residual funds in the amount of EUR 0.94 million. Due to lengthy coordination processes, the decision on the use of the funds was significantly delayed. In 2018, i.e. five years later, KfW and the MoHP reached an agreement to use the remaining amount for the technical equipment for hospital waste management and accompanying training measures primarily at project sites and commissioned a consultant. However, in 2020, it became apparent that the use of residual funds for the assumption of the coverage for the intended purpose was incorrect or was not shared by the Federal Ministry for Economic Cooperation and Development (BMZ). This ultimately led the commitment being reduced by EUR 0.94 million to EUR 2.54 million. KfW reimbursed the consultant EUR 47,153.00 from its own funds for services already performed but not yet invoiced. The sparing use of resources in terms of production efficiency suffered, unsurprisingly. From an ex-post perspective, support for waste management could have been a positive addition to the project, as already mentioned.

Overall, 93.7 % of costs were related to construction, 0.7 % to medical equipment and 5.6 % to consulting services. For comparison purposes, the PA included 70 % for construction measures and equipment, 18 % for unforeseen events (technical and price development) and 12 % for consulting services. The share for consulting services was therefore significantly lower than planned.

Allocation efficiency

Congestion at tertiary level. While referrals for complications were carried out from the lower level to the higher level (with outpatient services), there was no referral line for normal deliveries. Women from the provincial capital

in particular used tertiary services for normal childbirth. This led to an overload of the central tertiary maternity ward, which included women from the lower levels as well as women from the surrounding area for normal deliveries. Congestion at tertiary level is costly and inefficient for the healthcare system as a whole. While the number of deliveries in some primary healthcare institutions was declining, if anything, the number of deliveries increased mainly in higher-level institutions (see chapter on effectiveness). In order to reduce the burden on the tertiary level in particular, it is necessary to examine how an incentive or insurance system, in conjunction with a clear referral regime, can promote normal deliveries at primary care level. Tertiary institutions should focus (their bed and staff capacity) on referred and complicated cases for specialised services. At the same time, it remains to be considered whether women should be given the right to decide for themselves where to give birth to their child, or whether this decision should be left to primary-level service providers. Mapping where women prefer to give birth could help to provide more support and create suitable alternatives to normal births (e.g. through urban birth centres) by improving access to services where demand is high and closing those birth centres that are not very frequented by women based on the results of the mapping. Low utilisation is not only economically inefficient, but also carries the risk of staff not being sufficiently trained to perform deliveries and manage common obstetric and neonatal complications.

As already discussed, mobility in Nepal has increased significantly, resulting in better connections to formerly remote areas since the PA and, as a result, easier access for the population to higher-level healthcare facilities with more services. From the point of view of the evaluation, the currently politically desired establishment of micro-hospitals (with 15 beds) in each municipality is therefore likely to be problematic – especially if every hospital offered caesarean sections in addition to normal obstetric services, which would require more qualified staff and resources. As salaries and wages often make up the largest part of the hospital budget, the micro-hospitals (with 15 beds) would have to be continuously funded to cover the high share of personnel costs. It cannot be assumed that economies of scale can be achieved as a result.

Management of the healthcare facility. The economic viability of healthcare facilities can also be strengthened by good management even if they operate as non-profit organisations with no intention of making a profit. For example, in one hospital, medicines beyond the list of essential and free medicines are sold with a markup (especially to patients with insurance), which was used to pay for minor improvement measures (e.g. canopied waiting areas). The way defective equipment in a hospital was dealt with was just as creative. While most facilities had old, decommissioned devices and equipment in stock, this hospital had sold its defective devices and equipment. In fact, it turns out that the administrative process of selling old equipment is extremely complex, which most healthcare facility managers try to avoid.

As expected, the facility managers were professionals with a medical or nursing background. In hospitals, the Chief Executive Officers (CEOs) are generally physicians. Institutions, especially at the lower level, often lack staff with sound training in quality management/administration. At the same time, within the limits of the resources available, the capacities should be used where their comparative advantage lies, namely in the medical care of patients. Given that managing a clinic requires both clinical sense and management skills, it is very positive to note that among the institutions visited, one participates in a pilot programme that provides administrative support to the chief physician (by recruiting hospital administrators). Overall, it turned out that good teamwork and leadership in the healthcare facility – especially leadership – are important factors for the quality and organization of services. Management training for senior physicians can therefore provide additional benefits.

Residual funds. With regard to the use of residual funds, it appears undisputed that an alternative use of the remaining resources could have resulted in both an increase in the positive effects and a reduction in the (incurred) costs (see e.g. explanations on allocation efficiency; improvement of hygiene, maintenance and general quality management).

Rating summary:

The project experienced significant implementation delays and the associated unused resources could have had additional impacts. The efficiency is rated as unsatisfactory, especially in terms of time. Despite the fact that, to a certain extent, there were understandable reasons for the massive delays, the use of financial and human resources is poorly proportionate to the output achieved.

However, there are numerous approaches that, when viewed ex post, would have led to an increase in efficiency. However, some of the developments were not foreseeable at the time of the PA, or the establishment of basic structures initially appeared to be a priority.

Overall, the efficiency is rated as moderately unsuccessful.

Efficiency: 4

Impact

Overarching (intended) developmental changes

The objective at impact level was to contribute to improving the health situation in the project region. At the time of the PA, no impact indicators were formulated. Within the framework of the EPE, the development of maternal and neonatal mortality rates is examined with regard to mother-child health.

Over the past two decades, Nepal has made remarkable progress in improving health metrics. Maternal mortality (per 100,000 live births) has been reduced by more than 70 % since 2002. This decreased from 520 in 2002 to 151 (per 100,000 live births) in 2021. The 2021 National Population and Housing Census by the MoHP and the National Statistics Office (NSO) shows that a high proportion of deaths were observed among mothers who did not have formal education (38 %) compared to women with a bachelor's degree and higher education (6 %). Within the seven provinces, the highest maternal mortality rate was recorded in Lumbini (207 per 100,000 live births) and the lowest in Bagmati (98 per 100,000 live births) – both project provinces. Despite a good health infrastructure compared to other provinces, maternal mortality in Lumbini is alarmingly high. This may be partly due to the fact that women from remote areas do not have timely access to medical care and that families do not assume sufficient responsibility for the well-being of the mother.²³ Interviews also cited the reason that the province of Lumbini receives many cases from the province of Karnali, which only reach the health services when there is an advanced degree of complication.

The Sustainable Development Goals (SDGs) aim that the global maternal mortality rate will be reduced to less than 70 per 100,000 live births by 2030, with no country having a maternal mortality rate of more than 140 per 100,000 live births. Nepal has also committed to achieving this goal and has made maternal health one of its most important development priorities.

Since the time of the PA, infant mortality has also been significantly reduced, with a downturn of approximately 40 % from 36/1,000 live births in 2002 to 21/1,000 live births in 2022 (NDHS). According to the NDHS, infant mortality has stagnated at 21/1,000 live births since 2016, while the UN Interagency group's estimates indicate a downturn from 20 to 16/1,000 live births between 2016 and 2021. In terms of SDGs, a reduction to 12 or less per 1,000 live births is targeted by 2030.

Target achievement at the impact level can be summarised as follows:

Indicator	Status at PA	Target value at PA	(Optional) actual value at final inspection	Actual value at EPE
(1) Maternal mortality rate (per 100,000 live births)	520 (2002)*	/	/	151 (2021)**
(1) Neonatal mortality rate per 1,000 live births	36 (2002)*	/	/	21 (2022)***

*<https://data.worldbank.org/>

**MoHP, NSO: National Population and Housing Census 2021

***NDHS 2022

Contribution to overarching (intended) developmental changes

²³ Kathmandu Post (2023): Lumbini fails to curb maternal mortality despite good infrastructure. <https://kathmandupost.com/health/2023/04/06/lumbini-fails-to-curb-maternal-mortality-despite-good-infrastructure>

It can be assumed that the project contributed to improving the health situation of the population living in the project regions at a higher development policy level. Intact infrastructure is, among other things, a necessary prerequisite for the population to have access to and use health services. The bottleneck existing at the time of the PA (i.e. in particular the poor condition of existing infrastructure) was addressed by the project so that the healthcare facilities can fulfil their task of care, particularly in the area of reproductive health. Improved supply to the disadvantaged group of mothers and children helps to reduce maternal and neonatal mortality rates.

In terms of methodology, it should be noted that the FC funds were only used to support healthcare facilities on a very selective basis, meaning that it is not possible to precisely attribute the impacts to the FC project. However, it seems plausible that the FC project also contributed proportionately to the impacts achieved – within the scope of its possibilities. In addition, it is conceivable that other measures or external circumstances may also have had an influence on the impact objectives, which are not directly related to the financed measures. It seems obvious that the previously described initiatives of the Nepalese government to improve mother-child health have been pioneering in terms of achieving the intended development policy objectives. The severe earthquake in 2015, on the other hand, meant a severe setback for the country's development and also for the healthcare sector, as did the COVID-19 pandemic in 2020/21.

Contribution to overarching (unintended) developmental changes

There are no indications of overarching (unintended) developmental changes.

Rating summary:

Overall, the impact can be assessed as successful.

Impact: 2

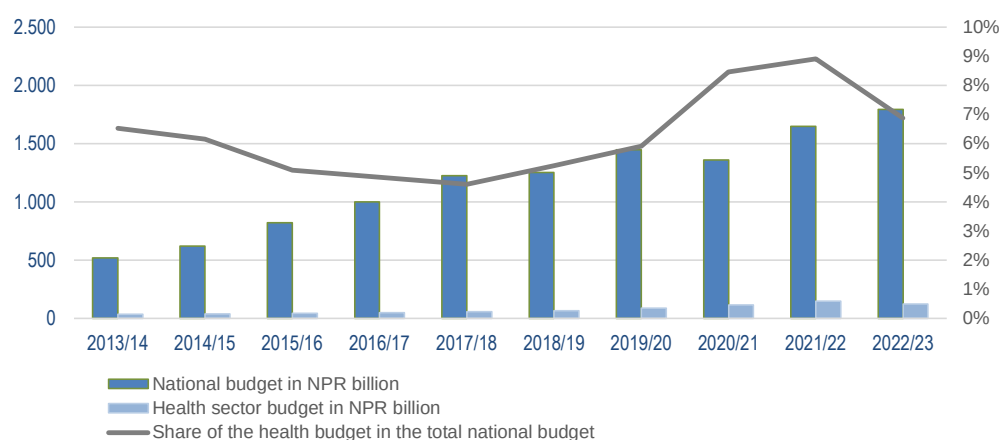
Sustainability

Capacities of persons concerned

The government strives to “improve the health of all people through a responsible and equitable system for the provision of health services”.²⁴ This objective was laid down in the national health sector strategy and supported by nine outcome indicators. Among other things, this includes improving the sustainability of healthcare financing.

Figure 5 shows the evolution of the percentage share of the health budget in the total state budget. This fluctuates over the years, most recently with a significant increase (due to the COVID-19 pandemic), but another reduction of 2 % in 2022/23 compared to 2021/22.

Figure 5: Development of the percentage share of the health budget in the total state budget

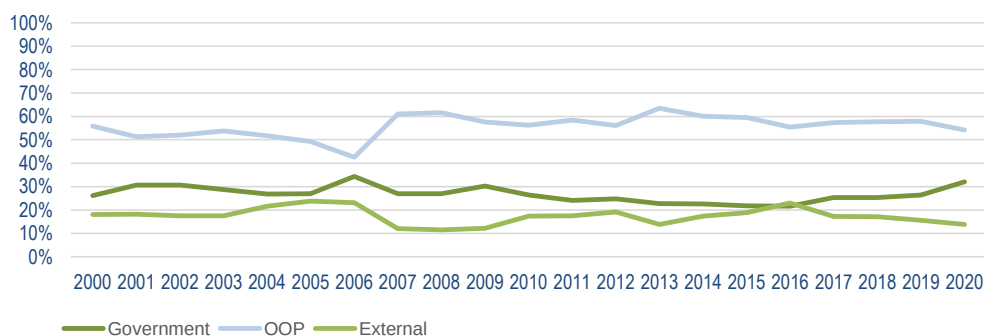


²⁴ MoHP: Nepal Health Sector Strategy 2015–2020, p. ii.

Source: MoHP (2018): Progress of the Health Sector Report for Joint Annual Review 2018, MoHP (2022): Health Sector Budget Analysis: First Five Years of Federalism, UNICEF (2022): Budget Brief: Overview of the budget – FY 2022/23; own presentation.

The financing of healthcare in Nepal as a whole is based on three main sources: government funds, external donor funds and private spending. In 2020, government spending accounted for 32 %, external donors for 14 % and Out-Of-Pocket expenditure (OOP) for health care for 54 % of total health care spending (see Figure 6). A challenge for the sustainable financing of healthcare is therefore the relatively low level of public funding, which results in a high proportion of OOP expenditure for the use of healthcare services. As a result, approximately 11 % of the population of Nepal (in 2016) had a high level of catastrophic health spending.²⁵

Figure 6: Financing healthcare in Nepal



Source: WHO global expenditure database; own presentation.

Although budgeting processes have shifted as a result of the transition from a centralised to a decentralised federal government system, government allocations for healthcare continued to be concentrated at the central level in the 2021–2022 fiscal year – also due to the COVID-19 programmes. Accordingly, 74 % of the health budget remained at central level, 5 % at provincial level and 21 % at local level.²⁶ However, the budget planning for 2023/24 shows that the share at central level is decreasing (59 %), the share at provincial level is at 7 % and the local level receives a larger share of the funds for healthcare (34 %)²⁷. The development is in line with the local level's constitutional mandate to provide basic medical care to the population.

In order to maintain the positive effects over time, it is essential that a part of the budget at the level of healthcare facilities is provided for or spent on repair in relation to the specific measures of the project, i.e. expansion, rehabilitation and equipment of the infrastructure. In principle, it is assumed that about 2–5 %²⁸ of the original procurement costs are to be recognised annually for equipment and about 2 %²⁹ for buildings. In countries with high inflation, the replacement value can also be used. Acquisition expenditure was significantly below these values in each of the institutions visited. Although there is a budget line for “Strengthening Health Care Facilities”, the amounts are insufficient and the purpose is not monitored.

Originally, it was agreed with the MoHP/DHS as a stipulation that – starting with financial year 2004/05 – at least 5 % of the healthcare facilities' budget is intended for repairs – however, this stipulation was unfortunately deleted later on, as this proved to be impractical.

Contribution to support for sustainable capacities

As part of the project, the rehabilitation and expansion of healthcare facilities contributed to strengthening sustainable capacities as follows: Healthcare services such as pregnancy and follow-up examinations, institutional births or emergency care can only be provided (and used) sustainably if the corresponding infrastructure is in place and operational. Improving the quality of care will help healthcare facilities to fulfil their supply mandate and, if necessary, increase revenue, which can have a positive impact on the sustainable existence of the

²⁵ At a threshold of 10% or more of total household income for healthcare expenditure.

²⁶ UNICEF. 2021. Health Budget: FY 2021/22.

²⁷ <https://publichealthupdate.com/health-sector-budget-for-fiscal-year-2023-24-red-book/>

²⁸ <https://www.upkeep.com/learning/budget-for-equipment-maintenance/>

²⁹ <https://www.statefarm.com/simple-insights/residence/how-to-budget-and-save-for-home-maintenance>

capacity. Buildings have a longer service life, so the healthcare facilities are able to achieve (over a certain period of time) positive effects – depending on maintenance and servicing (see next section).

Durability of effects over time

The longevity of impacts over time in relation to the specific measures of the project is closely linked to maintenance, servicing and user care, which is still deficient in the visited healthcare facilities.

All facilities lacked adequate maintenance. It should be noted here that maintenance is not identical to repair, but is primarily intended to have a preventive effect. This implies structural (e.g. budget line for maintenance, availability of trained personnel, tools), process resources (e.g. maintenance plans, maintenance contracts) and paradigm changes (e.g. culture of maintenance), which have so far been inadequate in Nepal. As already mentioned, the budget for maintenance is not sufficient, there is either no or insufficient maintenance personnel, maintenance plans were missing in all healthcare facilities and there seemed to be no mentality for maintenance. According to interview partners, attempts are often made to cover minor repair work with facilities' own budgets, while money is requested from the corresponding municipality for larger repairs.

During the on-site visits, signs of degeneration were visible in the buildings. In some cases, roofs were in need of urgent repairs, power lines were repaired unprofessionally and water damages were not removed. The technical service life has not yet been reached, but in some cases the actual service life is likely to be less than the technical service life because they have not been adequately maintained.

On the other hand, it is positive to note that it has been observed several times that buildings built as part of the FC project have been expanded in order to create more space for the growing number of patients. In fact, buildings in Nepal are often constructed with growth in mind, where the statics have already been prepared for expansion with additional floors.

As discussed under Effectiveness, it is the interplay of many (contextual) factors that makes it possible for the population to make long-term use of health services. In order to improve healthcare for pregnant women, mothers and newborns nationwide, the MoHP decided in 2006, for example, to create the job description for a professional midwife. It is assumed that if midwives are well-educated and work in interdisciplinary teams, they can cover a significant part of obstetric-related health services.

Rating summary:

Problematic with regard to sustainability is the low level of public financing for the healthcare system in general, as well as the lack of maintenance and repair concepts relating to the project in particular. On the other hand, the ongoing political efforts to achieve an adequate mother-child care are very positive. In view of this situation, the sustainability of the project is rated as moderately successful.

Sustainability: 3

Overall rating: 3

Improving mother-child health in Nepal remains of great relevance and is one of the highest priorities of the Nepalese MoHP. In this respect, the project supported the partner's own efforts by implementing the expansion and rehabilitation of three hospitals at the secondary and tertiary level as well as three PHCCs in Bardiya and Dhadhing planned for Phase I. The measures financed by the Start-up Fund in primary institutions were carried out under the leadership of TC. Further infrastructure measures (Phase II), which included the Achham and Doti districts, were not implemented. Overall, there were massive delays in the implementation of the project, which had a negative impact on efficiency. In terms of sustainability, there is a lack of a suitable concept and sufficient funds for preventive and corrective maintenance to ensure the long-term use of buildings. Overall, it can be assumed that the project – within the scope of its possibilities – contributed to improving the health situation of the population living in the project regions, in particular of mothers and children. Against this backdrop, the project is rated as moderately successful.

Contributions to Agenda 2030

The project directly contributes to SDG 3 “Good Health and Well-being”, in particular to reducing child and maternal mortality. Moreover, it is in line with SDG 5 “Gender Equality”, by improving women’s access to reproductive health services and reducing gender inequality.

It has not yet been explicitly aligned with ecological objectives. However, ecological aspects or potential for improvement with regard to improving waste management would certainly exist.

Project specific strengths/weaknesses and general conclusions/lessons learned

Strengths and weaknesses of the project included:

- (Preventive) maintenance is a fundamental problem that requires, above all, cultural change.
- The relatively large number of implementation partners made coordination difficult.
- Both the executing agency and the partner did not have sufficient capacity to complete their tasks on time.
- Cost increases resulted from unpredictable price increases in the construction measures and, in particular, a number of adjustments to the initial design.
- Uncertain and varying framework conditions posed significant challenges for the implementation of the project.
- The impact measurement was made more difficult by the fact that the indicators were not provided with baseline values, neither during the PA nor during the course of the project. Regarding this point we refer to the explanations made in the method section.

General conclusions and lessons learned:

- (Preventive) maintenance for the healthcare facilities is necessary to prevent major damage and ensure sustainable use.
- In the sense of a holistic approach to sustainable development, it is relevant to consider not only structural quality elements (such as infrastructure, personnel and technical equipment), but also process quality aspects (such as maintenance, application of standards, waste management and administration). This is particularly the case when structural quality elements have already reached an acceptable level, but process quality aspects prevent the use of resources from leading to appropriate results.
- Tertiary institutions should focus on referred and complicated cases for specialised services. Overloading at the tertiary level is costly and inefficient for the healthcare system overall. In the event of overloading, e.g. in maternity wards, as women also visit them for normal deliveries, it should be examined how an incentive or insurance system in conjunction with clear referral guidelines can promote normal deliveries at the primary care level. At the same time, it remains to be considered whether women should be given the right to decide for themselves where to give birth to their child, or whether this decision should be left to primary-level service providers. In this case, mapping that shows where women prefer to give birth could help to offer more targeted support – and thus create suitable alternatives for normal births (e.g. through urban birth centres) by improving access to services where demand is high and closing those birth centres that are either not very frequented by women based on the mapping results or where there are not enough births. Low capacity utilisation is not only economically inefficient, but also carries the risk of staff not being sufficiently trained to deliver and deal with common obstetrical and neonatal complications.
- With regard to the infrastructure/equipment, it is important to ensure that the privacy of patients is preserved – this aspect applies in general as well as in particular with regard to cultural contexts, for example if the use of public healthcare facilities is sought to increase institutional births, but there are obvious inequalities between women and men, certain social norms and cultural beliefs remain, so women’s privacy must be ensured.
- Greater reliability of public funding sources is essential to achieve progress towards better healthcare.

Evaluation approach and methodology

Ex post evaluation methodology

The ex-post evaluation follows the methodology of a rapid appraisal, which is a data-supported qualitative contribution analysis and constitutes an expert judgement. Effects are attributed to the project considering plausibilities, based on thorough analysis of documents, facts and impressions. This includes – if possible – the use of advanced technology (e.g. satellite imagery, online interviews, geocoding). There is a follow-up on possible conflicting information, attempting to eliminate inconsistencies and to base the rating on information that – to the extent possible – has been confirmed through different sources (triangulation).

Documents:

Internal project documents, secondary technical literature, strategy papers, analyses of context, country and sector, media coverage.

Data sources and tools for analysis:

(Digital) databases, annual reports, on-site data collection, partner monitoring data.

Interview partners:

Project-executing agency, target group, other donors, consultants, internal project managers.

The analysis of project effects is based on the theory of change defined at project appraisal and documented within the impact matrix, which may be updated for the purposes of the evaluation. The evaluation report argues which factors contributed to the observed effects and why – as well as the probable extent of the project's contribution (contribution analysis). The context of the project is taken into account concerning its influence on the results. The conclusions are put into perspective regarding the availability and accuracy of the available data. An evaluation concept is the frame of reference for the evaluation.

On average, the methods offer a balanced cost-benefit ratio for project evaluations that maintains a balance between the knowledge gained and the evaluation costs, and allows an assessment of the effectiveness of FC projects across all project evaluations. The individual ex post evaluation therefore does not meet the requirements of a scientific assessment in line with a clear causal analysis.

The following aspects caused limitations for the evaluation:

As already stated, a challenge for the evaluation was that the indicators originally formulated for assessing the target achievement at outcome level were not filled with base values at the time of the PA and were only sporadically monitored in the following years.

In addition, it was not possible to obtain budgets or surplus revenue accounts for healthcare facilities, as the relevant data was either not available or not accessible.

Rating methodology

Projects are rated on a six-point scale for each of the OECD DAC criteria. The scale is as follows:

- Level 1** very successful: result that clearly exceeds expectations
- Level 2** successful: fully in line with expectations and without any significant shortcomings
- Level 3** moderately successful: project falls short of expectations but the positive results dominate
- Level 4** moderately unsuccessful: significantly below expectations, with negative results dominating despite discernible positive results
- Level 5** unsuccessful: despite some positive partial results, the negative results clearly dominate
- Level 6** highly unsuccessful: the project has no impact or the situation has actually deteriorated

The overall rating on the six-point-scale is compiled by weighting all six 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 ("impact") and the sustainability are rated at least "moderately successful" (level 3).

About this publication

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Annex: Target system and indicators

Project objective at outcome level		Rating of appropriateness (former and current view)			
During project appraisal: The supported healthcare facilities offer improved quality, need-based healthcare services – especially in the field of reproductive health – and the population uses them more frequently.		Appropriate.			
During EPE (if target modified)					
Indicator	Rating of appropriateness (for example, regarding impact level, accuracy of fit, target level, smart criteria)	PA target level Optional: EPE target level	Status at PA (year)	Status at final inspection (year)	Optional: EPE status (year)
Indicator 1 (PA): The proportion of caesarean sections in the total number of births (relative to each supported healthcare facility) NEW: Indicator 3 b) (see below) Number of caesarean sections in each supported healthcare facility	Somewhat appropriate. The formulation of the indicator as a percentage of the total number of births in the individual, supported healthcare facility is viewed critically. Caesarean section (C-section) rates should always be calculated on the basis of the estimated births per population (e.g. state/province level). In relation to the individual institution, ideally, the rate of C-sections should be determined in the population treated in the hospital (calculation of the annual number of births based on population numbers and the birth rate in the population). However, it is not considered a certainty that all pregnant women will also give birth in this hospital/go directly to a higher referral institution. A high rate can also simply be due to the fact that the institution receives a lot of referrals. In addition, the target level, i.e. an annual increase of 1 %, is viewed critically for the following reason: C-section rates are used as an indicator of access	PA: annual increase of 1 % two years after start of operation	The indicator was not populated with base values at the time of the PA and the data or development was also not sufficiently tracked over the course of the project. With the adoption of the National Health Programme II (2010–2015), indicators were modified in the sense of adopting the national objectives and indicated accordingly starting with the 2014	Modification in the sense of adopting the national objectives: 15 % (2015); NHSP II target: 4.5 %	See graphical representation in the main section

	to emergency obstetric care. As long as C-sections are performed for medical reasons, they can be a primary obstetrical measure to save the mother and her newborn from pregnancy and birth-related complications. However, caesarean delivery is a major surgical procedure and can be associated with complications. It is estimated that 5–15 % of pregnant women experience a complication during pregnancy and childbirth, but not every complication requires a C-section. Against this background, the World Health Organization (WHO) recommends an appropriate national rate of caesarean delivery of 10 to 15 per 100 live births. This threshold is intended to allow access for women who require a C-section. A national rate of less than 5 % suggests a problem with access to C-sections. However, if the C-section rate in the population tends to exceed 15 %, this may be due to a broader indication. As part of the evaluation, the indicator is formulated as “number of caesarean sections in the individual supported healthcare facilities”. The indicator is intended to act as a proxy for access to emergency obstetric care. A fundamental weakness of the indicator is that it does not indicate pre-existing maternal high-risk factors. There is therefore the possibility that physicians generously indicate C-section, even if there is no medical necessity, diluting the indicator in relation to obstetric emergency care.		report. The same applies to Indicators 2 and 3.		
Indicator 2 (PA): The number of obstetric complications that are treated (in each case in relation to the individual supported healthcare facilities)	Appropriate. Basically appropriate as an additional indicator for measuring obstetrical emergency care — however, it should have been specified which obstetrical complications this entails.	PA: annual increase of 5 % two years after start of operations	The indicator was not populated with base values at the time of the PA.	Modification in the sense of adopting the national objectives: 99.7 % (2015); Target value of NHSP II: 49 %	See descriptions in the main section

NEW renamed as Indicator 4					
Indicator 3 (PA): The user rate in the outpatient and inpatient departments (relative to each supported healthcare facility) NEW: Indicator 1: Number of outpatients and inpatients	Limited appropriate. User rates seem reasonable in relation to the population of the catchment area, i.e. the proportion of the population who used outpatient or inpatient services of the healthcare facilities (see comment above). As part of the evaluation, the indicator is reformulated in a simplified manner as follows: "Number of outpatients and inpatients". This is generally suitable for measuring the utilisation of the created capacity.	PA: annual increase of 5 % two years after start of operations	The indicator was not populated with base values at the time of the PA.	Modification in the sense of adopting the national objectives: -outpatient: 73 % -inpatient: 2.4 %; No target values have been defined for this in NHSP II	See graphical representation in the main section
NEW: -Indicator 3 a): Number of inpatient births -Indicator 3 b): Number of caesarean sections (in each case in relation to the individual healthcare facilities supported)					See graphical representation in the main section
NEW: -Indicator 2: Occupancy rates for beds (in relation to each of the three hospitals)					See graphical representation in the main section
At country level, the development of the following indicators is also considered: -Number of women who took advantage of the first and fourth prenatal examination (per protocol) (ANC) -Number of women who attended three pregnancy follow-up visits (PNC) Note: There is no need to formulate separate indicators for the individual healthcare institutions, as the data are incomplete.					

Project objective at impact level		Rating of appropriateness (former and current view)			
During project appraisal: Contribution to improving the health situation in the project area.		Appropriate. Note: At the time of the PA, no indicators were formulated to measure target achievement. These are defined in retrospect as part of the EPE and are based on the common DC programme objective.			
During EPE (if target modified):					
Indicator	Rating of appropriateness (for example, regarding impact level, accuracy of fit, target level, smart criteria)	PA/EPE target level (new)	Status at PA (2002)	Status at final inspection (year)	EPE status (2023)
NEW: Indicator 1: Maternal mortality rate per 100,000 live births (SDG 3.1.1)			520		151
NEW: Indicator 2: Neonatal mortality rate (0 to 27 days) per 1,000 live births (SDG 3.2.2)			36		21

Annex: Risk analysis

Risks that have occurred (ex-ante, identified during the course of the project and ex-post):

Risk	Relevant OECD-DAC criterion
Lack of collection and monitoring of relevant and meaningful indicators.	Relevance, Effectiveness
The complex framework conditions (including the unstable political situation as a result of the Maoist conflict) were partially underestimated as a risk. As a result, insufficient account was taken of the financial funds and the timeframe.	Effectiveness, Efficiency
Insufficient capacities on both the executing agency's and partners' side.	Effectiveness, Efficiency
Strain on the healthcare facilities responsible for higher level of care	Effectiveness, Efficiency
Partially insufficient staffing with regard to the positions ("sanctioned posts").	Effectiveness
Insufficient establishment of hygiene standards.	Effectiveness
Setbacks as part of the COVID-19 pandemic.	Effectiveness, Impact
Missing (preventive) maintenance and servicing concepts	Sustainability
Low level of public financing for the healthcare system.	Sustainability

Annex: Project measures and their results

Also see chapter on effectiveness.

According to the PA, the following measures were planned:

Infrastructure measures (building) Phase I:

- Expansion of Bheri Hospital to include a birthing ward and rehabilitation of hospital care services
- Rehabilitation of Bardiya and Dhading district hospitals
- Rehabilitation of three PHCCs: two in Bardiya, one in Dhading
- Rehabilitation of up to 15 HPs in Achham, Bardiya and Doti (partly in Phase II)

Infrastructure measures (building) Phase II:

- Rehabilitation of Achham and Doti district hospitals
- Rehabilitation of two PHCCs: one in Achham and one in Doti
- Rehabilitation of HPs (remaining locations after completion of Phase I)

Replacement and supplementation of medical equipment and – where appropriate – repair of defective medical equipment (distributed over both phases).

Consulting services to support the implementation of the measures financed from FC funds.

According to the PCR, the measures planned for Phase I were essentially implemented in full, but with a changed volume and significant delay, while in Phase II the implementation of major investment measures, which included the Achham and Doti districts, was abandoned. There were further delays in the procurement of equipment, which took place in significantly lower volumes.

The initially planned implementation period was postponed overall from 2002 to 2004 towards 2006 to 2009/10 (completion of most of the measures) or 2012/13.

Annex: Recommendations for operation

The PCR made the recommendation that the MOHP and the local administrative bodies provide sufficient funds for preventive and corrective maintenance to ensure the sustainable use of buildings and medical equipment. As already explained in the PCR, the concept for preventive and corrective maintenance of (larger) medical equipment was piloted, tested and implemented by the private sector within the scope of the FC project “Health and Family Planning Sectoral Programme” (BMZ No.: 2006 66 305). In addition, a central control unit was established at the MoHP, the Physical Assets Management (PAM) Unit, in 2010, whose task is to design the building of new infrastructure and maintenance based on the identified needs and priorities.

Despite the positive developments, there was still a lack of (preventive) maintenance and repair concepts in all healthcare facilities at the time of the evaluation, as described in the sustainability chapter, and the budget was not sufficient.

Annex: Evaluation questions in line with OECD-DAC criteria/ex-post evaluation matrix

Relevance

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / 0 / +)	Reason for weighting
Evaluation dimension: Alignment with policies and priorities			2	0	
Are the objectives of the programme aligned with the (global, regional and country-specific) policies and priorities, in particular those of the (development policy) partners involved and affected and the BMZ?	Does the project comply with Nepal's development policy objectives as defined in the Second Long Term Health Plan (1997–2017) and the National Safe Motherhood Plan (2002–2017)? Does the project comply with the health sector concept of the German Federal Government?	-Federal Ministry for Economic Cooperation and Development (BMZ) Health sector concept -Nepal's Health Sector Strategies -Nepal's Long Term Health Plans -Nepal's National Safe Motherhood Plan -“Aama Surakshya Karyakram” programme			
Do the objectives of the programme take into account the relevant political and institutional framework conditions (e.g. legislation, administrative capacity, actual power structures (including those related to ethnicity, gender, etc.))?	No specification necessary.	See above.			
Evaluation dimension: Alignment with needs and capacities of persons concerned			2	0	
Are the programme objectives focused on the developmental needs and capacities of the target group? Was the core problem identified correctly?	Was it correct to assume that the state health system was unable to provide adequate medical care, especially to mothers, especially in the rural population?	Sector studies, GITEC Inception Report, PA, Joint Annual Review NHSS			

Were the needs and capacities of particularly disadvantaged or vulnerable parts of the target group taken into account (possible differentiation according to age, income, gender, ethnicity, etc.)? How was the target group selected?	Were the constraints of the rural population, in particular women and poor population groups, taken into account with regard to medical care? Target group in remote areas that are difficult to reach?	Sector studies, PA			
Would the programme (from an ex-post perspective) have had other significant gender impact potentials if the concept had been designed differently? (FC-E-specific question)	No specification necessary.	See above.			
Evaluation dimension: Suitability of project concept			3	0	
Was the design of the programme appropriate and realistic (technically, organisationally and financially) and in principle suitable for contributing to solving the core problem?	-Was it possible to address the poor condition of buildings and inadequate equipment with medical devices by expanding, rehabilitating and equipping facilities at different levels of care to achieve an improved, demand-oriented supply at output level? -Were the capacities of the implementing organisation taken into account before the start of the project? -Alongside functional infrastructure and equipment, is there sufficient qualified personnel and availability of medicines to manage the facilities effectively and efficiently, and is equal access guaranteed for all parts of the population?	PA, reporting			
Is the programme design sufficiently precise and plausible (transparency and verifiability of the	In view of the limited reporting situation in Nepal at the time of the appraisal: Were sufficiently precise initial data available?	PA, reporting			

target system and the underlying impact assumptions)?		
Please describe the theory of change, incl. complementary measures, if necessary in the form of a graphical representation. Is this plausible? As well as specifying the original and, if necessary, adjusted target system, taking into account the impact levels (outcome and impact). The (adjusted) target system can also be displayed graphically. (FC-E-specific question)	In order to improve the health situation in the project area (impact objective), the supported healthcare facilities are expected to offer improved quality, needs-oriented health services – in particular in the area of reproductive health – and the population should use them more frequently (outcome objective).	PA, reporting
To what extent is the design of the programme based on a holistic approach to sustainable development (interplay of the social, environmental and economic dimensions of sustainability)?	The intended improvement of the quality of public health services in the project regions should enable health institutions to increase their revenues and thus the cost recovery ratio and thus offer services sustainably while simultaneously increasing the range of treatment and quality. This should be reflected in the user rates, thereby improving the health of the population in a lasting (i.e. lifelong) manner. Improved quality of treatment in public health facilities also enables basic care and treatment options for the poor, reduces social inequalities and improves living conditions.	PA, reporting
For projects within the scope of DC programmes: is the programme, based on its design, suitable for achieving the objectives of the DC programme? To what extent is the impact level of the FC module meaningfully linked to the DC	To what extent does the outcome-level objective “The supported healthcare institutions offer needs-oriented health services with improved quality – in particular in the field of reproductive health – and the population uses them more frequently”	PA, reporting

programme (e.g. outcome impact or output outcome)? (FC-E-specific question)	contribute to the DC programme objective “Support from the health sector improves the health status of the population, especially disadvantaged groups”?				
Evaluation dimension: Reaction to changes/adaptability			2	0	
Has the programme been adapted in the course of its implementation due to changed framework conditions (risks and potential)?	e.g. how did the FC measure react to the unstable political situation as a result of the Maoist conflict during its implementation?	Reporting, PCR			

Coherence

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / 0 / +)	Reason for weighting
Evaluation dimension: Internal coherence (division of tasks and synergies within German development cooperation):			2	0	
To what extent is the programme designed in a complementary and collaborative manner within the German development cooperation (e.g. integration into DC programme, country/sector strategy)?	How does the project fit into the DC programme?	Report on the DC programme			
Do the instruments of the German development cooperation dovetail in a conceptually meaningful way, and are synergies put to use?	How well do TC and FC components interact? Especially in the context of this cooperation project? (among other things, improvement of the poor framework conditions by the TC component)	Reporting, PCR, GIZ report			

	before the start of the FC project (among other things lack of qualified staff and inadequate management in healthcare facilities)).				
Is the programme consistent with international norms and standards to which German DC is committed (e.g. human rights, Paris Agreement, etc.)?	No specification necessary.	Reporting, PCR			
Evaluation dimension: External coherence (complementarity and co-ordination with actors external to German DC):			2	0	
To what extent does the programme complement and support the partner's own efforts (subsidiarity principle)?	To what extent does the measure complement and support the Nepal Health Sector Programme Implementation Plan 2004–2009 and subsequent implementation plans?	Reporting, Nepal Health Sector Programme Implementation Plan			
Is the design of the programme and its implementation coordinated with the activities of other donors?	In addition to German DC, DFID, JICA, SDC, UNFPA, UNICEF and WHO carried out district health programmes – to what extent is the concept of the measure aligned with these activities?	Reporting, discussion with other donors			
Was the programme designed to use the existing systems and structures (of partners/other donors/international organisations) for the implementation of its activities and to what extent are these used?	In relation to -the involvement of the Town Development Fund for the award of contracts and implementation of construction measures -the start-up fund for financing small-scale construction measures	Reporting, PCR			

Are common systems (of partners/other donors/international organisations) used for monitoring/evaluation, learning and accountability?	At the beginning of 2004, a Letter of Intent for cooperation in the sector from 11 donors, including German DC, was signed with the Nepalese partner side and a health sector strategy was formulated (Health Sector Strategy: An agenda for reform), which forms the basis for joint planning and design. To what extent were joint annual programme reviews (JARs) as part of the SWAp also helpful before the project to be evaluated?	Reporting, on-site discussions
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Effectiveness

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Achievement of (intended) goals			3	0	
Were the (if necessary, adjusted) objectives of the programme (incl. capacity development measures) achieved? Table of indicators: Comparison of actual/target	--				
Evaluation dimension: Contribution to goal achievement:			3	0	
To what extent were the outputs of the programme delivered as planned (or adapted to new	As part of the project, public health facilities of various levels of care were to be rehabilitated, expanded and equipped in the districts of	Reporting, PCR, GITEC reports, TDF progress reports			

developments)? (<i>Learning/help question</i>)	Accham, Bardiya, Dhading and Doti. To what extent were the planned outputs achieved?	
Are the outputs provided and the capacities created used?	- What is the user rate in the outpatient and inpatient departments of the corresponding healthcare facilities? -What is the number of obstetric complications to be treated that occur in the supported hospitals? -Number of inpatient births? -What is the share of caesarean sections in the total number of births? Proportion of normal births? -What is the bed occupancy rate overall and in the maternity ward? -What is the number of women who have attended four pregnancy check-ups (ANC)? -What is the number of women who have attended three pregnancy follow-up examinations (PNC)?	MoHP: DHIS-2, DoHS: Annual reports, on-site visit/interviews
To what extent is equal access to the outputs provided and the capacities created guaranteed (e.g. non-discriminatory, physically accessible, financially affordable, qualitatively, socially and culturally acceptable)?	-How has access to health services (particularly in the area of reproductive health) developed for the population? Who are the main users of the services of the healthcare institutions (socio-economic/catchment area)? To what extent is equal access guaranteed (physical accessibility; non-discriminatory; affordable).	On-site visit/interviews
To what extent did the programme contribute to achieving the objectives?	Was the project able to improve access to health services (especially in the field of reproductive health)	Reporting, PCR, on-site visit to facilities/interviews

	for the population through the rehabilitation, expansion and equipment of the health departments?	
To what extent did the programme contribute to achieving the objectives at the level of the intended beneficiaries?	To what extent did the population living in the project region benefit from the measures?	Reporting, PCR, on-site visit to facilities/interviews
Did the programme contribute to the achievement of objectives at the level of the particularly disadvantaged or vulnerable groups involved and affected (potential differentiation according to age, income, gender, ethnicity, etc.)?	In particular, to what extent does the measure support the proportion of poor populations in remote rural regions? How has reproductive health improved, especially for women underserved by the health system?	Reporting, PCR, on-site visit to facilities/interviews
Were there measures that specifically addressed gender impact potential (e.g. through the involvement of women in project committees, water committees, use of social workers for women, etc.)? (FC-E-specific question)	No specification necessary.	Reporting, PCR, on-site visit to facilities/interviews
Which project-internal factors (technical, organisational or financial) were decisive for the achievement or non-achievement of the intended objectives of the programme? <i>(Learning/help question)</i>	-How did the cooperation between TC and FC work?	Reporting, PCR, on-site visit to facilities/interviews
Which external factors were decisive for the achievement or non-achievement of the intended objectives of the programme (also taking into account the risks anticipated beforehand)? <i>(Learning/help question)</i>	-To what extent did the precarious security situation in Accham and Doti influence the achievement of the intended objectives of the measure?	Reporting, PCR, on-site visit to facilities/interviews

Evaluation dimension: Quality of implementation			3	0	
How is the quality of the management and implementation of the programme (e.g. executing agency, consultant, taking into account ethnicity and gender in decision-making committees) evaluated with regard to the achievement of objectives?	-Were the capacities of the executing agency and the partners sufficient to provide the outputs in a timely and comprehensive manner? -How did the cooperation between TDF and GITEC work? -Was the provision of the individual outputs coordinated with each other?	Reporting, PCR, on-site discussions			
How is the quality of the management, implementation and participation in the programme by the partners/sponsors evaluated?	No specification necessary.	Reporting, PCR, on-site discussions			
Were gender results and relevant risks in/through the project (gender-based violence, e.g. in the context of infrastructure or empowerment projects) regularly monitored or otherwise taken into account during implementation? Have corresponding measures (e.g. as part of a CM) been implemented in a timely manner? (FC-E-specific question)	With regard to access to healthcare facilities for women in the context of obstetrics, pre- and post-partum care	Reporting, PCR, on-site discussions			
Evaluation dimension: Unintended effects (positive or negative)			3	0	
Can unintended positive/negative direct impacts (social, economic, ecological and, where applicable, those affecting vulnerable groups) be seen (or are they foreseeable)?	No specification necessary.	Reporting, PCR, on-site discussions			

What potential/risks arise from the positive/negative unintended effects and how should they be evaluated?	No specification necessary.	Reporting, PCR, on-site discussions
How did the programme respond to the potential/risks of the positive/negative unintended effects?	No specification necessary.	Reporting, PCR, on-site discussions

Efficiency

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / 0 / +)	Reason for weighting
Evaluation dimension: Production efficiency			4	0	
How are the inputs (financial and material resources) of the programme distributed (e.g. by instruments, sectors, sub-measures, also taking into account the cost contributions of the partners/executing agency/other participants and affected parties, etc.)? (Learning and help question)	What proportion of the financial resources were used for the rehabilitation, expansion and equipment of the healthcare facilities as well as minor structural measures within the scope of the Start-up Fund?	Reporting, PCR			
To what extent were the inputs of the programme used sparingly in relation to the outputs produced (products, capital goods and services) (if possible in a comparison with data from other evaluations of a region, sector, etc.)? For example, comparison of specific costs.	Was it possible to cost-effectively carry out the rehabilitation, expansion and equipment of the healthcare facilities?	Reporting, GITEC reports, TDF progress reports, PCR			
If necessary, as a complementary perspective: To what extent could the outputs of the programme have	Question not applicable, as it is not clear to what extent the alternative use of inputs should have led to the				

been increased by an alternative use of inputs (if possible in a comparison with data from other evaluations of a region, sector, etc.)?	realisation of the outputs. At the time of the PA, there was no basket funding to support the SWAp into which the inputs could have been contributed as an alternative.				
Were the outputs produced on time and within the planned period?	Are there any delays in terms of rehabilitation, expansion and equipment of healthcare facilities?	Reporting, GITEC reports, TDF progress reports, PCR			
Were the coordination and management costs reasonable? (e.g. cost share of the implementation consultant)? (FC-E-specific question)	No specification necessary.	PCR			
Evaluation dimension: Allocation efficiency			3	0	
In what other ways and at what costs could the effects achieved (outcome/impact) have been attained? (<i>Learning/help question</i>)	No specification necessary.	On-site visit, interviews			
To what extent could the effects achieved have been attained in a more cost-effective manner, compared with an alternatively designed programme?	No specification necessary.	On-site visit, interviews			
If necessary, as a complementary perspective: To what extent could the positive effects have been increased with the resources available, compared to an alternatively designed programme?	No specification necessary.	On-site visit, interviews			

Impact

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Overarching (intended) developmental changes			2	0	
Are there any overarching developmental changes to which the measure was expected to contribute? (or if foreseeable, then specify in terms of time if possible)	Has there been an improvement in the health situation in the project area?	MoHP Annual Report, Nepal Demographic and Health Survey, National Joint Annual Review Report, sector studies			
Is it possible to identify overarching developmental changes (social, economic, environmental and their interactions) at the level of the intended beneficiaries? (or if foreseeable, then specify in terms of time if possible)	How has the health situation of the population living in the project area improved?	MoHP Annual Report, Nepal Demographic and Health Survey, National Joint Annual Review Report, sector studies			
To what extent can overarching developmental changes be identified at the level of particularly disadvantaged or vulnerable parts of the target group to which the programme should contribute? (Or, if foreseeable, please be as specific as possible in terms of time)	How has the health situation improved, especially for poor parts of the population, people in remote areas and women?	MoHP Annual Report, Nepal Demographic and Health Survey, National Joint Annual Review Report, sector studies			
Evaluation dimension: Contribution to overarching (intended) developmental changes			2	0	
To what extent did the programme actually contribute to the identified or foreseeable overarching developmental changes (also taking into	What contribution has the project made to improving the health situation of the population living in the project area?	Reporting, PCR, on-site discussions			

account the political stability) to which the programme should contribute?		
To what extent did the programme achieve its intended (possibly adjusted) developmental objectives? In other words, are the project impacts sufficiently tangible not only at outcome level, but at impact level? (e.g. drinking water supply/health effects)	How has improved access to health services increased the population's use and thereby contributed to reducing mother, child and infant mortality rates?	MoHP Annual Report, Nepal Demographic and Health Survey, National Joint Annual Review Report
Did the programme contribute to achieving its (possibly adjusted) developmental objectives at the level of the intended beneficiaries?	What contribution has the project made to improving the health situation of the population living in the project area?	Reporting, PCR, on-site discussions, MoHP Annual Report, Nepal Demographic and Health Survey, National Joint Annual Review Report
Has the programme contributed to overarching developmental changes or changes in life situations at the level of particularly disadvantaged or vulnerable parts of the target group (potential differentiation according to age, income, gender, ethnicity, etc.) to which the programme was intended to contribute?	To what extent has there been a reduction in maternal, child and infant mortality rates, especially among poor parts of the population, among people in remote areas?	Reporting, PCR, on-site discussions, MoHP Annual Report, Nepal Demographic and Health Survey, National Joint Annual Review Report
Which project-internal factors (technical, organisational or financial) were decisive for the achievement or non-achievement of the intended developmental objectives of the programme? (<i>Learning/help question</i>)	No specification necessary.	On-site discussions

Which external factors were decisive for the achievement or non-achievement of the intended developmental objectives of the programme? (<i>Learning/help question</i>)	- To what extent did the precarious security situation in Accham and Doti influence the achievement of the intended objectives of the measure? -What impact did the severe earthquake in 2015 / the COVID-19 pandemic have on the healthcare sector?	PCR, reporting, secondary literature, on-site discussions			
Does the project have a broad-based impact? - To what extent has the programme led to structural or institutional changes (e.g. in organisations, systems and regulations)? (Structure formation) - Was the programme exemplary and/or broadly effective and is it reproducible? (Model character)	Question not applicable.	The project supported selected healthcare institutions and did not take a large-scale approach.			
How would the development have gone without the programme? (development additionality)	The health situation in the project region would have improved even without the rehabilitation, expansion and equipment of the selected healthcare facilities.	Triangulation of the collected facts, dates and information.			
Evaluation dimension: Contribution to overarching (unintended) developmental changes			/		
To what extent can unintended overarching developmental changes (also taking into account political stability) be identified (or, if foreseeable, please be as specific as possible in terms of time)?	/	/			

Did the programme noticeably or foreseeably contribute to unintended overarching (positive and/or negative) developmental impacts?	/	/
Did the programme noticeably (or foreseeably) contribute to unintended (positive or negative) overarching developmental changes at the level of particularly disadvantaged or vulnerable groups (within or outside the target group) (do no harm, e.g. no strengthening of inequality (gender/ethnicity))?	/	/

Sustainability

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Capacities of persons concerned			3	0	
Are the target group, executing agencies and partners institutionally, personally and financially able and willing (ownership) to maintain the positive effects of the programme over time (after the end of the promotion)?	-Are executing agencies and partners able to achieve impacts over time without sufficient donor engagement? - Does the healthcare sector have a sustainable financing strategy? - What is the importance of adequate mother-child care within the priorities of the Nepalese MoHP?	Secondary literature (MoHP, UNICEF), digital databases (WHO)			
To what extent do the target group, executing agencies and partners demonstrate resilience to future risks that could jeopardise the impact of the programme?	-To what extent can the effects of the measures be affected by the ongoing decentralisation and, in some cases, still unclear role distribution and responsibilities?	Secondary literature, on-site discussions			

	-To what extent are there risks for the target group with regard to poverty due to OOP payments for health expenses?				
Evaluation dimension: Contribution to support for sustainable capacities:			3	0	
Did the programme contribute to the target group, executing agencies and partners being institutionally, personally and financially able and willing (ownership) to maintain the positive effects of the programme over time and, where necessary, to curb negative effects?	The intended improvement in the quality of public health services has led to healthcare facilities increasing their revenues and thus their cost recovery ratio?	On-site discussions			
Did the programme contribute to strengthening the resilience of the target group, executing agencies and partners to risks that could jeopardise the effects of the programme?	See above.				
Did the programme contribute to strengthening the resilience of particularly disadvantaged groups to risks that could jeopardise the effects of the programme?	Are there still sociocultural and/or economic barriers to use of the offerings?	On-site discussion, further studies			
Evaluation dimension: Durability of effects over time			3	0	
How stable is the context of the programme (e.g. social justice, economic performance, political stability, environmental balance)? (Learning/help question)	No specification necessary.	Secondary literature, on-site discussions			

To what extent is the durability of the positive effects of the programme influenced by the context? <i>(Learning/help question)</i>	No specification necessary.	Secondary literature, on-site discussions
To what extent are the positive and, where applicable, the negative effects of the programme likely to be long-lasting?	-Is there any immediate foreseeable deterioration in the context? -To what extent are the created capacities sustainable? Does an appropriate maintenance and servicing concept exist? Is there sufficient budget available for this? - What other factors are important for lasting effects (also see Effectiveness)?	The quintessence of the previous statements in the section