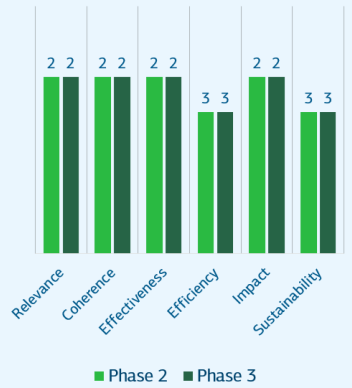
Ex-post evaluation
Social Health Protection Programme, Cambodia

Title	Social health protection programme (vouchers for reproductive health and health services for vulnerable groups), phases II & III
Sector and CRS Key	13020 Promotion of reproductive health (80%); 16010 Social welfare/social services (10%); 12191 Medical services (10%)
BMZ number	2009 66 127, 2011 65 547
Client	Federal Ministry for Economic Cooperation and Development (BMZ)
Recipient and executing agency	Cambodia, represented by the Ministry of Economy and Finance / Ministry of Health
FC financing volume and instrument	EUR 13 million (grant budget funds)
Project duration	2013-2020 **Reporting year** 2025 **Year of random sample** 2024

Overall rating

successful



1: very successful – **6:** highly unsuccessful

Project objectives and implementation

The objective of the project was: disadvantaged groups (poor and vulnerable women, people with disabilities, older people with chronic diseases) in up to six provinces use equal access of high-quality health services (outcome). This was intended to improve the health of poor and vulnerable populations and reduce their financial burden (impact). Through the introduction of a voucher system the demand side was strengthened and through a performance-based financing mechanism, an incentive system was created to provide patient-oriented, high-quality and efficient services for the target group.

Key results

The FC project achieved its outcome and impact objectives and addressed urgent needs of the target group. The project is assessed as "successful" for the following reasons:

- The project was particularly focused on the priorities of the partner country and the needs of the target group (Relevance).
- The project contributed both to an improved quality and an increased use of health services. The voucher promoters, who enhanced knowledge and awareness of the importance of preventive medical check-ups and encouraged the target group to make use of the vouchers was a key success factor (Effectiveness).
- The project management by the voucher agency was very agile. This allowed the project to successfully align itself with the national expansion of the Health Equity Fund (HEF) and other donor activities, ensuring complementarity and thereby enhancing its impact (Efficiency).
- After the end of the project implementation, the established activities were integrated into the HEF. Most of the good practices established in the FC project thus are continued. And thanks to the integration in HEF and additional donor support the target group still has free or low-cost access to the voucher service package today (Impact, Sustainability).

Conclusions

- Particularly good use of health services can be achieved through a combination of quality improvement, cost coverage for beneficiaries and effective voucher promotion.
- Voucher programmes can be successful bridging mechanisms until national social protection systems are functional and can accompany their introduction.
- It is important to consider the availability of and access to relevant medicine when selecting the services paid for by vouchers. In the case of chronic diseases, services often rely heavily on the availability of medicine.

Contents

Abbreviations

ADB	Asian Development Bank
ANC	Antenatal Care
PCR	Project completion report/Final inspection
GDP	Gross domestic product
BMZ	Federal Ministry for Economic Cooperation and Development
CDHS	Cambodia Demographic and Health Survey
DAC	Development Assistance Committee
EPE	Ex-post evaluation
EUR	Euro
FC	Financial cooperation
FC E	FC Evaluation
HDI	Human Development Index
HIS	Health Information System
MDG	Millennium Development Goals
MoH	Ministry of Health
NCD	Non-communicable diseases
NMCHC	National Maternal and Child Health Centre
NGO	Non-governmental organisations
OOPE	Out-of-pocket expenditures
PA	Project appraisal
PAR	Project appraisal report
PV	Project proposal
TC	Technical cooperation
USD	US dollar
VMA	Voucher Management Agency
WHO	World Health Organisation

Overview

General conditions and classification of the project

The FC project evaluated here (Phases II & III) was implemented in Cambodia from 2013 to 2020. As Phases II and III covered identical activities in the same regions, both phases were evaluated together. The two phases, which are therefore considered as one FC project in the ex-post evaluation (EPE), build on a previous phase. In phase I, a voucher system for selected health services for poor and vulnerable groups was introduced. During the implementation of Phase I, several approaches from different donors, similar to the FC voucher approach were implemented in parallel without any particular coordination. During the implementation of Phase I, the partner government increasingly focused on donor harmonisation and ultimately selected a World Bank programme – the *Health Equity Fund* (HEF) – for national roll-out as a uniform system.

The HEF is a system to provide health insurance for poor and vulnerable people. Identified beneficiaries receive an insurance card, which when presented during consultations at health facilities entitles them to selected health services free of charge. Health facilities are reimbursed by the HEF for the services rendered. The funds for this insurance mechanism are provided by the Cambodian government and from donor contributions a.o. from the Worldbank and from the multi-donor trust fund, H-EQUIP II. Unlike most other parallel voucher approaches, the Worldbank, under the HEF invests in capacity building for Cambodian partners and has established a HEF management structure within the Ministry of Health (MoH).

National implementation of the HEF only began during the implementation of Phase I, and the parallel approaches were subsequently gradually replaced by or integrated into HEF. The phases of the FC voucher project evaluated here are a continuation, expansion and further development of Phase I, aiming at supporting the expansion of the HEF and integration into HEF by the end of the project implementation. As the health centres and target groups supported under the FC programme were only gradually incorporated into the HEF, the FC programme provided additional support for the gradual expansion of the HEF.

The previous phase was evaluated in 2017 and was overall assessed as “moderately unsuccessful”. Even though, the project’s relevance and efficiency were rated “moderately successful” and effectiveness and overarching developmental impact “successful”, at the time of the evaluation, there were high risks and uncertainty concerning the sustainability in view of the national roll-out of the HEF. As a knockout criterion, the negative rating of sustainability let to the overall assessment as unsuccessful.

Summary

The objective of the project was: disadvantaged groups (poor and vulnerable women, people with disabilities, older people with chronic diseases) in up to six (of a total of 24) provinces use equal access of high-quality health services (outcome). This included a) to promote and improve access to specific reproductive health services for poor and vulnerable women, b) to promote and improve access to health services for vulnerable groups such as older people and people with disabilities, and c) to improve the quality of care provided by public and private health service providers through increased demand-side subsidies. This was intended to improve the health of poor and vulnerable populations and reduce their financial burden (impact). Through the introduction of a voucher system the demand side was strengthened and through a performance-based financing mechanism, an incentive system was created to provide patient-oriented, high-quality and efficient services for the target group. Activities included the distribution of vouchers to vulnerable groups in the project provinces, granting them free access to certain health services, including long-term family planning methods, professionally assisted childbirth and safe abortion (as in Phase I). In phases II and III, the services were expanded to include cervical cancer screening and treatment as well as cataract testing and surgery. Voucher users were reimbursed for transport costs incurred in accessing health services and received financial support for other costs, such as meals during hospitalisation. Healthcare facilities were reimbursed after providing the services and were able to use the income for wage supplements and quality improvement measures in the healthcare facilities.

Breakdown of total costs

	2009 66127 Phase 2 (plan)	2009 66 127 Phase 2 (actual)	2011 65 547 Phase 3 (plan)	2011 65 547 Phase 3 (actual)
Investment costs (total) in million EUR	7.2	6.8	7	6.5
Own contribution in EUR million	1.2[1]	1.2	n/a	n/a
External financing in EUR million	n/a	n/a	n/a	n/a
of which BMZ funds in million EUR	6	5.6	7	6.5*

Table 1: Breakdown of costs
** Remaining funds were implemented within the framework of HEQUIP*

Map of the project region

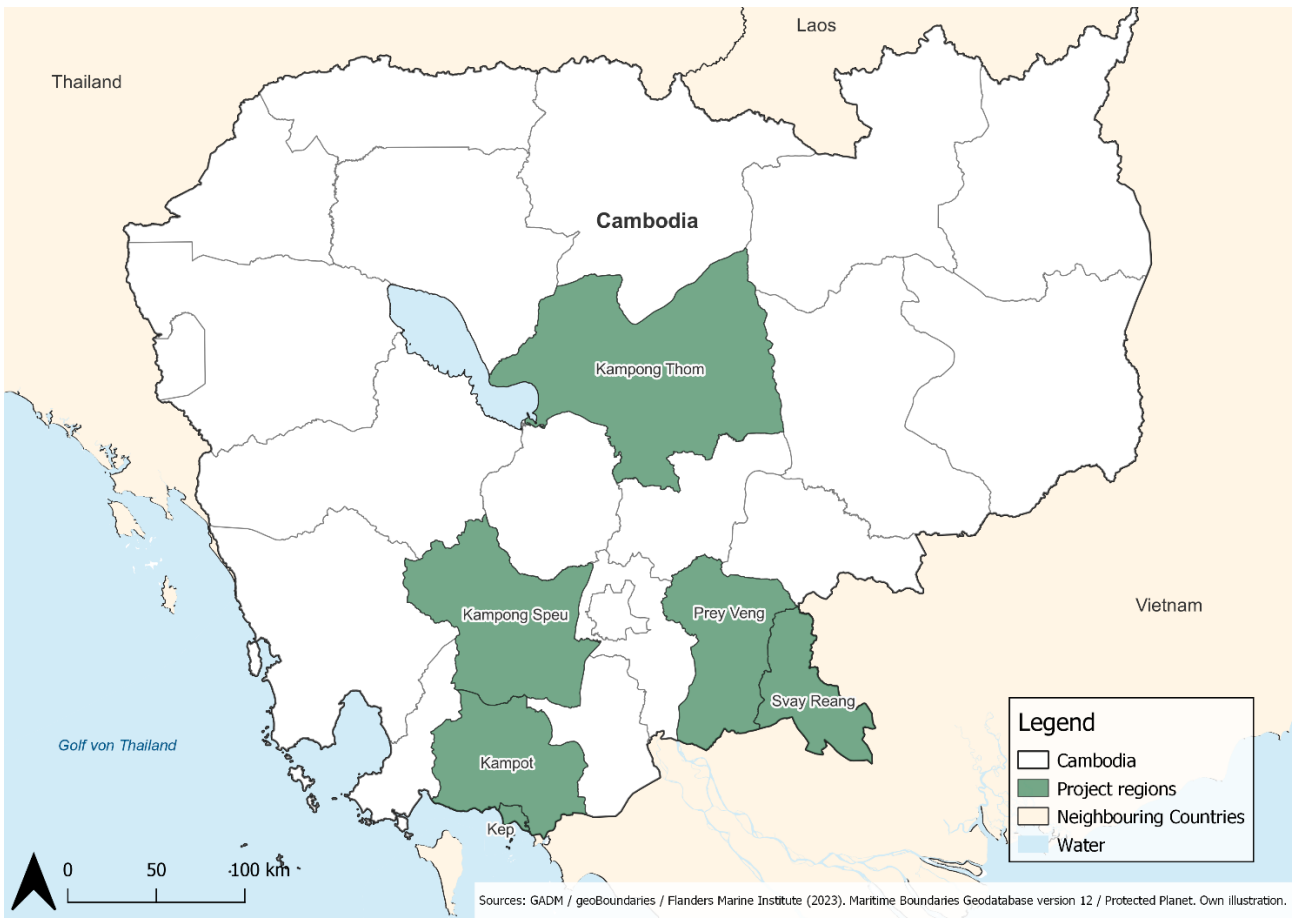


***Figure1** : Map of the project areas*
***Source**: GADM / geoBoundaries / Flanders Marine Institute (2023). Maritime Boundaries Geodatabase version 12 / Protected Planet. Own illustration.*

[1] The contribution was distributed across measures in both phases.

Strengths and weaknesses of the project

The strengths include in particular:

- The project successfully addressed the needs of vulnerable groups in particular, taking into account local contextual conditions and the political priorities of partners and donors in an appropriate manner.
- The project is characterised by highly effective *voucher promoters*, who successfully strengthened the demand side, and by efficient management by the voucher management agency (VMA), which successfully created incentives for the supply side to improve quality.
- Project management was highly adaptable thanks to the high level of ownership on the part of the project executing agency and the particularly agile VMA, which constantly took changing conditions into account.

The weaknesses include in particular:

- The successful voucher promoter concept was not continued as part of the HEF integration, and the high level of usage achieved could not be fully maintained under the HEF, particularly at the health centre level.

Cross-project lessons learned

- Voucher schemes that improve the quality of health services, promote them effectively and cover costs for beneficiaries can successfully remove access barriers to health services, especially barriers related to cost and lack of knowledge.
- Sustainability of the achieved effects is facilitated when the target groups and subsidised health services are closely aligned with partner priorities and own efforts. A high level of ownership in the health sector is important so that voucher projects can complement and reinforce own efforts and other donor activities.
- Voucher schemes can be successful bridging mechanisms until national social protection systems are functional and can accompany their introduction. Longer-term projects with sensible phasing-out models can avoid an abrupt end to support and possible financial overburdening of partners.
- Voucher promoters who inform the target group about rights, benefits, including benefits of preventive health care, and available support for funding access to health services contribute to increase the use of vouchers for services.
- The system replacing the vouchers can promote sustainability through the retention of voucher promoters, applying the same service packages covered and using established and proven reimbursement and incentive systems.
- It is important to consider the availability of and access to relevant medicine when selecting the services paid for by vouchers. In the case of chronic diseases, services often rely heavily on the availability of medicine. The FC voucher project addressed a selection of chronic diseases that did not require long-term treatment and the associated availability of medicines, so there was no risk in this regard.

Rating according to OECD DAC criteria

Relevance

1. Alignment with policies and priorities

At the time of the project review and at the time of the evaluation, the objective was appropriately aligned with BMZ's development policy priorities. The project approach was in line with the German and international development policy priorities as expressed in Millennium Development Goals (MDG) 4 (reducing child mortality) and MDG 5 (improving maternal health) and Sustainable Development Goal (SDG) 3 (Ensure healthy lives and promote well-being for all at all ages[2]). The project was part of a German development cooperation (DC) programme. The aim of this overarching programme was to improve the health of poor and vulnerable populations and reduce their financial burden for health by enhancing their access to quality health services. The German DC programme supported important health reforms and developments in social health protection in Cambodia, complementing other donor initiatives. It was launched in 2009 and adapted to the BMZ strategy for the health sector (2014–2018) in 2015. The FC project also took into account the increased focus of German DC on supporting vulnerable population groups, including older people and people with disabilities. Today, the approach is still in line with the current development policy strategy, included in the guidelines for German DC with Asia from 2023 ("IV. Exploiting the opportunities offered by social security as an investment in the stability and future of societies in Asia") and the core theme strategy "Health, Social Security, Population Dynamics" (2023). The strategies aim, among other things, to promote economic resilience and societies that are sustainable, e.g. by expanding social security systems, supporting people living in poverty and with disabilities (social security as a lever to reduce multidimensional poverty and social inequalities) and advancing gender equality, e.g. through improved access to health services for women. By focusing on supporting vulnerable population groups, including women, poor and elderly people, and mitigating the socio-economic impact of disabilities, chronic diseases and extremely high healthcare costs, the project takes particular account of the "*quality feature* of human rights, gender equality and inclusion" and contributes to the "*quality feature* of poverty reduction and reduction of inequality". The project is also in line with global standards in sexual and reproductive health and rights. Furthermore, its design is suitable for contributing to the implementation of the human right to social security and human rights standards. However, an explicit human rights-based approach is not apparent in the project design.

At the time of the project appraisal, the objectives and the measures derived from them were appropriately aligned with Cambodia's existing national policies and priorities, including: *National Health Strategic Plan* (2008–2015), *National Social Protection Strategy for the Poor and Vulnerable* (2011) and *National Strategy for Reproductive and Sexual Health* (2006–2010). With regard to the two strategies, the relevance of the FC project is particularly noteworthy in terms of the priority issues formulated therein, namely neonatal, child and maternal mortality, sexual and reproductive rights, and the financial burden of illness. The project was particularly consistent with efforts to reduce mortality and the financial burden of healthcare services (*catastrophic health expenditures)*. These objectives are in line with the FC project's target system and correspond specifically to some of the project's indicators at the programme and module level. There are also national strategies for selected diseases or disease groups, such as the *National Strategy for the Prevention and Control of Non-Communicable Diseases* (NCDs) (2007–2010), the *National Strategic Plan for NCDs* (2013–2020) and the *National Strategic Plan for the Prevention of Blindness* (2008–2015), which formulate objectives and priority measures for diseases such as cervical cancer and cataracts, as well as for improving the quality of healthcare services. The design/approach and theory of change of the FC project is consistent with these national objectives.

At the time of the evaluation, there continues to be an appropriate alignment with Cambodia's current national strategies and policies. The priority issues and disease patterns to be addressed at the time are still relevant today. Particularly noteworthy here are the further developed *National Health Strategic Plan* and the national *Roadmap to Universal Health Coverage* (2024-2035). The objectives include more comprehensive social security coverage, reduction of private out-of-pocket expenditures for health care, the provision of high-quality health services and a reduction of non-communicable diseases (e.g. cervical cancer, cataracts). The roadmap provides comprehensive guidance for national strategies for the development of a universal health insurance system with high-quality health services and minimised private expenditure, which is in line with the FC project and its objectives.

The institutional framework was adequately taken into account e.g. by implementing the FC project with the adequately mandated Ministry of Health (MoH), which provided particular support for the project's objectives.

[2] In particular, the sub-goals of SDG 3: Reduce maternal and child mortality; Protect all people from communicable diseases (such as AIDS or tuberculosis) and non-communicable diseases (such as cancer or diabetes); everyone should have access to basic health services without falling into financial hardship.
This also includes sexual and reproductive health services, medicines and vaccines; and all girls and women should have the right to self-determination in family planning. Their access to contraceptives should be ensured.

2. Alignment with the needs and capacities of the beneficiaries and stakeholders

There were different target groups in the project provinces for the various voucher-supported health services:

- The total population in the project provinces was around 4 million people (around a quarter of Cambodia's total population).
- Of these, all married women of reproductive age, i.e. around 553,389 women, were eligible to use vouchers for safe abortion and long-term family planning methods.
- The main target group for additional reproductive health services (including prenatal and postnatal care for mothers and children) were poor, vulnerable women in the project provinces who were classified as poor according to national standards (ID poor card holders). During the project period, an estimated 195,000 women fell into this category. With the expansion of the HEF, this group was extended to include the so-called *near poor*: people whose income is just above the national poverty line. This group increasingly includes informal workers, who generally had no social/health security. According to estimates, around 93 % of Cambodian employment (91 % for men and 96 % for women) was in the informal sector (ADB, 2012).
- In addition, around 29,244 children under the age of 24 months in the project regions were included in the target group.
- The target group for cervical cancer screening and treatment comprised all women aged 30-49. This category included around 71,270 women.
- The target group for cataract tests and operations comprised all people over the age of 50 with corresponding symptoms (around 36,405 cases).
- As part of the cooperation with GIZ in supporting children with cleft palate and clubfoot, the target group consisted of affected children who were referred from the project provinces to *the National Paediatric Hospital* (NPH).
- People with disabilities were also indirectly addressed through the removal of physical access barriers for limited mobility as part of the construction work at the the level of the health centres.

The focus of the voucher-supported services on mother/child health was already established in the previous phase I, partly due to high unmet needs and the high political priority by the Cambodian partners and German DC. The expansion to include additional services was due to high unmet needs. From both a past and present perspective, the project's objectives were adequately aligned with the needs of the target group.

At the time of the project appraisal in 2012, Cambodia was on the way to achieving a remarkable improvement in the health sector, particularly in child and maternal health: According to estimates, maternal mortality per 100,000 live births fell from 559 in 2005 to 226 in 2010 (World Bank, 2024). However, in 2006 only 44 % of all births were attended by qualified health personnel. There were also significant differences between urban centres and rural areas, as well as between different population groups. In 2010, for example, infant mortality in urban areas was 22 deaths per 1,000 live births, while in rural areas it averaged 64 and in remote provinces it was as high as 118 per 1,000 live births. Newborn mortality was 39 per 1,000 live births in the lowest income quintile and 16 in the highest income group. As for non-communicable diseases such as cervical cancer, cervical cancer was the most common cancer among women in Cambodia in 2014, with an estimated 1,600 cases per year, accounting for around 670 deaths per year (WHO estimate, 2022). In addition, according to the Cambodian Demographic Health Survey (CDHS, 2014), 10 % of the Cambodian population lives with one or more disabilities (including cleft palate and clubfoot), with the risk of disabilities (e.g. cataracts) increasing with age. Older, vulnerable people suffering from cataracts often had no access to appropriate treatment, even though their vision could have been restored by a single operation.

During the project appraisal, limited access to and insufficient use of health services due to high and unpredictable costs and inadequate quality of services were identified as the core problems. A pre-feasibility study had identified a lack of knowledge about free or subsidised access to health services as a key access barrier for vulnerable groups. In addition, a survey revealed that people often expect high costs associated with medication and long, expensive journeys to service providers. Concerns about poor or inadequate treatment due to the unavailability of suitable medication, as well as unfriendly staff – especially towards poor population groups – were also often cited as reasons for not using health services. The core problem was correctly identified. From today's perspective, despite the progress made, the core problem remains relevant and is reflected in the partner's current political strategies.

Regarding the expansion of free and subsidised approaches to social protection for vulnerable groups, which were introduced by the Cambodian government during implementation and since the end of the project, the key barrier of a lack of knowledge about social security programmes should be highlighted more prominently in new projects as an important part of the core problem.

3. Appropriateness of design

The concept was based on a target system that addressed the core problem and was plausibly backed by the project measures. The objective of the project was: disadvantaged groups (poor and vulnerable women, people with disabilities, older people with chronic diseases) in up to six provinces use equal access of high-quality health services (outcome). The objective of the German DC programme at impact level was: improved health of poor and vulnerable populations in the project area and their financial burden to access health services reduced. Both outcome and impact level objectives are assessed as appropriate.

The limited financial and human resources of the implementing agency were taken into account in the design. In the first phase of the project, a *Voucher Management Agency (*VMA) was set up in the MoH and continued to be used for support in phases II and III, playing a key role in the implementation of the project. The FC project aimed to remove the identified barriers to access for the target group by distributing vouchers for free use of health services to poor and vulnerable groups (a.o. covering professionally assisted childbirth, family planning, access to safe abortion, cervical cancer and cataract examinations and treatment including travel and other costs related to the use of health services). At the same time, incentives were provided on the supply side to improve the quality of health facilities and service delivery through a performance-based remuneration concept. In principle, this concept is assessed adequate for increasing the use of quality health services. The theory of change is plausible.

The key barrier of a lack of knowledge about social (health) security programmes for vulnerable groups was to be addressed with the help of voucher promoters. Together with regional MoH representatives and village councils, they were foreseen to identify the target group that needs to be addressed and educated about health risks and their rights to use vouchers and free services. The voucher promoters were to be recruited from among existing community volunteers who are well connected, already involved in charitable work and often seen as trusted persons in the community.

The proposed indicators and target values are assessed as partially appropriate: meaningful and SMART indicators were selected that appropriately reflect the FC project's objectives, but not all aspects of the objectives are equally reflected in the indicators at the outcome and impact levels. Some indicators at the outcome level are impact or output indicators. The same applies to the impact level. The corresponding indicators were adjusted during the evaluation. With slight adjustments to the wording, the selected indicators at all levels are nevertheless useful for reflecting the overall effects achieved.

4. Adaptability – response to change

The FC project was appropriately adapted to the context and proved well able to respond to changes. Conceptual changes based on learning experiences and the partner's growing demand for greater donor harmonisation took place primarily in the transition from phase I to II and at the beginning of phase II. Phases II and III adapted regularly and agilely to the ongoing expansion of the HEF throughout the country. For example, target groups and services in health facilities were regularly adjusted or supplemented. The project region within the six project provinces and the selected level of care were also constantly adapted to the status of HEF expansion and the presence of other donors or voucher approaches (e.g. on the level of individual health facilities) to avoid duplication and enhance impact.

Summary appraisal of relevance: successful (2)

The core problems addressed, and the needs of the target group were highly relevant both at the time of the project appraisal as well as from today's perspective. According to its design, the project was suitable for contributing to the political sector priorities of BMZ and Cambodia. Overall, the target system was appropriate and aligned with the core problem. The underlying theory of change was plausible. The indicators did not adequately reflect all aspects of the target system at the appropriate level of results but are considered suitable to assess the overall impact. The relevance of the project overall is assessed as successful.

Coherence

5. Internal coherence

The FC voucher project is part of the German DC programme "Social health protection" and complemented other German DC measures in the health sector, as was already the case in phase I. It built on the lessons learned in the first phase, including regarding donor coordination and the complementarity and synergies of TC and FC. There was regular exchange between GIZ and KfW on sectoral issues, which was positively assessed by both implementing organisations at the time of the evaluation.

For example, the project involved cooperation with the TC module "Social health protection" (BMZ No. 2009 21 718), which supported the MoH in establishing a system for external, independent quality reviews of health services.

There was also a direct link to the TC project "Targeting – Identification of Poor Households (ID Poor)". The FC project used the information available from ID Poor to identify target groups and shared relevant data on the target group with GIZ. In addition, the VMA of the FC project participated in the quarterly technical meeting of GIZ and in meetings with the implementation groups

of the projects "Multisectoral Project to Secure Food Supply" (MUSEFO) and "Improving Care for Mothers and Newborns" (Muskoka Initiative) to regularly exchange information and coordinate activities on the ground. The GIZ Muskoka project cooperated with the FC project in assessing the needs for equipping national maternal and child health centres and in providing social support for children with cleft palates and club feet from the provinces supported by Muskoka. In addition, the FC project provided support for children and their carers by covering transport and meal costs where necessary.

The cooperation in the field of working with people with disabilities is appraised positively by GIZ staff, KfW and the parents and carers concerned.

The programme is consistent with the relevant international norms and standards to which German development cooperation is committed. This includes, in particular, SDG 3, the Convention on Human Rights and gender equality.

6. External coherence

Other important donors in the health sector in Cambodia are the Worldbank, Australia, Japan and South Korea. While a lack of coordination of donor activities was identified in phase I, the Cambodian government increasingly called for harmonisation in the following phases. Coordination is nowadays taking place in the framework of the Worlbank's multi-donor trust fund H-EQUIP (in support of the HEF) and is appraised as appropriate by the various actors surveyed in the evaluation (partners, other donors, German development cooperation). The Cambodian partners particularly emphasise the improved efficiency of coordination and implementation. The Cambodian government has continuously increased its own contribution to the HEF.

In response to a request from the Cambodian government, as part of the FC project, the VMA has made efforts to (1) adapt phases II and III to complement the nationwide introduction of the HEF, (2) to pool donor efforts within the framework of Worldbank's multi-donor trust fund H-EQUIP (to support the HEF) and (3) to prepare the integration of the FC voucher approach into HEF after project completion:

(1) The FC project was continuously adapted to close existing gaps in provision, for example in provinces and health facilities where the HEF had not yet been introduced and/or where the FC project had a complementary effect by covering a broader target group than the HEF (including the near poor and additional risk groups) (additionality). In addition, some private health facilities not covered by the HEF were included in the programme.

(2) The HEF was supported by a loan from the Worldnank and a trust fund from several donors (HSSP followed by H-EQUIP). In parallel with the adaptation of the FC project, donor coordination was improved and intensified through the introduction of regular coordination meetings throughout the project planning and implementation phases.

(3) At the end of implementation in 2018, the FC project was integrated into the HEF, and experiences and databases were transferred. While the parties involved described the transition process as smooth, not all the recommendations made by the FC project team (consisting of the implementing agency, *the voucher management agency* (VMA) and the international consultant) were adopted or implemented. There were various reasons for this. One of the main reasons was that, although a seamless transition between the end of the project and the completion of the design/introduction phase of H-EQUIP was aimed for, it was ultimately not possible to completely achieve it. In Interviews during the evaluation, those involved repeatedly highlighted, that the budget allocated for implementing the voucher promoter concept within the framework of HEF was too low and the concept could therefore not be continued in its successful form (see also under sustainability).

Summary appraisal of coherence: successful (2)

The project fitted in well with Germany's DC activities in Cambodia and was designed and implemented to complement the partner country's own efforts and the activities of other donors, particularly the Worldbank. The project was successfully adapted to the ongoing expansion of the HEF to increase its impact and avoid duplication. Lessons learned and recommendations from the previous phase of the FC project were passed on to HEF management and largely considered. Overall, the partners' expectations of improved donor coordination and integration of the FC voucher project into the HEF were well implemented. Coherence is therefore assessed as successful.

Effectiveness

7. Achievement of objectives

The objective of the project was: disadvantaged groups (poor and vulnerable women, people with disabilities, older people with chronic diseases) in up to six provinces use equal access of high-quality health services (outcome).

As planned, the vouchers could no longer be used after the project was completed and the voucher system was integrated into the HEF. At the time of the EPE and for the appraisal of the indicators regarding the number of vouchers used (indicator 1) and applied quality standards (indicator 2), the services and quality checks under the HEF are considered to assess the achievement of the indicators from today's perspective. Furthermore, the overall data situation at the time of the EPE is very sparse. To assess the achievements of indicators 6-8, national trends at the time of the evaluation were used. At the time of the final review, different data sources used for indicators 3-5 during implementation showed partially contradictory trends. The evaluation therefore is based on the *Cambodian Demographic and Health Survey* (CDHS) data and the overall trends from 2010 to 2021/2022. Some of the baseline values were already very high.

The following indicators were used to measure the outcome target:

Indicator	Status at project appraisal (2012)	Target value for EPE (audit)	Actual value at final review (2020)	Actual value at EPE (2024)
(1) Number of healthcare services billed via vouchers	0	90,000[3]	362,683 vouchers distributed; 506,602 health services billed via vouchers.	Target value achieved
(2) Proportion of accredited service providers[4] that meet set quality standards during regular inspections	--	90	98	Target achieved
(3) Proportion of pregnant women who undergo at least one skilled prenatal check-up	Kampong Thom: 85.4 %[5] Kampot/Kep: 86 % Prey Veng: 92.1 % Kampong Speu: 90.3 % Svay Rieng: 93.3 %	Annual increase of 2%	CDHS[6] 2014 Kampong Thom: 95.6 % Kampot/Kep: 93.9 % Prey Veng: 99 % Kampong Speu: 97.8 % Svay Rieng: 98.1 %	CDHS 2021/2022 Kampong Thom: 98.7 % Kampot: 97.5 % Kep: 98.9 % Prey Veng: 100 % Kampong Speu: 97.6 % Svay Rieng: 99.3 % Target partially achieved[7]
(4) Proportion of births attended by skilled personnel	Kampong Thom[8] : 48 % Kampot/Kep: 76 % Prey Veng: 59 % Kampong Speu: 68 % Svay Rieng: 90 %	Annual increase of 2 %	CDHS 2014 Kampong Thom: 80.4 % Kampot/Kep: 95.51 % Prey Veng: 97.6 % Kampong Speu: 89.3 % Svay Rieng: 94.3 %	CDHS 2021/2022 Kampong Thom: 94.5 % Kampot: 99.4 % Kep: 100 % Prey Veng: 97.4 % Kampong Speu: 99 % Svay Rieng: 98.5 % Target partially achieved
(5) Proportion of women using long-acting modern contraceptive methods	Kampong Thom[9]: 1.0 % Kampot: 6.3 % Kep: 0.3 % Prey Veng: 2.7 % Kampong Speu: 4.5 % Svay Rieng: 7.0 %	Annual increase of 1 %	HIS[10] y 2016 Kampong Thom: 2.9 % Kampot: 10.5 % Kep: 1.9 % Prey Veng: 7.8 % Kampong Speu: 5.6 % Svay Rieng: 8.1 %	CDHS 2021/2022 Kampong Thom: 8.8 % Kampot: 7.8 % Kep: 9.6 % Prey Veng: 9.2 % Kampong Speu: 3.7 % Svay Rieng: 5.9% Target value partially achieved
(6) The number of successful cataract operations leads to a reduction in cataract cases and prevalence among the population in the project region	n/a	Reduction in cataract prevalence by 10 % per year	34 % reduction (overall) Reduction in bilateral cataract prevalence by 56.4 %	Target achieved
(7) Proportion of women between the ages of 30 and 50 who have undergone cervical cancer screening in the six provinces where this voucher service is offered	0	25 % of women aged 30 to 50 in catchment areas where cervical cancer screening is offered	31.8 % of women in catchment areas have taken advantage of screening.	Target achieved
(8) Proportion of women with positive cervical cancer screening results who received cryotherapy [11]	0	70 % of women with a positive result	92 % of women with a positive result	Target value achieved

Table1 *: Outcome target achievement*
Source*: as indicated*

[3] It is unclear whether the target refers to vouchers distributed, or services used. The indicator was adjusted within the framework of the EPE as illustrated in the table.
[4] The outcome indicator refers to the health facilities participating in the FC voucher project and complying with the quality standards established during the project.
[5] The data for indicators 3-5 come from the project proposal created in 2012; the data source is unknown.
[6] *Cambodia Demographic and Health Survey*
[7] For indicators (3) to (5), the available data at the time of the final review was challenging, in some cases the data from the CDHS and the *Health Information System* were inconsistent or even conflicting or outdated. When taking into account the overall positive trends between 2010 and 2022 and the positive development already after one year after the implementation based on CDHS data, it is plausible to assume that the indicators have been partially or fully met.
[8] The data for indicators 3-5 comes from the module proposal created in 2012; the data source is unknown.
[9] The data for indicators 3-5 comes from the module proposal created in 2012; the data source is unknown.
[10] Health Information System, data only partially comparable with CDHS
[11] Cryotherapy on the cervix is a method of removing pathological changes, such as precancerous lesions or warts, by freezing.

In phases II and III (from August 2013 to December 2017), a total of 362,683 voucher booklets were distributed and 506,602 coupons were used. This exceeded the target set for indicator 1. After the project was completed, no more vouchers could be used. However, with regard to the use of voucher-supported services, it should be noted that all services covered by the FC project continue to be offered and paid for by the HEF for ID Poor. As the FC project acted in a preparatory and transitional capacity until the introduction of the HEF and the vouchers introduced some new services in the project regions, the indicator is still considered to be fulfilled at the time of the evaluation.

Indicator 2 has also been fulfilled at the time of project completion regarding health facilities implementing specified quality standards. At the end of the project period, 98 % of health facilities applied the specified standards of the FC project. Under the HEF, into which the voucher services were integrated, the government continues to carry out regular quality checks as part of the reimbursement process. This indicator is therefore also considered to have been met at the time of the EPE.

At the time of project completion, the data for indicators 3-5 was unclear, with data from *the Cambodia Demographic and Health Survey* (CDHS) and the *Health Information System* (HIS) partially outdated, inconsistent and even contradictory. Looking at the current CDHS data (2021/22) and the trend between 2010 and 2021/2022, these confirm an overall positive trend for the indicators on the use of antenatal care and deliveries in health facilities, both at national level (deliveries attended by skilled personnel (national level): 78 % (2010), 93 % (2014), 99 % (2022); at least one antenatal care visit (national level): 39 % (2000), 99 % (2022) as well as in the project provinces. According to the HIS, the target value for the use of long-term family planning methods was not always achieved, but usage has increased in all provinces.

Indicators 6, 7 and 8, which assess the improved tested prevalence and treatment of chronic diseases, were exceeded for both cataracts and cervical cancer. The lack of comparable current data makes it difficult to comment on the status quo at the time of the EPE. Since cataracts could be healed with the surgery, the results achieved here are still relevant at the time of the EPE: the project reduced the overall prevalence of cataracts in the intervention provinces by 34 % and the prevalence of bilateral cataracts by 56.5 %. This means that more than half of all bilateral cataract cases were successfully operated. Those involved reported that demand for cataract surgery rose sharply during the implementation of the programme. In addition, the eye clinics visited reported that demand remained stable, as other donors are still active in this area (e.g. China and Australia) and the services continue to be paid for by the HEF and NSSF.

About cervical cancer screening measures, both indicators (7 & 8) were met at the time of the final review: 31.8 % of women between the ages of 30 and 50 living in the six project provinces used the vouchers for a screening examination, the positive rate was 4.2 % and the cryotherapy treatment rate for positive cases was 92 %. As no comparable current data is available, it is difficult to assess whether the target has been achieved. However, looking at national trends and WHO estimates of incidence and mortality rates, an overall positive trend can be observed between 2012 and 2022 at the national level (age-standardised incidence rate: 23.8 per 100,000 (2012; 1,512 women diagnosed annually), 15.2 per 100,000 (2022; 1,274 women annually) and mortality rate: 13.4 per 100,000 (2012; 795 women annually), 8.1 per 100,000 (2022; 670 women annually).

For the target group of people with disabilities and limited mobility, the vouchers mainly covered transport costs, as healthcare for people with disabilities has been free of charge in Cambodia since 2015. In addition, the FC project also financed renovation works at health facilities to improve sanitary facilities and physical access for people with reduced mobility (e.g. enhanced wheelchair accessibility). In addition, the programme, in cooperation with GIZ, also provided financial support for children with cleft palates and club feet so that their carers could take them to the national children's hospital for treatment. A total of 14,337 vouchers for services to support people with disabilities were used by the target group. No indicator for this target group was included in the results matrix. This seems reasonable given the large number of indicators and the relatively small proporion of this particular target group.

Taking into account the interviews conducted as part of the evaluation and the strong positive impact that the national partner, health personnel and beneficiaries attribute to the FC voucher project, the target values are considered appropriate and the achieved successes of the project are considered remarkable.

8. Contribution to the achievement of objectives

These results are certainly attributable to many different initiatives that were carried out in the field of reproductive health during this period. It is difficult to assess the extent to which the FC project has contributed to this positive overall trend to date. However, a study conducted by *Population Council* confirms the effectiveness of the FC voucher programme: Indicators such as the use of antenatal care, deliveries in health facilities and the use of long-term family planning methods have improved significantly more in the project areas with vouchers than in other regions without vouchers (baseline 2010-2012; endline 2012-2014)[12].

[12] Results of external monitoring of various voucher projects by the Population Council. Presentation: Bellows, B. W. (2015). The impact of voucher programmes on demand and supply of reproductive health services: A cross-country comparison.

As part of the FC project, systematic screening for cervical cancer was introduced in Cambodia for the first time – apart from a small pilot project and isolated screenings, most of which were carried out by the local NGO RHAC. During the project, 111,329 women were screened. As data at provincial level is not available, no comparison was made with provinces without vouchers. In interviews conducted during the evaluation, health workers confirmed that they had learned to carry out systematic screening as part of the project and that the demand for screening and the number of referrals to hospitals had risen sharply. The effective outreach by voucher promoters and the increased use of screenings in health centres were seen as success factors. In addition, financial incentives in the form of transport cost reimbursements and social support (including food and baby packages) were cited as success factors that effectively strengthened demand.

9. Quality of implementation

According to representatives of the partners, health centres, patients and other donors interviewed, the FC voucher project was managed and coordinated very well. The project management by the MoH, supported by the VMA, is described by those involved as agile, efficient and successful. Particularly noteworthy were the professional and appropriate management by the VMA and the high level of political support, which enabled the outputs to be achieved satisfactorily despite the fragmented donor landscape and rapid changes in the sector during implementation. The Cambodian government's request to harmonise voucher approaches from various donors and integrate them into the HEF, as well as the MoH's continuous agile reorientation and adaptation of the FC project, supported by the VMA, contributed significantly to good coordination with other initiatives. As part of the preparations for H-EQUIP and the integration of the HEF, integration into national systems was improved compared to the previous phase and learning experiences were incorporated into a harmonised approach.

The individual measures were implemented primarily by the VMA, supported by the international consultant and NGOs acting as implementing partners. According to reports from partners, health facilities and beneficiaries, the activities were implemented highly satisfactory: the quality of health services provided improved rapidly thanks to training and equipment; invoices were paid on time; and use of health services increased significantly. Healthcare staff were made aware of the importance of improving the patient experience. Coupled with investments in infrastructure and improved opening hours that are compatible with clients/patients working hours, the services offered were readily used by the target group. The beneficiaries were targeted with the help of highly effective local representatives, the voucher promoters, who worked with village leaders to identify beneficiaries in their respective catchment areas and then visited them at home to provide information and awareness raising activities. The project did not pay voucher promoters according to the number of vouchers distributed, but for health services used that were reimbursed via vouchers. This created the right incentives for efficient and successful targeting in phases II and III.

10. Unintended effects (positive or negative)

No unintended effects, either positive or negative, can be identified. The do-no-harm principle was taken into account appropriately.

Summary appraisal of effectiveness: successful (2)

Overall, the voucher system has successfully contributed to creating incentives for the demand side to use services and for the supply side to provide health services. The most important success factors on the demand side are advertising in the community by voucher promoters (very effective targeting of the target group) and financial incentives in the form of transport cost reimbursements and social support (including food and baby packages). The most important success factors on the supply side are improved service quality (through training and equipment) and an improved patient experience (through the friendliness of healthcare staff, investment in infrastructure, adapted opening hours, etc.), as well as efficient and transparent processing of reimbursement claims for healthcare services provided. It is reasonable to assume that the FC project has contributed to the achievement of the objectives, but at the same time the contribution of the programme cannot be quantified, as other initiatives, not least those of the HEF, also contributed to the positive trends. The effectiveness is therefore assessed as successful.

Efficiency

11. Production efficiency

The FC voucher project was able to increase efficiency in phases II and III compared to phase I, as the voucher system had already been introduced, the VMA had been established and lessons learned had been implemented. In phases II and III, the costs for consulting services therefore were significantly reduced from 61 % to 34 % of the total costs, but couldn't reach the target of around 20 % as defined in the mid-term review of the first phase. The costs of administering the voucher system cannot be clearly separated from other consulting costs. It is difficult to assess the appropriateness of the administrative costs in comparison with other voucher projects, as administrative costs are not calculated uniformly (Bellows et al., 2013)[13]. However, according

[13] Bellows, B. W., Conlon, C. M., Higgs, E. S., Townsend, J. W., Nahed, M. G., Cavanaugh, K., Grainger, C. G., Okal, J., & Gorter, A. C. (2013). A taxonomy and results from a comprehensive review of

to a study that examined 28 voucher projects, administrative costs of between 10 % and 15 % should aimed for or possible once the initial set-up costs of the system are no longer incurred. In view of these figures, the programme certainly does not perform optimally, especially since the VMA was dissolved after implementation was completed.

However, the high costs are offset by efficient implementation and overall successful achievement of objectives at the output level. Voucher settlement was punctual and uncomplicated. The management information system ensured accurate tracking of vouchers distributed and used. The healthcare personnel interviewed reported that the pay-for-performance approach had increased their motivation and contributed to efficiency. In most health facilities, for the first time, poor and vulnerable groups were seen as attractive patients/clients. The staff interviewed described the project as the first and most important awareness-raising measure to sustainably enhance patient/client-orientation (e.g. in terms of friendly treatment and more adapted opening hours).

The improved patient/client focus, coupled with financial incentives and exceptionally efficient targeting by voucher promoters, was fundamental to the sharp increase in the use of health services, in particular of preventive medical check-ups. Many patients were accustomed to only going to the doctor when they had severe symptoms. The awareness campaigns targeting risk groups for cervical cancer motivated many women to seek preventive screenings even if they had no or only mild symptoms. This allowed for timely treatment. Furthermore, the efficiency of the referral system was improved, as more women went to health centres instead of hospitals to give birth. The voucher promoters accounted for 2-3 % of the total costs. All respondents cited the voucher promoters as a crucial element in the successful implementation of the project. Given the positive impact on the outputs and outcomes achieved, combined with relatively low costs, the voucher promoter concept is assessed very efficient.

12. Allocation efficiency

The use of a parallel voucher system with its own VMA involved considerable consulting costs in phases II and III (34 % of the total investment). However, since the partners had already selected the HEF as the national system at the time of implementation and capacity building at the partner was planned by the Worldbank but not yet well advanced, the decision to continue using the already established and efficient VMA in phases II & III is understandable. A comparison of voucher project shows that the use of VMAs can be a valuable alternative for effective implementation (Bellows et al., 2013), as third-party administrative agencies can be sanctioned for poor performance and have demonstrated that they can respond efficiently to changing programme requirements. This has also been the case in the FC project, particularly with the steady expansion of the HEF and the necessary adjustments.

A study shows that the results achieved through a combination of complementary *Health Equity Funds*, vouchers and performance incentives are greater than those achieved through isolated measures (Ir et al., 2010)[14]. This supports the decision to adapt the efficient voucher approach and to continue its implementation in a complementary manner to the HEF until integration (see also under sustainability). For example, the complementary FC project made it possible to add the near poor and other vulnerable groups to the HEF before the HEF was ready to cover a broader target group. This expansion of beneficiaries ensured that resources were efficiently allocated to those who had the greatest need and could benefit the most.

Summary appraisal of efficiency: moderately successful (3)

Overall, the programme was implemented more cost-effectively than the first phase, but costs could not be reduced to the target level. A final appraisal of the cost-benefit ratio cannot be made with certainty due to the difficulty of comparing it with similar approaches. In the context, it is understandable why the parallel, more cost-intensive VMA structure continued to be used instead of strengthening a partner structure. The project had to adapt to constantly changing conditions, which was achieved largely through the efficient implementation by the VMA. This enabled the project to be successful and complementary to the HEF, i.e. to positively reinforce the effects of the HEF (additionality). Overall, there is a trade-off between high costs for the use of the VMA and good efficiency in implementation. The efficiency of the programme overall is appraised as moderately successful.

28 maternal health voucher programmes. Population Council, Nairobi, Kenya; USAID, Washington, DC, USA; National Institute of Allergy and Infectious Diseases, Bethesda, MD, USA; Options Consultancy Services Ltd., London, UK; Instituto Centro-Americano de la Salud, Nicaragua.

[14] Ir, D., Horemans, N., Souk, W., & Van Damme, W. (2010). Using targeted vouchers and health equity funds to improve access to skilled birth attendants for poor women: A case study in three rural health districts in Cambodia.

Impact

13. Overarching development policy changes

The EPE applied the impact objective of the project appraisal: the poor and vulnerable population is healthier and less financially burdened by the use of quality-assured health services.

Unfortunately, due to the unavailability of adequate data, it impossible to assess the health status and reduced financial burden of all target groups of the project in detail. It is particularly challenging to find reliable data on the development of "catastrophic health expenditure". For several indicators, target values were not defined and it is not possible to derive them retrospectively. For the EPE, data from a study and national trends from the CDHS and WHO were therefore used as proxies for the appraisal of target achievement (see explanations below the following table). HEF data is also considered when assessing the achievement for vulnerable groups, as the FC programme is considered preparatory for the national expansion of the HEF and FC target groups and services were subsequently integrated into the HEF.

The following indicators were used to measure the impact.

Indicator	Status at project appraisal (2012)	Target value at EPE (audit)	Actual value at final review (PCR) (2020)	Actual value at EPE (2024)
(1) Frequency of catastrophic health expenditure for poor and vulnerable population groups in Cambodia	4.9 % of households	4.4 % of households (10 % decrease)	n/a	Target partially achieved
(2) Proportion of vulnerable groups who are covered by a mechanism and can meet their health service needs	n/a	n/a	n/a	+30 % *ID-poor* users (HEF 2023) Target achieved
(3) Maternal mortality (per 100,000 live births)	206 (CDHS, 2010)	n/a	n/a	154 (CDHS, 2022) Target achieved
(4) Neonatal mortality (per 1,000 live births)	27 (CDHS 2010)	n/a	n/a	8 (CDHS, 2022)
(5) Infant mortality (per 1,000 live births)	45 (CDHS, 2010)	n/a	n/a	12 (CDHS, 2022)
(6) In addition to the above indicators for EPE: Decline in cervical cancer mortality rate[15] (per 100,000)	13.4 (WHO, 2010)	n/a	n/a	8.1 (WHO, 2022)

*Table**2** : Impact target achievement*
***Source**: see details in the table*

Regarding an appraisal of indicator 1: It is impossible to verify the financial relief for the individual target groups at the time of the EPE (2025) due to the difficult data situation. A study[16] shows that although the incidence of catastrophic health expenditure has not fallen by 10 % by the end of the project, it has nevertheless decreased: the incidence of catastrophic health expenditure (10 % of THCE[17])[18] was 19.1 % in 2009, 13.3 % in 2014 and 13.1 % in 2017. This trend is also reflected in the data when looking at people in rural areas (21 % (2009), 14.9 % (2017)), in income quintile 4 (23.3 % (2009), 14.2 % (2017) and 5 (20.5 % in 2009, 15.2 % in 2017). A reduction in healthcare expenditure for the target groups seems plausible in the project regions, based on interviews conducted with beneficiaries. We therefore consider it plausible that indicator 1 was partially fulfilled during the project period. The study shows that the incidence has risen again since 2019 (average 17.7 % (2019)). More recent data are not available for an assessement at the time of the EPE.

[15] WHO International Agency for Research on Cancer: Cancer Today (iarc.fr)
[16] Kaiser, A. H., Okorafor, O., Ekman, B., Chhim, S., Yem, S., Sundewall, J. (2023). Assessing progress towards universal health coverage in Cambodia: Evidence using survey data from 2009 to 2019.
[17] THCE: Total household consumption expenditure
[18] Kaiser, A. H., Okorafor, O., Ekman, B., Chhim, S., Yem, S., Sundewall, J. (2023). Assessing progress towards universal health coverage in Cambodia: Evidence using survey data from 2009 to 2019.

In addition, the trend in private health expenditure (*out-of-pocket expenditure*, OOPE) is assessed as a proxy-indicator. Although this is a different indicator than the one originally selected during the project appraisal and less meaningful in terms of the financial burden on vulnerable households, the upward trend according to World Bank data from 2016 (share of OOPE for health expenditure 56 %) to 2019 (64 %), and then again after a brief decline to 55 % in 2020 to 61 % in 2022, could be an indication of existing and increasing hidden costs or costs not covered by the HEF. At the same time, this could also indicate a continuing preference for using private health facilities[19], which are included in the FC programme but not considered by the HEF. The quality of services at private health facilities is still often considered to be better than at public facilities. In interviews, the partner government and other donors expressed concern about the development of private health expenditure and cited the above-mentioned assumptions for an increase as possible causes. In conclusion, the indicator is classified as partially fulfilled, as the positive trend in the study confirms the assumptions of the voucher approach's impact logic at the time of project completion and the positive effects that beneficiaries attribute to the project.

With regard to indicator 2, a significant increase in HEF beneficiaries was recorded between 2014 and 2017[20], as was the use of qualified health services. The data from the FC project show good use of the vouchers, and between 2016 and 2023, the number of ID Poor covered by the HEF increased by 30 %. The services reimbursed by the HEF (for all beneficiaries combined) provided in hospitals and health centres increased by 29 % over the same period. The proportion of people covered in the event of illness has thus increased during and after the project implementation, and the indicator can be considered fulfilled.

Indicators 3-6 on the reduction of maternal mortality, infant mortality, neonatal mortality and cervical cancer mortality rates were assessed as fulfilled based on national trends according to the WHO between 2012 and 2022.

14. Contribution to intended overarching developmental changes

Overall, however, the data also confirm the reports from representatives of the Ministry of Health and the National Maternal and Child Health Centre (NMCHC), health workers and former voucher users on the positive effects of the FC project:

No systematic data is available for indicator 1, which measures catastrophic health expenditure. However, a study confirms a decline at national level and in rural areas during the project implementation period from 2014 to 2017. The decline is less than 10 %, but the study[21] suggests a positive trend. It is plausible that the FC project has contributed to this.

Regarding indicator 2: During the implementation of the programme, the number of people who benefited from a health insurance system in Cambodia increased overall, thanks to various approaches, particularly the HEF. The use of qualified health services under the HEF increased significantly according to Worlbank data[20]. Data from the FC project show that the services paid for with vouchers are used very frequently. The FC voucher project was already able to provide coverage to people before the HEF was fully rolled out. It is plausible that the project has thus contributed to the fulfilment of the indicator.

Regarding indicators 3) - 6): With regard to the health of women, mothers and children, the CDHS data confirm the continuing and remarkable positive trend. The NMCHC attributes a significant contribution to the reduction in mortality to the FC project.

The large number of different hedging and financing mechanisms that existed side by side at the time of implementation in Cambodia makes it difficult to clearly and quantitatively attribute individual effects to the FC project. The parallel FC project measures in phases II & III, were intended to complement the activities and effects of the HEF. The FC voucher project therefore focused on demand-side costs and supply side services with an emphasis on services below the hospital level and also included private health facilities until the HEF was extended to those health centres. All key stakeholders interviewed as part of the evaluation confirmed a significant increase in the use of health services during the project implementation. This is consistent with some of the literature on impacts and qualitative studies, which suggests that health equity funds, vouchers and performance-based financing have a positive impact on access to and use of services, especially for the poor (Flores et al., 2013[22] ; Noirhomme et al., 2007[23] ; Ir et al., 2010[14,] Soeters and Griffiths, 2003[24] and Jithitikulchai et al., 2021[20]). For the provinces in which the programme was implemented, NMCHC representatives and the provincial health departments met during the evaluation mission, reported that the FC project has contributed significantly to reducing the mortality rate of women, mothers and newborns. It is reasonable to assume that the combined efforts of various measures, including the FC project, and the increasing use of qualified health services financed by *vouchers* have contributed to improving health and alleviating the financial burden from beneficiaries.

[19] This refers to small private *clinics*, which are often operated in rooms in private homes.
[20] Jithitikulchai, T., Feldhaus, I., Bauhoff, S., & Nagpal, S. (n.d.). Health Equity Funds as the pathway to universal coverage in Cambodia: Care seeking and financial risk protection.; & World Bank Data
[21] Kaiser, A. H., Okorafor, O., Ekman, B., Chhim, S., Yem, S., Sundewall, J. (2023). Assessing progress towards universal health coverage in Cambodia: Evidence using survey data from 2009 to 2019.
[22] Flores, G., Ir, P., Men, C. R., O'Donnell, O., & van Doorslaer, E. (2013). Can vouchers deliver? An evaluation of subsidies for maternal health care in Cambodia. Bulletin of the World Health Organisation, 91(5), 331–339. https://doi.org/10.2471/BLT.12.110015
[23] Noirhomme, M., Meessen, B., Griffiths, F., Ir, P., Jacobs, B., Thor, R., & Van Damme, W. (2007). Improving access to hospital care for the poor: Comparative analysis of four health equity funds in Cambodia. Health Policy and Planning, 22(4), 246–262.
[24] Soeters, R., & Griffiths, F. (2003). Improving government health services through contract management: A case from Cambodia. Health Policy and Planning, 18(1), 74–83. https://doi.org/10.1093/heapol/18.1.74

Overall, the programme is characterised by a good additionality, as far as this can be assessed. The impact trends sought would likely have been achieved in a similar positive direction due to the partner's own efforts and the national expansion of the HEF, but it is plausible that the trends would have been slower/less pronounced. The lessons learned regarding tried and tested processes and their integration into the HEF also speaks for the additional character.

15. Contribution to unintended overarching developmental changes

No overarching unintended development policy changes can be identified.

Summary appraisal of impact: successful (2)

An appraisal of the development policy impact must consider the overlapping and interacting interventions. It is important to note that, due to the many influencing factors, the effects at the impact level cannot be attributed directly or exclusively to the FC project. Overall, based on the positive development of all indicators and the plausible theory of change, it can be assumed that the project has achieved predominantly positive development policy effects. The overarching developmental impact is therefore assessed as successful.

Sustainability

16. Capacities of the beneficiaries and stakeholders

The voucher project has gained a very good reputation at all levels, from the project executing agency, the *Ministry of Health* (MoH) and its national and provincial representatives, to the participating hospitals and health centres in rural areas and is recognised at the highest political level as a key project for promoting the health sector. Despite budgetary constraints, there is a strong sense of ownership on the part of the Cambodian partners to further advance the health sector and to continue to provide health security for the target group of the FC project, with a steadily growing budget. The integration of the voucher approach into the HEF to establish one harmonised national system is assessed as overall successful by the implementing partners interviewed, thus creating good conditions for maintaining the positive effects of the FC project in the longer term.

Given the budgetary situation in Cambodia, health services will continue to depend on external support for the foreseeable future, but the FC voucher project has supported the government by bridging until it could increase its share of funding in the health sector. Integration into the HEF and the simultaneous continuation of FC support within the framework of H-EQUIP facilitated a smooth transition and a gradual increase in the government's financial contribution (from an initial 20 % to the current 60 %).

At the level of the participating health facilities and voucher promoters, there appears to be a high level of interest in maintaining positive effects in the longer term. All health services introduced as part of the voucher project continue to be offered and, according to the health staff interviewed, there were no layoffs due to budget constraints since the end of the project. The knowledge gained in training courses continues to be applied and has been passed on to new staff since the end of the project. The management of health facilities continues to be supported by the MoH in the areas of good management, customer orientation and satisfaction through weekly seminars and exchange formats. To further strengthen the demand side, the discontinuation of paid voucher promoters since the end of the project was reported as a challenge for health facilities. Although a few health centres report that they are trying to continue their educational work with own staff, a lack of time and budget is a significant obstacle to implementing these activities to the extent required. The former voucher promoters are still predominantly in the project areas and their knowledge/skills are still available. When approached, they continue to inform patients about health risks and services and, to the extent that they are aware of them, also about new insurance mechanisms for health access (HEF, NSSF, card for vulnerable groups, etc.). Since the end of the project, the partner government has not allocated a sufficient budget for promotional activities, although these have been identified by all stakeholders as essential for stabilising high utilisation rates. Both the health staff and the former voucher promoters are motivated and would be capable of continuing the promotional activities and thus maintaining or reactivating the effects achieved, but such activities dependent on external financial support.

At the target group level, focus group discussions showed that former patients seem to have permanently changed their behaviour in the event of illness. Since the FC project, they had been going to health centres for treatment when they experienced symptoms and assumed that there would be no treatment costs. This also applied to patients interviewed who were currently unsure about their insurance status, but who reported feeling confident that they would not have to pay if they could not afford to. This was also confirmed by all the health facilities interviewed. Regarding preventive medical check-ups, the effects on behaviour did not appear to be sustainable. Unless patients felt ill, they didn't seek preventive medical check-ups, e.g. for cervical cancer. As in most countries, it is primarily preventive care that must be actively promoted by the state to stimulate demand. It appears that the FC project has made a sustainable contribution to strengthening the resilience of the target groups, including with regard to seek health treatment in the event of illness. Based on the reports of those involved, it is not surprising that the

projects contribution to sustainability regarding the use of preventive medical check-ups appears to be rather limited without further promotional activities.

17. Contribution to supporting sustainability capacities

The FC voucher project has contributed to giving the government more time to steadily increase its share of funding in the health sector within the limits of available capacities. An abrupt end to the FC project would have been challenging. Integration into the HEF and the simultaneous continuation of FC support under H-EQUIP enabled a smooth transition and a gradual increase in the government's financial contribution. The Cambodian government has been able to increase its funding of the HEF from an initial 20 % to the current 60 %.

The FC project team was part of the working group led by the Ministry of Health that developed the National Guidelines for the HEF service package and payment mechanism. Key project-related achievements in the development of the guidelines, which were validated in 2018, include:

- Inclusion of specific service packages for cervical cancer screening and treatment services and associated essential payments to health facilities for the provision of these services; and
- Rationalising transport fees to a flat rate to reduce administrative burden and improve customer understanding and utilisation.

At the end of the programme, the VMA handed over the database and recommendations to the MoH team responsible for processing applications and quality assurance within the HEF. Following the handover, the VMA ceased operations as planned. The use of an efficient and flexible administrative structure contributed to the gathering of important experience and lessons learned (see also under efficiency). As the parallel VMA itself has ceased to existed in 2018, it contributed at best indirectly to strengthening sustainable capacities.

The health staff interviewed confirmed that all services covered by the FC vouchers are still being provided, that their income comes largely from visits of HEF- and NSSF-recipients, and that no staff has been laid off after the end of the FC project. The transition from FC vouchers to HEF was perceived as smooth in the health facilities, although the processing of voucher reimbursements under the FC project was described as more efficient compared to the HEF/H-EQUIP (here, the respondents referred primarily to newer services from support programmes for non-communicable diseases such as diabetes and high blood pressure). The healthcare staff interviewed confirmed that the knowledge and experience acquired in FC financed training courses, such as systematic screening for cervical cancer, is still applied today.

As part of the voucher promoter campaigns, the target group was provided with information about their rights and the health services offered. Beneficiaries reported that they continue to go to health centres when they feel ill or are pregnant. They also know which government programme covers the costs (e.g. HEF, NSSF or the card for vulnerable groups) or expect that even if they do not know, they will not have to bear the costs themselves or will only have to bear a smaller portion of the costs. Awareness-raising measures regarding preventive medical check-ups, on the other hand, do not seem to have a lasting effect and should be regularly repeated (see also under effectiveness).

18. Sustainability of the effects

Overall, the project concept was not designed to create structures that would remain in place after the end of the project, but rather to integrate lessons learned and good practices into the HEF. Sustainability has thus been addressed through integration into the HEF. Although initially there had been no concept for services or target groups not directly covered by the HEF, at the time of the evaluation, all FC project target groups and services were covered through health insurance through HEF and additional government programmes.

Overall, integration of FC target groups (and services) into HEF has been successful and the number of HEF beneficiaries has grown steadily since the end of the FC project. All services introduced and covered under the FC voucher project and the support paid (e.g. transport costs) continue to be offered under the HEF, and some service packages have even been expanded.

The health staff interviewed described the transition from vouchers to HEF as smooth and were satisfied with the reimbursed amounts (in some cases the reimbursement is now higher than in the FC voucher project). Concerns that staff layoffs might occur after the end of the FC project have not materialised. The reimbursement process for services paid for by vouchers was also described as similarly efficient. Criticism of slow, non-transparent processes was mainly directed at services that have been added since the end of the FC project (e.g. screening and treatment of non-communicable diseases such as high blood pressure and diabetes).

With regard to behavioural changes on the supply side, the FC project was described by health staff at the health centre level as a starting point for becoming more customer oriented. Thanks to the FC project poor and vulnerable people were considered as

attractive patients for the first time. Since the end of the FC project, the government has reportedly continued to emphasize adequate health facility management and patient-centred care. Healthcare staff interviewed was aware of the importance of creating a positive patient experience. Overall, the physical condition of the healthcare facilities visited was good.

Initially, the target groups of the voucher and the HEF did not overlap. Fears that vulnerable groups outside those identified as ID poor (e.g. the near poor) would no longer be covered after the end of the FC project have not materialised. This is partly because the HEF has expanded the target group and partly because the government has introduced various additional safety net programmes since the end of the FC project, so that the voucher target group is fully covered by public and, in some cases, private healthcare. Unlike the FC voucher project, however, private healthcare providers have not been included in the HEF for the poorest.

According to the target group, the main obstacles to the use of health services were the lack of health knowledge and awareness of available insurance systems. The beneficiaries confirmed that those obstacles were partially sustainably reduced (see also Chapter 17). There were also examples of staff continuing the awareness-raising work of the voucher promoters since the end of the FC project to inform beneficiaries and increase the use of services. Beneficiaries reported that they now only consult a health facility once they have symptoms. Many no longer use preventive care. According to the respondents, this had been different in the meantime, due to the awareness-raising and information activities by the voucher promoters (see also under Effectiveness).

It is difficult to assess the sustainable financing of the HEF and whether/when complete financing by the Cambodian government could be realistic. However, the increased partner contribution to HEF financing (initially 20 %, currently 60 %) is seen as a positive signal for a sustainable commitment and budget allocation to the HEF. Based on discussions with the Worldbank, it currently doesn't seem likely that donor funding will stop in the medium to long term, and it can therefore be assumed that the effects achieved will continue accordingly.

Despite the smooth transition following integration into the HEF and the overall sustained positive developments in social health protection for vulnerable groups, the health facilities visited reported a noticeable decline in the use of all services after the end of the FC project. The use of services related to prenatal care, childbirth and postnatal care increased again after the initial decline and stabilised at an overall lower level than during the implementation of the FC project. An initial decline in the use of some services is plausible, particularly after systematic preventive examinations (e.g. cervical cancer screenings should be carried out every three to five years) and (surgical) treatments (e.g. cataracts can be cured by surgery) and for example through the introduction of long-term family planning (e.g. IUDs, implants (which need to be replaced after 3-6 years) that have a positive medium to long-term effect on the health of the beneficiaries. Nevertheless, it can be assumed that the use of these services should still have increased at times over the last six years. Interviewees assume that an important reason for the general decline is insufficient information about the various (in some cases new) government social health security programmes and the criteria for accessing free of charge services. There seems to be a lack of information both among health staff and the target group. This could also be an explanation of the relatively high out-of-pocket expenditures for health services in Cambodia (61 % of total health service expenditures; Worldbank, 2022). In addition, as in many countries, the decline in recent years has certainly also been influenced by the COVID-19 pandemic.

The timing of integration into the HEF and the available budget for promoting awareness-raising and information activities posed a challenge in terms of taking all the recommendations of the FC project into account. The FC project aimed to establish HEF promoters based on the model of the successful voucher promoters. A final decision on the role *of HEF promoters* had not been made by the end of the project, and a proposed training course to be conducted by the VMA was never implemented. However, as the FC is still involved in HEF/H-EQUIP today, important experiences gained during the FC project continue to be shared and are still taken into account in the design and expansion of the HEF. For example, a HEF promoter campaign is currently being prepared for 2025. On a positive note, former voucher promoters are still being called by women asking for vouchers. Respondents reported that in such cases, they explain to the women that HEF has now replaced vouchers and that they can continue to use health services free of charge. For future voucher projects, complementary opportunities for the (improved) formal involvement of community volunteers, village health support groups and/or village leaders in the information formats could be one approach to continuing the promotion in part or in addition to the paid voucher promoters after the project has been completed. The use of social media and IT solutions could also be considered, for example to provide information about services and programmes or to send regular reminders on preventive medical check-ups (e.g. through automatic mobile phone messages). Such initiatives certainly cannot replace effective targeting, but they can increase the sustainability of the availability of information.

Summary appraisal of sustainability: moderately successful (3)

The FC project was able to reduce important access barriers to health services for poor and vulnerable groups. It supported health facilities in improving the quality of their services in selected health services and becoming more patient centred. Following integration into the HEF and expansion of the HEF target group, the scope of services has remained the same for the majority of the voucher target group or has been partially expanded over the last few years. Together with complementary government

programmes, the entire target group of the FC voucher project continues to have access to subsidised public health services, either free of charge or at low rates. Given the overall lower use of health services since the end of the FC project and the still relatively high out-of-pocket expenditure in Cambodia, increased promotion and awareness-raising for government social health protection systems appears to have the potential to reinforce the sustainable impacts achieved during the FC project. The fact that the successful voucher promoter model could not be adopted by HEF until the time of the evaluation appears to be a significant omission in the otherwise successful integration into the HEF. Since the parallel VMA itself ceased to exist in 2018, it contributed at best indirectly to strengthening sustainable capacities. Sustainability is therefore appraised as having had limited success overall.

Overall rating: successful (2)

The FC project is assessed as highly relevant as it was aligned with the partner country's policies and priorities as well as the needs of the target group. The project was designed and implemented in a complementary manner to the partner's own efforts and the commitments of other donors. It has successfully adapted to changing requirements. There is a trade-off between the cost-intensive use of a voucher management agency (VMA) and efficient project implementation. In context, it is understandable why a dual structure was used for implementation by involving the VMA instead of the implementing agency's structures, but despite high implementation efficiency, the costs were higher than intended. Overall, the voucher system has successfully contributed to creating incentives on the demand side for poorer and vulnerable groups to use health services, while at the same time strengthening the supply side. Based on the positive development of all indicators at the impact level and the plausible theory of change of the FC project, it can be assumed that the project has contributed to the intended overarching positive development policy effects. Through a largely successful integration into the HEF, coupled with complementary government programmes, the access barriers addressed by the vouchers were largely reduced in a sustainable manner. The fact that the successful voucher promoter model was not adopted by HEF until the time of the evaluation appears to be a significant omission in terms of ensuring sustainability, despite the otherwise successful integration into the HEF. The project overall still is assessed as successful.

Contribution to the 2030 Agenda

The project was directly aimed at implementing SDG 3: "Ensure healthy lives and promote well-being for all at all ages". In particular, it contributed to the following sub-goals of SDG 3:

- Reduce maternal and child mortality.
- All people should be protected from communicable diseases (such as AIDS or tuberculosis) and non-communicable diseases (such as cancer or diabetes).
- All people should have access to basic health services without falling into financial hardship. This includes sexual and reproductive health services, medicines and vaccines.
- All girls and women should have the right to self-determination in family planning. Their access to contraceptives should be ensured.

The FC project used national health facility structures for its implementation. The project was implemented in close coordination with GIZ and, increasingly, with the Worldbank and other development partners to ensure complementarity prior to its integration into the Worldbank HEF. The basis for the increasing harmonisation was participation in the World Bank's HSSP II donor basket and joint preparation for the H-EQUIP project, a multi-donor trust fund related to the HEF. Monitoring was carried out together with the partner and in joint meetings and discussions with GIZ and other donors at both the political and working levels.

The project exclusively supported its target group of particularly disadvantaged groups and was thus consistent with international norms and standards on inclusion (leave no one behind).

Methodology

Evaluation methodology

The ex-post evaluation follows the methodology of a rapid appraisal, i.e. a data-based, qualitative contribution analysis, and represents an expert opinion. The project is said to have certain effects based on plausibility considerations, which are based on a careful analysis of internal and public documents, data, facts and impressions. Where possible, this also includes the use of digital data sources and modern techniques (e.g. satellite data, online surveys, geocoding). The causes of any contradictory information are investigated, attempts are made to resolve them, and the assessement is based on statements that are confirmed by several sources of information (triangulation), where possible.

The analysis of the effects (outcomes, impacts) is based on assumed causal relationships, documented in the theory of change during project appraisal and updated during the ex-post evaluation, if necessary. The evaluation report explains certain influencing factors identified for the effects (outcomes, impacts) observed and why the project under review probably made a certain contribution (contribution analysis). The context of the development measure is considered in terms of its influence on the results. The conclusions are evaluated in light of the availability and quality of the data basis. An evaluation concept serves as the reference framework for the evaluation.

The method offers a balanced cost-benefit ratio for project evaluations, on average, with a balance between knowledge gain and evaluation effort, and allows for a systematic appraisal of the effectiveness of FC projects across all project evaluations. Individual ex-post evaluations cannot therefore meet the requirements of scientific assessment in the sense of a clear causal analysis.

The main objective of the evaluations (knowledge interest) is to measure impacts, provide accountability, promote transparency and enable institutional learning.

Type of evaluation:

Evaluation mission to the project area

Key questions of the evaluation according to the evaluation design:

- Sustainability: Has the voucher approach (main challenge during implementation) been successfully integrated into the existing Health Equity Fund (HEF) system? Are the health services introduced still being offered at an appropriate level of quality and used by beneficiaries?
- Cost-effectiveness: Could there have been/could there be a more cost-effective approach (better use of synergy potential)?

Non-public (internal) documents

Internal FC project documents (project proposal, final review, final report by the project executing agency and consultants, strategy papers, context, country and sector analyses), EPE from the previous phase I, 2017.

List of public sources

3ie (2024). Sexual and reproductive health and rights in low- and middle-income countries: An evidence gap map.

Bellows, B. W. (2015). The impact of voucher programs on demand and supply of reproductive health services: A cross-country comparison.

Bellows, B. W., Conlon, C. M., Higgs, E. S., Townsend, J. W., Nahed, M. G., Cavanaugh, K., Grainger, C. G., Okal, J., & Gorter, A. C. (2013). A taxonomy and results from a comprehensive review of 28 maternal health voucher programmes. Population Council, Nairobi, Kenya; USAID, Washington, DC, USA; National Institute of Allergy and Infectious Diseases, Bethesda, MD, USA; Options Consultancy Services Ltd., London, UK; Instituto Centro-Americano de la Salud, Nicaragua.

Bellows, N. M., Bellows, B. W., & Warren, C. (2010). The use of vouchers for reproductive health services in developing countries: Systematic review.

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Gaius-Obaseki, A. (2020, 15 January). Further development of voucher approaches in the context of universal health coverage.

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Noirhomme, M., Meessen, B., Griffiths, F., Ir, P., Jacobs, B., Thor, R., & Van Damme, W. (2007). Improving access to hospital care for the poor: Comparative analysis of four health equity funds in Cambodia. Health Policy and Planning, 22(4), 246–262.

Soeters, R., & Griffiths, F. (2003). Improving government health services through contract management: A case from Cambodia. Health Policy and Planning, 18(1), 74–83. https://doi.org/10.1093/heapol/18.1.74

Data sources and analysis tools

Cambodia Demographic Health Surveys (CDHS) 2010, 2014, 2021/22, WHO, ADB and World Bank data, survey results from the project's internal interim and final evaluations, user data from selected health centres, data from the national partners' Health Information System

Project sites visited

Various health facilities (health centres, referral hospitals, provincial hospitals) were visited in three of the six provinces where the FC voucher project was active. The random sample included provinces that had been involved since phase I and those that were newly added in phases II and III: Kampong Thom, Kampong Speu and Prey Veng. The locations were selected according to their size and logistical considerations. The random sample of locations visited amounted to approximately 4 %, corresponding to 14 of 340 supported health facilities.

Interview partners and modality (in person)

Representatives of the project executing agency, health staff, representatives of the district health authority, former voucher promoters, target group/beneficiaries, international implementation consultants, other donors, German Embassy, KfW employees

The following aspects limited the evaluation

Data availability: When assessing effectiveness and overarching developmental impact, some of the indicators available at the time of the final review contained contradictory or outdated data, which meant that only limited conclusions could be drawn. Furthermore, monitoring data was not collected for all aspects of the projects objectives.

Evaluation methodology

A six-point scale is used to assess the project according to OECD DAC criteria, with the exception of the sustainability criterion. The scale values are as follows:

Level 1 Very successful: results significantly above expectations

Level 2 Successful: results fully in line with expectations, without significant shortcomings

Level 3 Moderately successful: results below expectations, but positive results predominate

Level 4 Moderately unsuccessful: significantly below expectations and negative results dominate despite recognisable positive results

Level 5 Unsuccessful: despite some positive partial results, the negative results clearly dominate

Level 6 Highly unsuccessful: the project is useless or the situation has deteriorated

The overall rating on the six-point scale is based on a project-specific rationale for the weighting of the six individual criteria. Levels 1–3 of the overall rating indicate a 'successful' project, while levels 4–6 indicate an 'unsuccessful' project. It should be noted that a project can generally only be classified as 'successful' in terms of development policy if both the achievement of objectives at the outcome level (effectiveness) and impact level, as well as sustainability, are appraised at least as 'limited success' (level 3).

The annex to this report is available upon request (German only).

Imprint

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