

KNOWING WHAT WORKS



Central Project Evaluation

Improving Maternal and Newborn Care in Cambodia

PN 2014.2378

Evaluation Report

On behalf of GIZ by *Klaus-Peter Jacoby, Chean Rithy Men*

Published version: 19.11.2019

Publication details

GIZ is a federal enterprise and supports the Federal German Government in achieving its objectives in the fields of international education and international cooperation for sustainable development.

GIZ's Evaluation Unit reports directly to the Management Board. It is separate from GIZ's operational business. This organisational structure strengthens its independence. The Unit is mandated to generate evidence-based results and recommendations for decision-making, to provide plausible verification of results and to increase the transparency of findings.

The Evaluation Unit commissioned the evaluation to external independent evaluators. The evaluation report was written by these external evaluators. All opinions and assessments expressed in the report are those of the authors.

Evaluators:

Klaus-Peter Jacoby, Chean Ritty Men

Authors of the Evaluation Report:

Klaus-Peter Jacoby, Chean Ritty Men

Consulting:

iSPO-Institut für Sozialforschung, Praxisberatung
und Organisationsentwicklung GmbH
Saargemünder Straße 40
66119 Saarbrücken
T: +49-6571-9850167
E: ispo@ispo-institut.de
I: www.ispo-institut.de

Concept, coordination and management

Claudia Kornahrens, Head of Section
Dr. Vera Hundt, Evaluation manager
GIZ Corporate Unit Evaluation
Central Project Evaluations Section

Responsible:

Albert Engel, Director
GIZ Corporate Unit Evaluation

Editing:

Christine Steel
Chris Steel Editorial Services

Published by:

Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices:

Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Deutschland
T +49 228 4460-0
F +49 228 4460 – 1766

E evaluierung@giz.de

I www.giz.de/evaluierung

www.youtube.com/user/GIZonlineTV

www.facebook.com/gizprofile

https://twitter.com/giz_gmbh

Design/layout etc.:

DITHO Design GmbH, Cologne

Printing and distribution:

GIZ, Bonn

Printed on 100% recycled paper, certified to FSC standards.

Bonn, November 2019

This publication is available of GIZ-Website as pdf-
Download www.giz.de/evaluierung. Inquiries for a
printed issue should be addressed
evaluierung@giz.de

Contents

The project at a glance.....	vi
Cambodia: Improving Maternal and Newborn Care.....	vi
Executive summary	1
Description of the project	1
Evaluation design	2
Assessment of relevance	2
Assessment of effectiveness.....	3
Assessment of impact	3
Assessment of efficiency	4
Assessment of sustainability	4
1 Evaluation objectives and questions	6
1.1 Objectives of the evaluation.....	6
1.2 Evaluation questions	6
2 Object of the evaluation	7
2.1 Definition of the evaluation object.....	7
2.2 Results model including hypotheses	8
3 Evaluability and evaluation process.....	12
3.1 Evaluability: data availability and quality.....	12
3.2 Evaluation process	15
4 Assessment of the project according to OECD/DAC criteria	16
4.1 Long-term results of predecessor(s)	16
4.2 Relevance	18
4.3 Effectiveness	24
4.4 Impact	33
4.5 Efficiency	38
4.6 Sustainability	43
4.7 Key results and overall rating.....	46
5 Conclusions and recommendations.....	48
5.1 Factors for success or failure	48
5.2 Conclusions and recommendations	49
Annex 1: List of references	51
Annex 2: Evaluation matrix.....	55

List of figures and tables

Figure 1: Results model of the project Improving Maternal and Newborn Care (PN 2014.2473.8) (summarised during the evaluation, 03/2019)	11
Table 1: Basic documents	12
Table 2: Stakeholders involved in the evaluation.....	15
Table 3: SMART analysis of the module objective indicators	24
Table 4: Emergency cases treated in EmONC facilities of the 4 project provinces (static denominator)	26
Table 5: Emergency cases treated in EmONC facilities of the 4 project provinces (dynamic denominator)	26

List of abbreviations

BMZ	German Federal Ministry for Economic Cooperation and Development <i>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung</i>
CDHS	Cambodian Demographic and Health Survey
DPO	Disabled people's organisation
EmONC	Emergency Obstetric and Neonatal Care
FMB	GIZ Fach- und Methodenbereich (Sectoral Department)
FTIRM	Fast Track Initiative Road Map for Reducing Maternal & Newborn Mortality 2016-2020
GDC	German Development Cooperation
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
HEF	Health Equity Fund
HEQIP	Health Equity and Quality Improvement Project
HSP	Health Strategic Plan
JICA	Japan International Cooperation Agency
KpRTC	Kampot Regional Training Centre
LNOB	Leave-no-one-behind
MCAT	Midwifery Alliance Core Teams
MCH	Maternal and Child Health
MNBC	Maternal and Newborn Care
MMR	Maternal mortality ratio
MoH	Ministry of Health of the Kingdom of Cambodia
MPA-HC	Minimum Package of Activities for Health Centres
NCU	Neonatal care unit
NMCHC	National Maternal Child Health Centre
NMR	Neonatal mortality ratio
NQEMT	National Quality Enhancement Monitoring Tools
NSDP	National Strategic Development Plan
PHD	Provincial Health Department
PN	Project number
PPH	Post-partum haemorrhage
PRH	Provincial referral hospitals
PwD	Persons with disabilities
QI	Quality improvement
RACHA	Reproductive and Child Health Alliance

RBM	Results-based management
SDG	Sustainable Development Goal
SHP	Social Health Protection
SMP-HC	Safe Motherhood Clinical Management National Protocols for Health Centres
TC	Technical cooperation
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VMA	Voucher Management Agency
WHO	World Health Organization
ZAS	Zeitaufschriebe

Abbreviations for the citation of interviewees and focus group participants

<i>Int-</i>	<i>Interviews</i>
<i>FG-</i>	<i>Focus groups / group interviews</i>
<i>GIZ</i>	<i>GIZ staff, incl. consulting consortium</i>
<i>DP</i>	<i>Development partners</i>
<i>NP</i>	<i>Partners at national level</i>
<i>PHD</i>	<i>Partners at provincial level</i>
<i>OD</i>	<i>Partners at Operational District level</i>
<i>HC</i>	<i>Partners at the level of EmONC health centres</i>
<i>CSO</i>	<i>Staff of civil society organisations</i>



The project at a glance

Cambodia: Improving Maternal and Newborn Care

Project number	2014.2473.8
CRS-Code(s) (Creditor Reporting System Code)	12110
Project objective	Families with small children are increasingly benefiting from improved quality health services for mothers and children
Project term	1.1.2016 – 30.04.2019
Project volume	EUR 5,121,942
Commissioning party	German Federal Ministry for Economic Cooperation and Development (<i>Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ</i>)
Lead executing agency	Ministry of Health of the Kingdom of Cambodia (MoH)
Implementing organisations (in the partner country)	Ministry of Health of the Kingdom of Cambodia (MoH) National Maternal Child Health Centre (NMCHC) Provincial Health Departments (PHD), in particular maternal and child health (MCH units) Selected referral hospitals and health centres for emergency obstetric and neonatal care (EmONC) National Paediatric Hospital (NPH) Kampot Regional Training Centre (KpRTC)
Other development organisations involved	(-)
Target group(s)	The target groups of the project are approximately 200,000 mothers and newborns in the four provinces of Kampot, Kampong Speu, Kampong Thom and Kep as well as their family members – partners and fathers in particular. The central focus is on those 15% of mothers (who according to WHO's policy recommendations need emergency care) and on the number of newborns at risk, which is difficult to estimate. The target group for early detection of disabilities in children are those aged 0 to 5 years

Executive summary

Description of the project

The performance of the Cambodian health system and the health status of the population have largely improved over the last decade (e.g. nearly all health-related Millennium Development Goals were achieved by 2015). The Cambodian Demographic Health Survey 2014 suggests that maternal mortality has decreased from 320 deaths per 100,000 to 170 per 100,000 live births in 2014. In the same period, neonatal mortality has dropped from 25 to 18 per 1,000 births. Nevertheless, the quality of health services and the health status of the Cambodian population are still among the lowest in South-East Asia and need further improvement. Whereas the United Nations assume that worldwide around 15% of all deliveries require emergency care in order to prevent death or disability, the Cambodian public health system does not yet sufficiently respond to the respective health care needs (e.g. only 8 out of 23 facilities selected by the Ministry of Health–MoH) as emergency centres met the minimum requirements during a national assessment in 2015, and only 23.6% of complications were treated in Emergency Obstetric and Neonatal Care (EmONC) centres at the end of 2014, (see GIZ-Muskoka 2014a). Only a few families are therefore benefiting from maternal and child health (MCH) services to date (a core problem according to the module offer). Thus, health services in Cambodia are often not capable of preventing avoidable deaths and impairments related to pregnancy and delivery.

The specific object of this evaluation is the TC measure 'Improving Maternal and Newborn Care', referred to here as 'the project', also the 'Muskoka project'. The project is carried out by GIZ on behalf of BMZ, with GFA International consulting group (in a consortium with the Cambodian non-governmental organisation Reproductive and Child Health Alliance (RACHA) and the Liverpool School of Tropical Medicine) as subcontractor for the implementation of two outputs. It has a duration of 3 years and 4 months from 01/2016 to 04/2019 and an overall budget of EUR 5,121,942. Its design was based on the results of the predecessor project, Rights-based Family Planning and Maternal Health (PN 2011.2194.6) carried out from 08/2012 to 12/2015.

The **objective** of the project is: 'Families with small children are increasingly benefiting from improved quality health services for mothers and children.' As a result, mothers and newborns receive better care, particularly in emergencies, while the special needs of persons with disabilities are taken into account. The following output objectives are pursued:

- **Output 1: Quality of emergency care:** 'The quality of maternal and neonatal emergency is improved'.
- **Output 2: Qualification of health staff:** 'Emergency Obstetric and Neonatal Care qualification of health care providers is improved'.
- **Output 3: Disability-friendly organisation of health services:** 'New developed competencies and tools to adapt health services to disability-related needs are introduced'.

The **target groups** of the project are mothers and newborns in the four Cambodian provinces of Kampot, Kampong Speu, Kampong Thom and Kep (a total of approximately 200,000), as well as their family members, partners and fathers in particular. A specific focus is on those 15% of mothers who, according to policy recommendations of the World Health Organization (WHO), need emergency care and on newborns at risk. The target group for early detection of disabilities in children are those aged 0 to 5 years.

Evaluation design

To adequately anticipate results and direct the focus of data collection and analysis, a theory-based approach was applied, based on a reconstructed results model. The evaluation design is based on the principles of contribution analysis and relies predominantly on qualitative methods: semi-structured interviews with key informants and focus groups with staff members of supported health facilities. Since results processes at this level are non-linear and to a certain degree unpredictable, the use of semi-structured interviews and focus groups allows for unintended occurrences and results to be identified. Data collection covered the four provinces and all stakeholder groups. Other methods were document analysis (project documentation, partner documents etc.) and secondary data analysis of available monitoring data.

Assessment of relevance

Both modules consistently contributed to the implementation of national policies and strategies. They are aligned with the National Strategic Development Plan (NSDP) 2014-2018, the Health Strategic Plan 2016-2020 (HSP3), the Fast Track Initiative Roadmap for Reducing Maternal and Newborn Mortality (FTIRM) 2016-2020 and the Emergency Obstetric and Newborn Care (EmONC) Improvement Plan 2016-2020. The programme's methodological approach complies with international standards as summarised in the Handbook for Monitoring Obstetric Emergency Care of the WHO, the United Nations Population Fund (UNFPA) and the United Nations Children's Fund (UNICEF). The project objectives are linked to the health-related Sustainable Development Goals (SDGs), particularly to SDG 3.1 'reduce the global maternal mortality ratio' and SDG 3.2 'end preventable deaths of newborns and children under 5 years of age'. From both a sector and a regional/country perspective, both modules correspond with the relevant concepts and strategies of German development cooperation, i.e. of BMZ as commissioning party.

The needs of the final beneficiaries (mothers and newborns) as well as of health care providers as immediate intermediaries are well documented and addressed by the project evaluations. The quality of maternal and newborn care is essential to comply with the basic human right to health; emergency obstetric care deals with live-saving interventions. One output of the project specifically focuses on improving the access of persons with disabilities to health care services and thus contributes to the leave-no-one-behind (LNOB) principle. The inclusion of gender aspects is supposed to be a central aspect of all project activities since risks of childbirth expose women to a particular risk, but gender-transformative elements play a minor role. The given gender marker (GG-2) was not adequately chosen against the background of the actual project approach.

The project is generally well designed to address the core problems and needs of the target groups. The results hypotheses are plausible. The objective of the project was realistic for the clinical aspects and possibly too ambitious regarding the increase of the EmONC coverage.

The project operated in a relatively stable environment and was not exposed to changes in the framework conditions that would have challenged the overall methodological approach. The most significant change was the introduction, from early 2017 onwards, of the so-called National Quality Enhancement Monitoring Tools (NQEMT) to which the project reacted adequately by integrating support to the mechanism into its strategy. There were further significant (though incremental) adjustments of the project concept which were not motivated by external changes but by the recommendations and lessons learnt of a feedback mission carried out in the last quarter of 2017.

The overall rating for the relevance criterion is with 95 points at '**Level 1 – very successful**'.

Assessment of effectiveness

The project achieved two of three module indicators:

- During the project term, the absolute number of treated complicated cases has risen continuously from 2,940 (2016) and 3,125 (2017) to 3,343 (2018), thus reaching a 34.2% of expected obstetric emergencies treated in the project-supported EmONC facilities at the end of 2018. Alternative calculations adjusted to decreasing birth rates show a coverage of 40.7%. However, both values are still falling short of the target (50%).
- Undocumented treatment outcomes for post-partum haemorrhage (PPH) declined from 90% to 7.7% between 2016 and 2018, whereas the proportion of women who had experienced PPH and were discharged with permission has risen from 3.2% to 90.4%. The proportion of (pre-)eclampsia cases with documented treatment of MgSO₄ has risen from 29% in 2016 to 37% in 2017 and 90% in 2018. The proportion of resuscitated newborns with documented survival of 72 hours out of all resuscitated babies increased from 4.3% to 55.4%.
- A screening tool for the early detection of children with disabilities has been approved by the MoH and integrated into the Safe Motherhood Protocol for Health Centres, the Minimum Package of Activities for Health Centres and the benefit package of the Health Equity Fund, a nationwide social assistance programme for the poor.

The contribution analysis does not provide sufficient evidence for the project effect on EmONC coverage. However, it does provide conclusive evidence that supported quality improvement processes and skill development measures for EmONC staff (doctors, nurses, midwives) significantly contributed to better treatment outcomes.

No unintended negative results of the project could be identified during the evaluation. On the other hand, the project has achieved further positive results which are not reflected in the results matrix but do not constitute unintended effects since they are planned for as integral parts of the methodological approach. These additional results include in particular the macro-level results regarding the project contribution to maternal and newborn care (MNBC)-related policies, strategies and guidelines.

Effectiveness is rated with 84 points at '**Level 2 – successful**'.

Assessment of impact

The Muskoka project exclusively focuses on one out of four indicators of the German Social Health Protection Programme in Cambodia which pursues the reduction of maternal and neonatal mortality. The target value, however, is based on the Demographic and Health Survey (CDHS) which is updated every 5 years but not available at the time of the evaluation. Still, project impact on maternal and neonatal mortality can be quantitatively approximated through the reduction of fatalities in the project-supported facilities. Between 2016 and 2018, monitoring data shows that the in-house mortality of newborns in the supported facilities dropped drastically during the last year of the project, falling from a mortality of 19.7% of newborns within 72 hours after resuscitation in 2016 (12 out of 61 cases) to 1.4% in 2018 (1 out of 74 cases). No fatal cases were registered in the second half of 2018. Further treatment outcomes of live-saving interventions have been registered though not for the full timeline of the project. Overall, in 2018, 324 cases were admitted during the first semester and 425 cases during the second. Meanwhile in the same period, documented cured cases increased from 56.8% (first half) to 72.0% (second half), fatal cases dropped from 6.2% (20 cases) to 1.6% (7 cases). Since maternal mortality rates are lower than newborn mortality rates, there are not enough cases to see a similar trend for maternal mortality.

The contribution analysis does provide conclusive evidence for the project effect on the reduction of the in-house mortality in EmONC centres. Systemic impact through contributions to national policies, strategies and guidelines is likely to be achieved to a certain extent but cannot be traced due to the complexity of the involved stakeholder landscape.

Impact is rated with 83 points at **'Level 2 – successful'**.

Assessment of efficiency

The methodological approaches of both modules could be implemented without major cost-related constraints, be it regarding the thematic scope, the regional scope or the implementation of the instrument concept. Resources were shifted flexibly between the outputs according to current states of implementation (i.e. achievement of milestones), identified needs and arising opportunities which in this case is considered a success factor. Resource distribution complied with the 'maximum principle'.

The maximisation of outputs was to some degree compromised by false assumptions on documentation quality at the health facility level, which resulted in failed assessments of treatment patterns and uneven implementation of planned activities in the first half of the project. After an internal feedback mission, operational planning was adjusted accordingly, and heavy efforts were undertaken to close existing gaps. However, efficiency losses during the first half of the project, related to frictional losses in the management of the outsourced outputs, may have impeded further maximisation and consolidation of results.

The results chains of both major thematic areas (two outputs focusing on EmONC vs one output focusing on disability inclusion) are only partly integrated and address different target groups so that the distribution of inputs necessarily implies trade-offs. Against this background, the distribution of two-thirds of the project budget for EmONC-related interventions vs slightly below 30% for the disability-related output seems well balanced; and observed reallocations during the project period are effectively geared towards enhancing the outcome. Coordination with other development partners was sought where relevant and no synergy losses due to insufficient coordination and cooperation were observed. Particularly the cooperation with the German TC measure 'Social Health Protection Project' (SHP) in the field of quality improvement (QI) leveraged significant synergies.

Efficiency is rated with 80 points at **'Level 3 – rather successful'**.

Assessment of sustainability

For each thematic area, the capacity development strategy of the project considered specific measures to anchor achieved results in the partner structure. The programme invested significant efforts in building ownership and strengthening existing partner mechanisms responsible for the continuation of achieved results, for example:

- The establishment and strengthening of QI structures (e.g. provincial core teams, hospital core teams)
- Strongly improved documentation of patient registers
- The provision of skill labs and organisational integration into the provincial referral hospitals and selected referral hospitals
- The strengthening of the midwifery alliance core teams (MCAT) mechanism
- The strengthening of practical/clinical elements in the pre-service training of the Kampot Regional Training Centre (KpRTC)
- Contributions to wide range of national policies, strategies and guidelines in the field of maternal and newborn care

- The integration of a disability service directory into the website of the government's Disability Action Council

However, the extent to which these mechanisms are functional and results are effectively anchored in the partner structure varies. Partners are facing resource-related challenges (e.g. lack of budget positions for participations in trainings, meetings etc.), organisational challenges (e.g. lack of strategic planning for expanded coverage of the skill labs), leadership challenges (e.g. varying leadership quality for QI processes at EmONC facilities) and others. Health centre staff interviewed during the field mission have expressed their confidence to retain improved capacities and continue their application (with low case load per facility being a key challenge).

Sustainability is rated with 75 points at '**Level 3 – rather successful**'.

The summarised results for module are:

Criterion	Score	Rating
Relevance	95 of 100 points	Very successful
Effectiveness	84 of 100 points	Successful
Impact	83 of 100 points	Successful
Efficiency	80 of 100 points	Rather successful
Sustainability	75 of 100 points	Rather successful
Overall Score and Rating for all criteria	83.4 of 100 points Average Score of all criteria (sum divided by 5, max. 100 points see below)	Successful

100-point-scale (Score)	6-level-scale (Rating)
92-100	Level 1 = very successful
81-91	Level 2 = successful
67-80	Level 3 = rather successful
50-66	Level 4 = rather unsatisfactory
30-49	Level 5 = unsatisfactory
0-29	Level 6 = very unsatisfactory

1 Evaluation objectives and questions

1.1 Objectives of the evaluation

The evaluation objective is the technical cooperation (TC) module, 'Improving Maternal and Newborn Care', carried out by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the Federal Ministry for Economic Cooperation and Development (Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung, BMZ). The module is part of the Cambodian-German Social Health Protection Programme in Cambodia which supports key health reforms, for example in the fields of health financing, health service quality, local governance in health, and maternal and newborn care. In this context, the module to be evaluated is closely interlinked with another TC module, Social Health Protection (SHP, project number/PN 2017.2006.9), particularly regarding the quality improvement (QI) of health services.

The central project evaluations of BMZ-commissioned projects perform three basic functions: (1) to support evidence-based decision-making, (2) promote transparency and accountability, and (3) facilitate organisational learning by contributing to knowledge management. The module has been selected as part of the random sample; that is, the selection has not been driven by further specific situational evaluation objectives.

Because the module ended in April 2019, this evaluation is considered the final one, which implies a focus on verifying the effects of the technical cooperation and promoting accountability. Since no follow-up module was envisaged, the evaluation pursues a summative function. However, selected evaluation results for relating to the quality of health service may also be fed back to the still ongoing SHP project. Partners interviewed during the inception mission (18–23 February 2019) did not express additional evaluation objectives.

1.2 Evaluation questions

The project is assessed on the basis of standardised evaluation criteria and questions to ensure comparability by GIZ. This is based on the [OECD/DAC criteria](#) for the evaluation of development cooperation and the [evaluation criteria for German bilateral cooperation](#): relevance, efficiency, effectiveness, impact and sustainability. Aspects regarding the criterion coherence, complementarity and coordination are included in the other criteria.

Specific evaluation dimensions and analytical questions are derived from this given framework by the GIZ. These evaluation dimensions and analytical questions are the basis for all central project evaluations in GIZ and can be found in the evaluation matrix (annex 2). In addition, the contributions to Agenda 2030 and its principles (universality, integrative approach, 'leave-no-one-behind', multi-stakeholder partnerships) are also taken into account as well as cross-cutting issues such as gender, the environment, conflict sensitivity and human rights. Also, aspects regarding the quality of implementation are included in all OECD/DAC criteria.

Project staff and national partners were consulted for additional evaluation questions during the inception mission. Since data regarding the achievement of outcome (i.e. module objective) indicators is available, questions raised focused on the extent to which partners will be able to retain achieved capacities, assure routinely application in clinical practice and maintain core processes (e.g. continuous quality improvement, Midwifery Coordination Alliance Team (MCAT) meetings, Hospital Core Team and Provincial Core Team meetings) that are defined by national guidelines and policies and implemented or strengthened during the project term. The questions refer to key interventions that are already considered in the results chain of the project. The durability of the respective results will be a focus of the sustainability analysis.

2 Object of the evaluation

2.1 Definition of the evaluation object

Framework conditions and core problem according to the module offer

The performance of the Cambodian health system and the health status of the population have largely improved over the last decade (e.g. nearly all health-related Millennium Development Goals were achieved by 2015). The Cambodian Demographic and Health Survey (CDHS) 2014 suggested that maternal mortality decreased from 320 deaths per 100,000 to 170 per 100,000 live births in 2014. In the same period, neonatal mortality dropped from 25 to 18 per 1,000 births (for further data, see NIS et al. 2015). Nevertheless, the quality of health services and the health status of the Cambodian population are still among the lowest in South-East Asia and need further improvement. While the United Nations assume that worldwide around 15% of all deliveries require emergency care in order to prevent death or disability (see UNICEF/WHO/UNFPA 1997: 23f; WHO/UNFPA/UNICEF 2009:113), the Cambodian public health system does not yet sufficiently respond to this need (e.g. during a national assessment in 2015, only 28 out of 110 facilities selected by the Ministry of Health (MoH) as Emergency Obstetric and Neonatal Care (EmONC) centres were found to be fully functional, see MoH 2016d: 1f) so that only a few families presently benefit from maternal and child health services (**core problem**). Thus, health services in Cambodia are often not capable of preventing avoidable deaths and impairments related to pregnancy and delivery.

According to the project offer, causes for the core problem are: (a) lack of processes and structures for the continuous improvement of health services; (b) limited knowledge of health staff regarding the implementation of QI processes; (c) limited knowledge of health staff in relevant areas of clinical practice; (d) lack of sufficient and quality pre- and in-service training; (e) lack of awareness among the target group; and therefore (f) low utilisation of emergency care and low case load in EmONC facilities; (g) unsuitable incentive and referral systems; and (h) health services not adapted to the needs of persons with disabilities.

With the initiative of the MoH for the reduction of maternal and newborn mortality (Fast Track Initiative: Road Map for Reducing Maternal & Newborn Mortality, FTIRM) and the national plan for emergency obstetric care for mothers and newborns (EmONC Improvement Plan), the Royal Government of Cambodia aims to improve maternal and newborn emergency care. The National Disability Strategic Plan 2014-2018 strives for equitable access to health services as well as physical and mental rehabilitation for persons with disabilities. As a result, the number of facilities offering comprehensive or basic EmONC care increased from 44 to 147 between 2009 and 2015. But this constitutes only 50% of the identified needs, and only a quarter of the facilities were fully functional in 2015 (i.e. performing all signal functions¹ as stipulated by national guidelines).

The responsibility for this area lies with the Ministry of Health. Under the MoH, the National Maternal Child Health Centre (NMCHC) is the authority to issue guidelines for maternal and child health (MCH). It also functions as a clinic and hosts various national programmes. Despite sound competencies, the NMCHC is heavily overburdened due to its diversity of functions and the centralisation of EmONC trainings. At the

¹ A health facility must perform seven signal function to qualify as a Basic EmONC facility: (1) Intramuscular and intravenous administering of antibiotics, (2) intramuscular and intravenous administering of oxytocics, (3) intramuscular and intravenous administering of anticonvulsants (MgSO₄), (4) manual removal of placenta, (5) manual vacuum aspiration, for post abortion care, (6) assisted vaginal delivery by vacuum extraction (venthouse), and (7) basic newborn resuscitation with Ambu bag and mask. Two additional signal functions must be performed to qualify as a Comprehensive EmONC facility: (a) Caesarean section, and (b) blood transfusion.

provincial government level, the MCH units within provincial Departments of Health are responsible for the sector management, including the monitoring of the quality of health services at district and facility level.

TC measure: improving maternal and newborn care

The specific object of this evaluation is the TC measure 'Improving Maternal and Newborn Care', referred to as 'the project', also 'Muskoka project', in the following. The project is carried out by GIZ on behalf of BMZ and with the Ministry of Health of the Kingdom of Cambodia as national executing agency. GFA consulting group (in a consortium with the Cambodian non-governmental organisation Reproductive and Child Health Alliance (RACHA) and the Liverpool School of Tropical Medicine) participated as subcontractor for the implementation of two outputs. It had a **duration** of 3 years and 4 months from 01/2016 to 04/2019 with an overall **budget** of EUR 5,121,942. It was designed on the results of a predecessor project, Rights-based Family Planning and Maternal Health carried out from 08/2012 to 12/2015.

The **objective** is: 'Families with small children are increasingly benefiting from improved quality health services for mothers and children'. This implies that mothers and newborns receive better care, particularly in emergencies, while special needs of persons with disabilities are taken into account. The project consists of the following outputs:

- **Output 1 – Quality of emergency care:** The quality of maternal and neonatal emergency care is improved.
- **Output 2 – Qualification of health staff:** Emergency obstetric and neonatal care qualification of health care providers is improved.
- **Output 3: Disability-friendly organisation of health services:** New developed competencies and tools to adapt health services to disability-related needs are introduced.

The **target groups** (final beneficiaries) of the project are mothers and newborns in the four Cambodian provinces of Kampot, Kampong Speu, Kampong Thom, and Kep (a total of approximately 200,000), as well as their family members (partners, fathers). A focus is on those 15% of mothers who – according to policy recommendations of the World Health Organization (WHO) – need emergency care, and on newborns at risk, whose number is difficult to estimate. In terms of disability prevalence, national statistics provide varying figures, reaching from 4-10% of the population. The figure most probably underestimates the real disability prevalence considering that WHO estimates that persons with disabilities comprise 15% of the global population. The target group for early detection of disabilities in children are those aged 0 to 5 years. Within the partner system, staff of the supported health facilities as well as members of involved civil society organisations, particularly disabled people's organisations, benefit from human capacity development interventions.

A **multi-level approach** is adopted in which the project primarily advises partners in the project provinces to improve maternal and neonatal emergency care as well as early identification of disabilities in children while at the national level, MoH receives support to develop and review national guidelines and strategies.

2.2 Results model including hypotheses

Adjusted results model

The project has elaborated specific results models for each output and further thematic focus areas (behaviour change communication, disability mainstreaming, gender mainstreaming) which adequately map the methodological approach and results hypotheses. For the purpose of this evaluation, however, these results models contain too much detail (over 80 items without activities). Therefore, a more condensed overall results

model for the entire project has been elaborated by the evaluators and discussed with project team for its inputs and agreement. The numbering of described changes refers to the visualisation in figure 1.

Under **Output A**, the project aims at improving the **quality of maternal and neonatal emergency care**. By advising technical and managerial staff in the MCH units of the Provincial Health Departments (PHD)² and Operational Districts (ODs), the health administration's capacities to carry out national quality assessments (Level-2-assessments, EmONC assessments, quality assessments according to Health Equity and Quality Improvement Project/H-EQIP) and related activities (monitoring and supportive supervision of health facilities, planning capacities) is strengthened (see results model, **A-1**). At facility level, project support focuses on referral hospitals and health centres that offer emergency obstetric and neonatal care. Closer cooperation between different departments (obstetrics, paediatrics, operating theatre) and professional groups (medical doctors, midwives, nursing staff and anaesthetists) is stimulated and institutionalised through working groups for continuous quality improvement, thus facilitating the establishment of QI processes (**A-2**) for maternal and newborn health care. This results in an improved quality of maternal and neonatal emergency (**A-3**). The intended output is the improvement of quality of care, measured by the proportion of premature newborns receiving Kangaroo Mother Care (i.e. early skin-to-skin contact plus breastfeeding, see MoH 2017d and 2017e) and improved quality assessment scores for mother and newborn care in selected referral hospitals. At the outcome level, better treatment for PPH, eclampsia and neonatal resuscitation (module objective indicator **M-2**) is pursued. According to the risk analysis in the project offer, there is a moderate risk regarding the willingness of specialist and executive staff in health facilities to engage in continuous quality improvement. This risk is intensified by conflicts of interest resulting from common dual (i.e. private and public) practice among health care providers.

The objective of **Output B** is to improve the **qualification of health staff**. For this purpose, the project closely cooperates with provincial and district health authorities, training institutions and health facilities to implement specific EmONC-related trainings and coaching and strengthen the training capacities in the project area (**B-1**). The wide array of support measures consists, among others, of key interventions such as caesarean section trainings and coaching, training for blood bank and laboratory staff, and EmONC trainings for doctors, nurses and midwives. Organisational capacity development aiming at the institutionalisation of training capacities focuses on the set-up and functioning of skill laboratories within the hospital training units and the establishment of trainer pools through training-of-trainer approaches.

The Kampot Regional Training Centre for Nurses and Midwives (KpRTC) receives support to improve the quality of pre-service training for midwifery and nursing students and to intensify the cooperation with hospitals, i.e. the provincial referral hospital in Kampot, with regard to pre- and in-service training. Additionally, the project supports the institutionalisation and functioning of lateral learning platforms as foreseen by existing national guidelines, i.e. the Midwifery Coordination Alliance Team meetings or the Provincial and Hospital Core Teams (**B-2**), thus further aiming to contribute to the improvement of EmONC qualifications of health care providers (**B-3**) and the dissemination of capacities in the project region. The results interact with Output A (i.e. the improvement of health service quality/**A-3**), aiming towards the same outcome: improved clinical treatment (**M-2**) and the decrease of neonatal deaths (**A-4**). As quality of care (including its documentation) increases and health staff is better capacitated to recognise and adequately deal with emergencies, the proportion of obstetric emergencies treated in EmONC facilities also increases (**M-1**). To achieve the intended results, it is assumed that the MoH and other development partners allocate adequate financial resources for the infrastructure and procurement related to emergency obstetric care and for the in-service training of health staff. A risk for the

² Cambodia is divided into 24 provinces and the special administrative unit Phnom Penh. For primary and secondary health care provision, service areas are further divided into 81 Operational Districts. Provincial health departments operate a provincial hospital and govern several ODs, whereas the ODs manage public primary and secondary health care providers in their areas.

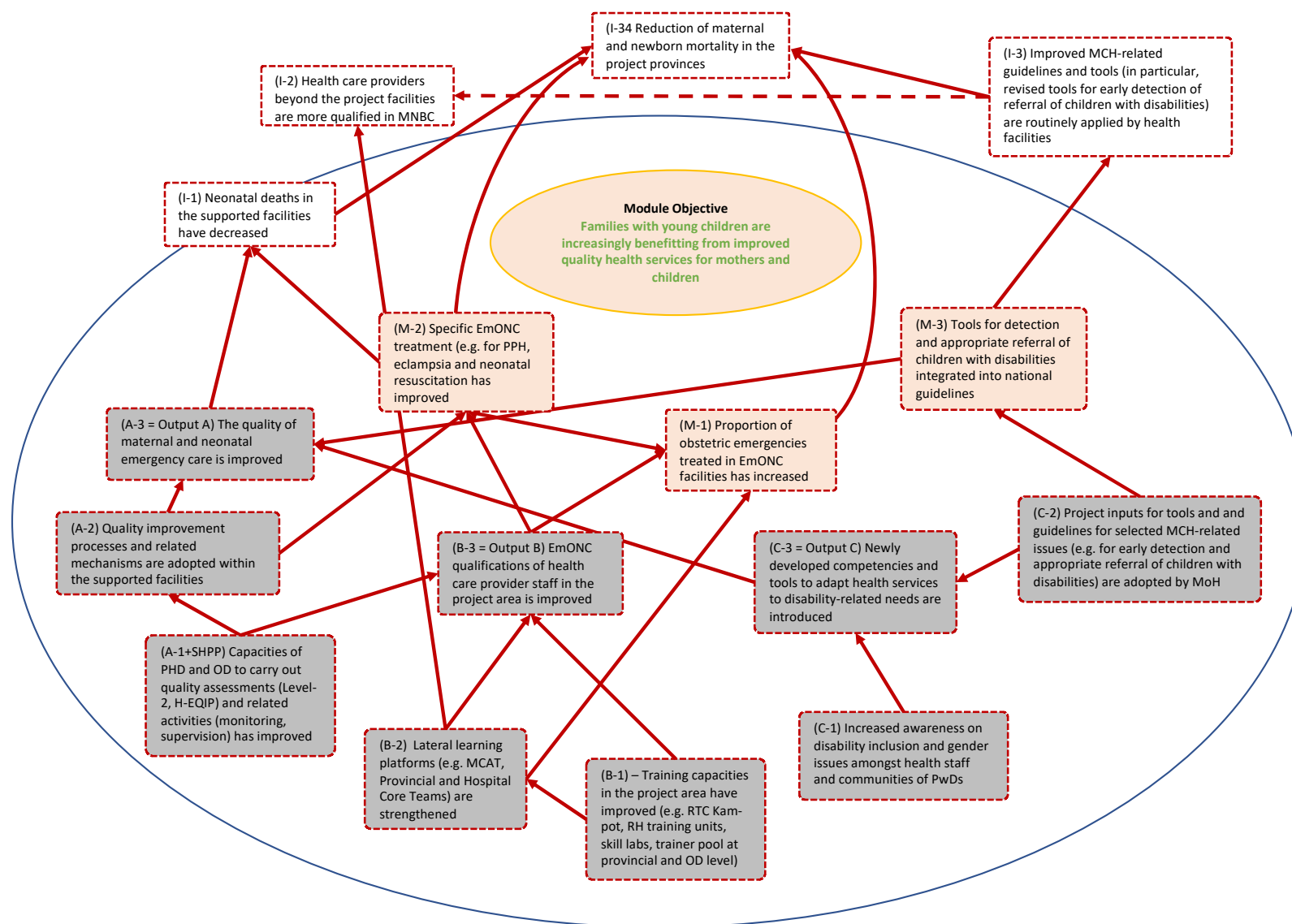
effectiveness of pre-service training support is the dependency of the regional training centres on national level decision-making resulting in a very limited regional/local influence on the quality and contents of training.

In addition to the supply-side capacity development represented in the graphic results model, additional measures are directed towards demand-side-oriented behaviour change communication, promoting topics of maternal and newborn care (MNBC) and the inclusion of persons with disabilities in communities among different target groups (activities not assigned to one specific output, therefore not inserted in the aggregated graphic results model). In particular, improved interpersonal communication skills of service providers for patient counselling and facility-based education sessions contribute to better health-seeking behaviour of target groups. This allows for a timely anticipation of complicated deliveries and their subsequent referral to EmONC facilities, thus additionally contributing to indicator **M-1** (proportion of obstetric emergencies treated in EmONC facilities).

Output C (**disability-friendly organisation of health services**) aims to introduce newly developed competencies and tools to adapt health services to disability-related needs. On the one hand, civil society organisations are supported to enable them to promote dissemination of knowledge across self-help groups of persons with disabilities (PwD) with regard to MCH and sexual and reproductive health and rights, and thus increase the awareness among PwD and health staff on disability inclusion (**C-1**). Thus, an enabling environment is created that facilitates the access of PwD to MCH care so that they equitably benefit from improved health care services (see Output A and B). On the other hand, tools for early detection of disabilities in children which were developed in the predecessor project are revised, including the development of a toolkit which outlines the responsibilities of the parties involved (health centre, hospital, community-based rehabilitation, cost bearers) as well as the referral processes and corresponding working tools. The project provides inputs for tools and guidelines for selected MCH-related issues (e.g. for early detection of appropriate referral of children with disabilities) (**C-2**). In combination with increased awareness on disability inclusion and the sensitisation of health staff to improve their attitude towards PwD (**see C-1**), it ensures the availability of competencies and tools to adapt health services to disability-related needs (**C-3**) and the integration of the respective tools into national guidelines (**C-4**). The intended results in the area of disability inclusion depend on the assumption that the Cambodian government fulfils its obligations in relation to the inclusion of PwD. There is a risk of time delays if the MoH sets other priorities.

The project's **system boundary** is adequately defined in the results model (see figure 1). The project's overarching goal at the clinical level is the expected decrease of in-house maternal and neonatal mortality in the provinces' EmONC facilities (**I-1**). Beyond the clinical environment (the project focuses on meso- and micro-level capacity development (i.e. of subnational administrations, health facilities and local PwD self-help groups) by supporting the implementation of existing national policies. Thus, the outcome is limited to the results achieved in the supported health facilities within the project provinces (i.e. quality improvement, better clinical EmONC practice). Further effects related to the dissemination of capacities, the implementation of improved guidelines and tools, as well as to the target groups' improved health situation, belong to the impact level and are thus not the project's responsibility. At this level, it is expected that learning platforms and improved capacities of subnational administrations contribute to the dissemination of MNBC capacities and thus, to better quality of health care beyond the project facilities (**I-2**). MoH implementation of MNBC-related tools and guidelines (in particular, the revised tools for early detection and referral of children with disabilities – see outcome level **M-2**) assures their routinely application in clinical practice (**I-3**), thus further aiming to contribute to better health care beyond the health facilities directly benefiting from project support. The aggregated result of the project culminates in its contribution to the reduction of maternal and newborn mortality in Cambodia (**I-4**), an indicator of the German-Cambodian Social Health Protection Programme.

Figure 1: Results model of the project Improving Maternal and Newborn Care (PN 2014.2473.8) (summarised during the evaluation, 03/2019)



3 Evaluability and evaluation process

3.1 Evaluability: data availability and quality

Basic documents

All basic documents as defined by the GIZ Evaluation Unit (see table 1) were available for the evaluation. The information provided was exhaustive and the overall quality of the basic documents was good and met the requirements of the evaluation:

Table 1: Basic documents

Basic document	Is available (Yes/no)	Estimation of actuality and quality	Relevant for OECD/DAC criterion
Projects proposal and overarching programme/fonds proposal (etc.) and the 'Ergänzende Hinweise zur Durchführung' / additional information on implementation	Yes	Programme Proposal, Part A; Project Proposal, Part B ('Additional information on implementation' not compiled during the appraisal phase)	Point of reference for all OECD/DAC criteria
Modification offers where appropriate	Yes	Two change offers from 2017 and 2018	Reference for all OECD/DAC criteria
Contextual analyses, political-economic analyses or capacity assessments to illuminate the social context	Yes	Political-Economic Analysis of 11/2016 and publications about health system development in Cambodia (Annex 1)	Relevance
Peace and conflict assessment (PCA Matrix), gender analyses, environmental and climate assessments, safeguard & gender	Yes	Gender Analysis (March 2015), Peace and Conflict Assessment (July 2015)	Relevance
Annual project progress reports and, if embedded, also programme reporting	Yes	Progress reports, Part A and Part B for years 2016 to 2018	Effectiveness, Impact, Sustainability
Evaluation reports	Yes	Predecessor Project Evaluation Report (May 2015)	Predecessor, Relevance
Country strategy BMZ	(Yes)	BMZ Strategy Paper Priority Area Health (2014-2018), EU Cooperation Strategy 2017-2019, sectoral and thematic strategy papers	Relevance
National strategies	Yes	HSP3, FTIRM, EmONC Improvement Plan and others	Relevance
Sectoral/ technical documents (please specify)	Yes	Several analytical and descriptive documents for each intervention area	Effectiveness, Impact, Sustainability
Results matrix	Yes	In line with current methodological approach	Effectiveness, Impact, Efficiency
Results model(s), possibly with comments if no longer up-to-date	Yes	Detailed results models for each output, adequately reflecting current approach; a more general and summarised overall results model for the entire project has been elaborated by the evaluation team	Relevance, Effectiveness, Impact

Basic document	Is available (Yes/no)	Estimation of actuality and quality	Relevant for OECD/ DAC criterion
Data of the results-based monitoring system (WoM) ³	Yes	Data mostly available for the project term; documentation of the methodology and rationale for indicator adjustments during the project term	Effectiveness, Impact
Map of actors ²	Yes	Available; includes description of stakeholders and functional analyses	(background for all criteria)
Capacity development strategy/overall strategy ²	Yes	CD-Matrix 01/2015 (SWOT)	Relevance, Effectiveness, Impact, Sustainability
Steering structure ²	Yes	Graphical representation including key processes and functional descriptions	Efficiency, Sustainability
Plan of operations ²	Yes	Comprehensive and costed plans of operations for years 2016 to 2018	Effectiveness, Efficiency
Cost data (at least current cost commitment report / Kostenträger-Obligo Bericht).	Yes	Data gathering for the efficiency tool complete, incl. assignment of cost data to outputs	Efficiency
Excel sheet assigning working-months of staff to outputs	Yes		Efficiency
Documents regarding predecessor project(s) (please specify if applicable)	Yes	Project Offer, Results Matrix (2012), Change Offer (2014), Progress Reports (2013-2015), Project Evaluation (May 2015), Final Report (July 2016)	Predecessor(s)
Documents regarding follow-on project (please specify if applicable)	No	(no follow-on project)	(-)

Baseline and monitoring data including partner data

The methodology of the project monitoring is documented in a results-based management (RBM) overview document. Among other aspects, the document contains detailed descriptions of data sources, their scope and limitations, contextualisation and operationalisation of the indicators and clarification of terms. In addition to and/or for more detailed operationalisation of results matrix indicators, several sub-indicators have been added.

Monitoring data was handed over to the evaluation team both in an RBM Excel sheet and as raw data. It includes baselines for most indicators. Sources are, at first, based on existing partner systems (e.g. hospital data/patient files, Health Management Information System). Since data at facility level, however, is usually incomplete and flawed, the project supported the respective data management processes. In addition, some indicators required generation of primary data by the project (e.g. for skill assessments, awareness studies).

Some qualitative aspects exceed the scope of quantitative indicators and had to be covered by qualitative data collection methods, e.g. questions related to the organisational and institutional capacity development supported by the project. Though these qualitative dimensions have not been formally integrated in the project monitoring (e.g. through the use of 'Kompass'-tools such as periodic interviews of selected stakeholders), other formats were used to assess perceptions in the partner system and adjust ongoing project interventions or exit strategies (e.g. feedback mission by an external consultants, regular results dissemination workshops with discussion of

³ Mandatory for all projects based on 'Quality Assurance in Line (Qsil)'

next steps, sustainability/exit-strategy planning workshops with partners). Overall, the existing qualitative analyses provided important insights in results processes and a good starting point for the interviews and focus group discussions held with a wider range of stakeholders during the main mission of the evaluation.

Further data which was collected

Further documents were retrieved during the evaluation process (e.g. updated monitoring data and progress reports, policy documents of the Cambodian government and of international development partners, see annex 1). Additional primary data collected during the field phase aimed at a better understanding of the perspectives (needs, expectations, and value judgements) of stakeholders and of results processes. Therefore, primary data collection by the evaluators was based on qualitative methods (semi-structured interviews and group discussions). The evaluators used the stakeholder maps and the results model to determine the organisations and stakeholder that should participate in the evaluation. The list was submitted to the programme to identify and add the interviewees and to discuss the pertinence of the list.

The selection of interview partners and focus group participants covered the national, provincial and district/facility level. All four provinces were covered. Locations and interviewees were selected according to the following criteria:

- National level
 - GIZ project staff: project managers (GIZ and consulting responsible for Outputs A and B), further interviews and/or workshops with technical project staff for each thematic area
 - National partners: executives of all relevant departments of the MoH and other involved institutions (e.g. National Paediatric Hospital) related with thematic areas of the project
 - International development partners: selection according to (a) intensity of coordination/cooperation; or (b) the further role for the sustainability and dissemination of project results
 - Additional stakeholders according to their relevance for specific project results
- Provincial level
 - Interviews with provincial health departments of all provinces (directors, MCH chiefs)
 - Interviews with related staff of all provincial referral hospitals (with health workers: focus groups)
 - Additional stakeholders according to their relevance for specific project results
- Operational Districts and facility level
 - Coverage of one OD and related EmONC facilities plus – in two provinces one additional EmONC facility per province (resulting in a coverage of 10 out of 25 EmONC facilities, including the provincial referral hospitals)
 - Selection of hospitals with higher vs lower case load
 - Interviews and focus group discussions with related staff of the selected ODs and health centres

Table 2: Stakeholders involved in the evaluation

Organisation/ company/ target group (Please do not list persons or functions)	Overall number of persons involved in evaluation (gender disaggregation: female/male))	Participation in interview (no. of persons)	Participation in focus group discussion (no. of persons)	Participation in workshops (no. of persons)	Participation in survey (no. of persons)
Donors <i>World Health Organization (WHO), Korea International Cooperation Agency (KOICA)/Korea Foundation for International Healthcare/ (KOFIH), United Nations Fund for Population Activities (UNFPA), Japan International Cooperation Agency (JICA), Humanity and Inclusion (formerly: Handicap International) (HI), Czech Embassy / Head of development cooperation</i>	6 (3/3)	6 (6 interv.)	-	-	
GIZ <i>GIZ-Muskoka (officer responsible for the commission, long-term experts, development advisers, staff members of the consulting consortium, responsible for Outputs 1 and 2); GIZ Social Health Protection module</i>	9 (1/8)	5 (5 interv.)	-	7 (1 worksh.)	-
Partner organisations (direct target group) <i>Ministry of Health: (a) National Maternal and Child Health Centre – NMCHC (director, vice chief of neonatal care unit–NCU), (b) Department of Hospital Services (director) National Paediatric Hospital (NPH) (Hospital director, head of surgery department, staff member working with the integrated expert) Provincial health departments (PHD) of the four project provinces: directors/deputies and MCH chiefs Selected Operational District chiefs, MCH chiefs, hospital directors or deputies, trained coaches from MCH unit Provincial Referral Hospitals (PRH) of Kampot, Kampong Thom and Kampot (Kep does not have a PRH): hospital directors or deputies, maternal & paediatric ward/neonatal care units (chiefs and doctors, midwives) Selected health centres: health centre chief, doctors, midwives</i>	64 (30/34)	21 (17 int.)	43 (10 groups)	-	
Civil society and private actors <i>Cambodian Disabled People's Organisation; disabled people's organisations (DPOs) at provincial level (interviews or group discussions with members); Epic Arts; Reproductive and Child Health Alliance (RACHA): director, midwife</i>	8 (3/5)	8 (6 interv.)	-	-	-
Final beneficiaries (indirect target groups) <i>No primary data collection at target group level (covered by monitoring data and operational</i>	-	-	-	-	-

3.2 Evaluation process

The evaluation process comprised an inception phase (inception mission 18–23 February 2019, final draft of the inception report on 13 May 2019, approved on 22 May 2019), a field phase (23 May to 5 June 2019) and a reporting phase (adjusted deadlines for the of the evaluation report: first draft by 19 July, approval of evaluation report by 20 September 2019). The stakeholders of the evaluation coincide with the project stakeholders (see section 2.1 and table 2). Apart from the data-gathering process during the evaluation phase, selected key stakeholders (e.g. project staff, political/national partners) were involved through personal interviews during the inception mission to express knowledge interests for the evaluation. Following the demand of the political partner who preferred personalised feedback over a broader workshop, key findings of the evaluation were discussed bilaterally with the director of the National Maternal and Child Health Centre (NMCHC) as a key representative of the political partner. A separate debriefing presentation was held for GIZ staff (former officer responsible for the commission of the Muskoka TC module and of the 'Social Health Protection' TC module).

The evaluators' key tasks were:

- *International evaluator (Klaus-Peter Jacoby)*: Coordination of the evaluation process and communication with GIZ, evaluation design, data collection, presentation of results to the political partner and GIZ (SHP) and the report writing (inception report, evaluation report and by-products);
- *Local evaluator (Chean Rithy Men)*: Critical feedback for the abovementioned tasks and providing contributions agreed with the evaluation team leader, document and secondary data research in the partner country (between on-site missions), preparation of the evaluation mission agenda, data collection (during evaluation mission), conducting selected focus group discussions in Khmer.

While document and secondary data analysis were distributed among the evaluators, most interviews and stakeholder discussions were conducted together by the evaluation team; perceptions of the evaluators were constantly triangulated through feedback sessions at the end of each day.

4 Assessment of the project according to OECD/DAC criteria

4.1 Long-term results of predecessor(s)

The project 'Improving Maternal and Newborn Care' builds on the results of the predecessor project 'Rights-based Family Planning and Maternal Health' that took place from 08/2012 to 12/2015.

Evaluation basis and design for assessing long-term results of the predecessor(s)

The predecessor project's objective was: 'The quality and use of maternal and child health care, and rights-based family planning services in the target Operational Districts of Kampot, Kep, Kampong Thom, and Kampong Speu are improved'. While the focus on MNBC was maintained in the follow-on project (with gradual thematic adaptations, such as a stronger focus on neonatal care, the continuum of care, continuous QI processes), family planning interventions were phased out. The project provinces remained unchanged.

The evaluation analyses the impact and sustainability of the predecessor, taking into account the continuity of interventions in the area of MNBC, which makes it difficult to specifically attribute results to the current project vs the predecessor project. Intended results at the impact level (i.e. the reduction of maternal and neonatal mortality) remain mostly the same, despite some changes in the programme objective and activities. The objective indicators of the predecessor can partly be used to assess the sustainability understood as the durability of the outcomes achieved:

The assessment applies a mix of (a) updating information on previous project indicators (where available); and (b) an analysis on how the current project builds on the results of the predecessor. It relies on document analysis and triangulates initial findings with opinions of project staff and key stakeholders. The key informants do not vary from the stakeholders of the current project.

Assessment of the predecessor project's results

Compared to the current TC module, the predecessor included a stronger focus to the demand-side by including the strengthening of family planning services and sexual and reproductive health services. On the

clinical side, the predecessor already focused on EmONC facilities in the same provinces, in particular on improving the EmONC health staff practical/clinical skills (see project offer, GIZ-Muskoka 2012a). Based on the predecessor module objective indicators, further results – sustainability and/or the continuity of interventions within the follow-on measure – are summarised as follows:

- *Former module objective indicator 1: Problem-solving capacity, clinical skills and practice of professional staff in all EmONC health facilities (midwives, nurses, and doctors) in the four target provinces are improved (measurement of practical skills of trained health staff based on average value).*

The indicator was pursued through training and coaching for midwives and other professional groups (e.g. anaesthetists, neonatologists). It also supported the MCAT as regular, supposedly quarterly platform for continuous training and professional exchange of midwives. Trainings were oriented towards the compliance with the signal functions of EmONC facilities (see GIZ-Muskoka 2016b).

The operationalisation of the indicator is not fully comprehensible based on the project reporting and does not provide differentiated information on the gradual improvement of specific skills. Later assessments during the follow-on measure also revealed that there was an issue with weak data quality at the facility, both regarding internal registries and information available or generated for monitoring purposes. There is thus no basis for valid, evidence-based long-term comparison of health staff skills throughout the two modules. Even though, according to the final report, the indicator was achieved (see GIZ-Muskoka 2016b), it presents a mixed picture, indicating increased skills in training-based assessments, but significantly lower results for clinical practice. This was partly attributed to the low caseload in basic EmONC (BEmONC) facilities (see GIZ-Muskoka 2016b).

Intended impact coincides with the follow-on measure. It therefore cannot be assessed separately and will be discussed in section 4.4. This applies also for the sustainability criterion (section 4.6) since the follow-on measure seamlessly continued and expanded the support to the qualification of EmONC health staff.

- *Former module objective indicator 2: The number of female patients using the supported emergency obstetric centres increases from 854 births/month to 1,668 births/month and at least 90% of are documented in a correctly filled out partogram.*

During the project term it has risen from 854 in the base year to 1,343 in 2015 (with an increase of correct partograms from 64% to 90%); an increase of 57% but still short of the target value since a high proportion of deliveries takes place outside the EmONC facilities (i.e. in other health centres, in private facilities or even outside the project provinces in Phnom Penh, see GIZ-Muskoka 2016b).

Because the indicator measures neither the coverage of skilled birth attendance nor the coverage of actual obstetric emergencies, its relevance is not fully clear. The follow-on project focused more pertinently on the percentage of expected obstetric emergencies carried out in the project facilities (see section 4.3, module objective indicator M1). The related expected impact and sustainability, however, are the same for the predecessor and the follow-on project and therefore assessed in sections 4.4 and 4.6 respectively.

It should be noted that for both operationalisations of the use of health services (all deliveries at EmONC facilities versus coverage of expected obstetric emergencies), a mix of demand-side and supply-side interventions would be required to achieve an optimal result. In this sense, the broader approach of the predecessor was a plausible response, whereas the narrower clinical focus of the follow-on measure provides for improving treatment outcomes at the EmONC facilities rather than for increasing coverage (see also the contribution analysis in section 4.3). However, one should bear in mind that the focalisation of the follow-on measure was also a resource-based decision, in line with the priorities of the political partner (Int-GIZ, Int-NP).

- *Former module objective indicator 3: The contraceptive prevalence for modern family planning methods in the project provinces has increased by 6 percentage points.*

Results for this indicator were inconclusive at the time of final project report since it is based on the Cambodian Demographic Health Survey (CDHS) which is carried out every 5 years, and updated data was not available at that time. Since the published version of the latest CDHS 2014 does not differentiate data for the provincial level, nor does it provide for a subsequent assessment of the indicator achievement. However, it shows that the contraceptive prevalence for modern family planning methods has risen nationwide between the CDHS 2010 and the CDHS 2014 from 35% to 39%, i.e. in dimension close to the target value though not related to project interventions. Thus, even if the target value was achieved, it would still be doubtful to what extent it would reflect a project outcome or simply the result of general change process stimulated by government policies. Because the project outcome cannot be determined, impact and sustainability cannot be assessed either. The objective is no longer pursued by the follow-on module (see above).

Two further indicators for the inclusion of PwD were added through a change offer at the end of 2014 (see GIZ-Muskoka 2014b) with first interventions being integrated in the operational planning for 2015. With one year left, only initial interventions were carried out to provide a basis for the respective output of the follow-on project. Therefore, impact or sustainability criteria do not yet apply:

- *Former module objective indicator 4: At least 50% of all newborns in the EmONC facilities in Kampot and Kampong Thom are routinely screened and, in the case of abnormalities, referred.*

In cooperation with Handicap International, the project started revising a screening tool and toolkit for the early detection of children with disabilities. Since the revision of the tools was still ongoing at the end of the predecessor, only pilot trainings were carried out in selected EmONC facilities in Kampot and Kampong Thom, rather oriented towards feedbacking experiences to the revision process than to achieve coverage. Therefore, any later outcome of this line of intervention would be a result of the follow-on module.

- *Former module objective indicator 5: 70% of the members of selected local disabled people organisations (DPOs) and civil society organisations are capacitated to communicate sexual and reproductive health and rights messages to affected persons.*

This outcome was not measured during the predecessor and only preparatory interventions had taken place. There are therefore no results available to assess for impact and sustainability. A study was carried out in the last quarter of 2015 to serve as a baseline for the follow-on project.

Beyond the results captured by the indicators, the predecessor participated in policy and strategy formulation at the national level. Key outcomes were the approval of the Fast Track Initiative Road Map for Reducing Maternal and Newborn Mortality (FTIRM) 2016-2020 and the EmONC Improvement Plan 2016-2020 – the two key policy documents which define the objectives and approaches pursued by the Cambodian government in this field. The extent to which technical advice offered by the project has materialised in specific contents of the abovementioned policy documents cannot be determined as it was part of collaborative effort of all involved development partners. Other development partners as well as national partners confirmed a significant presence of GIZ in policy discussions but could not exemplify specific contributions attributed to GIZ (Int-DP).

4.2 Relevance

The evaluation dimensions of the relevance criterion cover (a) the alignment of the project objectives with relevant strategic frameworks; (b) the extent to which the project strategy matches the needs of the target groups; (c) the pertinence of the project design to achieve the chosen project objective (results logic); and (d) the adequacy of conceptual adaptations to changing framework conditions.

Evaluation basis and design for assessing relevance

To evaluate the alignment with relevant strategic frameworks (Dimension 1), the project concept (see project offer GIZ-Muskoka 2014a) is assessed against the extent to which the methodological approach is consistent with (a) the strategic orientation of the German development cooperation, namely the thematic strategy papers, policies and guidelines of the BMZ (i.e. German Development Policy in the Health Sector, strategy paper 'Priority Area Health' for Cambodia, current health programme framework, BMZ Asia strategy); (b) international standards (specifically, standards published by the WHO and United Nations organisations); and (c) the strategic orientation of the Cambodian government (i.e. National Strategic Development Plan 2014-2018, Health Sector Strategic Plan 2016-2020, Fast Track Initiative Road Map for reducing Maternal and Newborn Mortality 2016-2020, EmONC Improvement Plan 2016-2020, National Disability Strategic Plan 2014-2018). To evaluate the extent to which the project strategy addresses the target groups' core problems (Dimension 2), the project concept is assessed on the basis of existing sector analyses (in particular, EmONC assessments quoted in MoH 2016d) and the extent to which those analyses – triangulated with opinions of key stakeholders (health administrations and facilities) – confirm the core problem. Evaluating the pertinence of the project design (Dimension 3) includes the assessment of the actual project logic, i.e. the results model, results hypothesis and relevant framework conditions. The assessment further considers the extent to which the potential effectiveness of key interventions is based on previous evidence and/or validated through monitoring or operational research during implementation. Lastly, the evaluation assesses the main changes in the context and how the project reacted to these changes. Evidence on necessary conceptual adaptations (Dimension 4) is drawn from the progress reporting and triangulated with the perspectives of involved partners regarding the adequacy of the adaptations.

The methodological approach of the evaluation is similar for all abovementioned dimensions of the relevance criterion. The assessment relies on document analysis and triangulates findings with opinions of project staff and key stakeholders. For research questions related with the overall strategic orientation of the programme, key informants included the national partner organisations and representatives of subnational administrations; whereas the extent to which the project concept matches the need of the target groups was addressed in interviews and focus group discussions at health facility level and with members of organisations of PwD.

Relevance dimension 1: The project concept is in line with the relevant strategic reference frameworks

The National Strategic Development Plan (NSDP) 2014-2018 contains a section on 'ensuring enhanced health services' which specifies the goal of 'further improving reproductive, maternal and infant/child health (...) through enhancing quality and effectiveness of reproductive, maternal, infant and child health care services' (NSDP 2014: 68). The NSDP explicitly refers to MNBC services and enhancing their quality through strengthening clinical techniques and management capacity of health staff. The 17 NSDP indicators explicitly refer to reproductive, maternal and child health (among them, several indicators to which the project directly or indirectly contributes).

Sectoral goals are more specific in the third Health Strategic Plan 2016-2020 (HSP3) which envisions that 'all people in Cambodia have better health and wellbeing, thereby contributing to sustainable socio-economic development' (MoH 2016a: 5). In the section 'specific health needs of the population', reproductive, maternal, newborn and child health is addressed as one out of five priority areas. HSP3 defines seven strategic areas, among them 'Health Service Delivery' and 'Health Workforce Development'.

The Cambodian MoH has formulated further policies and strategies for specific areas of the HSP3. The relevant framework for the project is the Fast Track Initiative Road Map for reducing Maternal and Newborn Mortality (FTIRM) 2016-2020. The project contributes to three of five core objectives of the FTIRM, namely improving skilled birth attendance, emergency care and newborn care. It has put further emphasis on behavioural change communication which is addressed as an important enabling factor in the FTIRM. In

addition, the EmONC Improvement Plan 2016-2020 highlights the need to improve the quality of education, services and referrals, to achieve a more equitable distribution of EmONC and better financial access. Following the demand of the political partner, the project was designed to contribute to the EmONC Improvement Plan 2016-2020 by focusing on the improvement of service quality through skill development (supervision, mentoring, coaching) and continuous quality improvement. In essence, the project has been designed as an implementation support for the EmONC Improvement Plan in the four project provinces (Int-GIZ, Int-NP). Although the sector has progressed significantly in enhancing the coverage of EmONC facilities, only 28 of 110 basic EmONC facilities were found to be fully functional in a review in April 2015 (see MoH: 2016: 1). Therefore, the project focused on enhancing the quality of care in the already existing EmONC facilities.

The focus of the project on the inclusion of PwD is mandated by several of the previously mentioned policy and strategy documents which emphasise the inclusiveness of the health system. The HSP3 highlights 'Equity' as one of five overarching 'Working Principles' ('removing barriers in access to and utilisation of quality health services, especially by poor and vulnerable people, including persons with disability', MoH 2016a: 64). The project focus is further mandated by specific legal and strategic frameworks, such as the National Disability Strategic Plan 2014-2018 (Strategic Objective 2: 'Provide persons with disabilities with equal access to quality health services as well as physical and mental rehabilitation', MoH 2013a: 26). The National Strategy for Reproductive and Sexual Health in Cambodia 2017-2020 emphasises the importance of physical screening of newborns for disabilities as part of postnatal care and calls for strengthening reproductive and sexual health information and services among vulnerable groups such as PwD.

International standards and guidelines for EmONC are clearly defined and also applied in the conceptualisation of the FTIRM and the EmONC Improvement Plan. It applies also for the internationally established signal functions for basic and comprehensive EmONC (see Handbook for Monitoring Obstetric Emergency Care of the WHO, the United Nations Population Fund/UNFPA and the United Nations Children's Fund/UNICEF of 2009). The project approach is specifically designed to develop the skills of health staff and enhance service quality and thus enable health care providers to perform EmONC services in line with international standards.

The project objectives are linked to the health-related SDGs, particularly to SDG 3.1 'reduce the global maternal mortality ratio' and SDG 3.2 'end preventable deaths of newborns and children under 5 years of age'. The SDGs are being integrated within the Cambodian planning and policy-making framework through the NSDP 2019-2022 and related Budget Strategic Plans which, at the time of the evaluation, were still at the draft stage (Int-GIZ). Health-related targets have already been integrated into the current Health Strategic Plan 2016-2020 (see MoH 2016a: 66f) and include contributions to the abovementioned MCH-related goals.

Due to the clinical focus of the project, interactions with other sectors are not relevant for the assessment. Interactions between the different dimensions of sustainability are also limited. The module objective is related to the social dimension and contributes to a fundamental social right (human right to health). This objective also depends on economic factors such as the removal of economic barriers for the access to health services; however, this dimension is addressed by the other German TC module, the Social Health Protection Project.

From both a sector and a regional/country perspective, both modules correspond with the relevant **concepts and strategies of German development cooperation**, i.e. of BMZ as commissioning party. The 'German Development Policy in the Health Sector' of 2009 formulates several principles, objectives and intervention areas that coincide with the approach of the evaluated project: (a) the basic human right to the highest attainable standard of health (including medical care during and after pregnancy and childbirth); (b) the inclusion of vulnerable groups (poor, disabled and others); and (c) a focus on enhancing the availability of trained health workers (see BMZ 2015a). In absence of a current BMZ country strategy for Cambodia, the design of the project has been guided by a sector strategy, i.e. the Strategy Paper for the Priority Area Health –

Social Protection for the Poor and Vulnerable, 2014-2018' (see GDC 2014a), updated by the new programme framework ('Part A') of 2015 (GDC 2015a). Both include targets related to maternal and newborn mortality and provide for improving the quality of essential health services and enhancing the skills of health professionals. They also formulate a rights-based approach which includes mainstreaming the specific needs of PwD. The BMZ Action Plan for the Inclusion of Persons with Disabilities 2013-2015 served as another strategy document, calling for a twin-track approach addressing the inclusion of PwD through specific activities as well as mainstreaming efforts. The health sector in Cambodia was chosen as one of the priority areas to foster the inclusion of PwD in BMZ partner countries. The BMZ's Asia Strategy names 'improving health' as one out of seven priority issues for the GDC (see BMZ 2015a).

Altogether, the project is consistently aligned with the relevant strategic reference frameworks at all levels (national and regional policies and strategies, international standards, and strategies of German development cooperation) and fully complies with the criteria of this assessment dimension (rating **30 of 30 points**).

Relevance dimension 2: Suitability to address problems/needs of the target groups

The needs of the final beneficiaries (mothers and newborns) are well documented and addressed by the project. The quality of MNBC is essential to comply with the human right to health; emergency obstetric care deals with live-saving interventions. Most health service providers in Cambodia do not have the capacity to render the required services according to current clinical standards and are, therefore, not in a position to prevent avoidable deaths and impairments related to pregnancy and delivery. Thus, the inability of more than three of every four EmONC facilities in 2015 to perform the seven signal functions directly correlates with (potentially fatal) health risks for the target group. The **core problem** stated in the project offer ('only few families are benefiting from maternal and child health services to date', see Muskoka 2014a), the lack of clinical skills of doctors, midwives and nurses, and the lack of QI mechanisms (e.g. regarding clinical standards, processes, cooperation between different professional groups, referral systems) are thus evident.

The project had a strong focus on the health facility level and provided intensive and continuous coaching, mentoring and training to the 25 EmONC facilities of the four project provinces (out of 110 countrywide at the beginning of the project, see MoH 2016d). The project assessed the needs of each health facility thoroughly to offer tailor-made support, oriented towards the compliance with clinical guidelines and the requirements of quality assessment methodologies applied by the Ministry of Health. While the needs of the target groups (see section 2.1) were assessed based on existing sector analyses and strategies, the needs of the health staff in the project-supported facilities were verified during the evaluation mission. All interviewed health staff at subnational level – including both at health facilities and health administrations – confirmed that the project interventions had indeed dealt with the most pressing issues of the health care providers and the involved staff (Int-PRH, Int-OD, Int-HC, FG-HC). Interviewees and focus group participants also pointed to other root causes of the core problem which are outside the scope of the project (e.g. related to infrastructural and financial constraints, Int-OD, Int-HC, FG-HC) but were aware about the respective limitations of a TC project and did not mention any area that it neglected.

One project output specifically focuses on improving the access of **persons with disabilities** to health care services. On the one hand, it addresses the competencies and attitudes of health staff towards PwD and the knowledge of persons with disabilities about sexual and reproductive health and rights. On the other hand, the revision of screening tools for early detection of children with disabilities pursues improving the attention for special health needs. The latter intervention area addresses children from 0 to 5 years which reaches out beyond the core target group of mothers and newborns but addresses an essential health need as identified in the current Health Sector Programme (see MoH 2016a) and the National Strategy for Reproductive and Sexual Health in Cambodia. The focus on improving the access of PwD to health care is consistent with the **leave-no-one-behind (LNOB)** principle and is also emphasised both in the NSDP (see RGC 2014) and the Health Strategic Plan. Though focusing on PwD, it is further relevant to assure the access of poor populations in

general to comply with the LNOB principle. Whereas the Muskoka TC module has a strong focus on the supply-side (i.e. the quality of health care and clinical skills of service providers), the removal of financial barriers for poor populations is addressed through health financing mechanisms (i.e. social health assistance and insurance) supported by the other TC module 'Social Health Protection' (see also section 4.5 regarding synergies within the German development cooperation). The Muskoka TC module complements these demand-side measures to a limited extent through facility-based behaviour change communication measures (see the results model in section 2.2).

The **inclusion of gender aspects** is a central aspect of the project. Childbirth exposes women to a particular risk, MCH-interventions therefore contribute to reducing a gender-specific disadvantage. Behavioural change interventions of the project also addressed men, as fathers and partners. From the perspective of the overall project, this was a side-topic though. It does not lead to classifying the project as gender transformative – which in fact would be a requirement for the given gender marker (GG-2). Team interviews and discussions (Int-GIZ), however, led to the conclusion that the project followed the agreed mandate and that the gender marker was not adequately chosen against the background of the actual project approach, which is characterised by a gender-sensitive proceeding rather than a gender-transformative one (i.e. the assessment of the gender marker reveals a formal classification error, rather than a design flaw).

In summary, the strategy of the module was generally well designed to address the target groups' core problems/needs. The core problem is highly relevant ('live-saving interventions') and the project addresses a pertinent selection of crucial factors. Disability inclusion interventions are consistent with the LNOB principle. The project approach is not gender transformative, but the intended outcome reduces a gender-specific disadvantage. Overall, the suitability to address the needs of the target groups is rated with **28 out of 30 points**.

Relevance dimension 3: The project concept is adequately designed to achieve the chosen project objective

The results hypotheses (see section 2.2) are plausible and have been elaborated by the project through further detailed results models of each intervention area. It must be noted that the module objective ('target groups increasingly benefit from improved MCH services') has two dimensions: (1) benefiting from better services and (2) more members of the target group benefiting. The first dimension is linked to Output A (quality of maternal and neonatal emergency care) and Output B (qualification of health staff). The causal relationship between the two clinical outputs and the respective outcome dimension is very immediate and does not depend on uncertain causal hypotheses. Of course, the health facilities are confronting numerous challenges, partly within the scope of the project (e.g. the functioning of QI support processes between provincial, district and facility level), partly outside (e.g. infrastructural and financial constraints). External factors are, however, more relevant for the sustainability of achieved results (see section 4.6) than for immediate outcome.

Regarding the second outcome dimension (i.e. the increased proportion of complicated cases that are actually treated in EmONC facilities) the causal link is less distinct. The caseload would increase either (a) to the extent that other health facilities better diagnose complicated cases and take better referral decisions, or (b) to the extent that pregnant women by themselves (based on the results of antenatal care visits) visit EmONC centres for delivery. The project carried out a set of behaviour change communication measures sensitising at community level about issues related to sexual and reproductive health, the importance of antenatal care and danger signs for anticipating complicated deliveries. However, compared to the health facility support, target groups were less specific and more external factors affect the intended behaviour (e.g. other information campaigns on the importance of antenatal care, incentives for institutional delivery). It is therefore doubtful if the behaviour change communication measures – characterised by some stakeholders as less intense and less focused than the health facility support (Int-GIZ, Int-DP) – can have a sizeable effect on anticipating complicated cases (see also the contribution analysis in section 4.3). Project staff stated that more

comprehensive behaviour change communication measures would have added value to the methodological approach but also emphasises that further investing in that area was not feasible within the budgetary scope (Int-GIZ).

A third dimension of the module objective relates to early detection of disabilities in children. Anticipating the lengthy processes for achieving a ministerial approval of guidelines and tools, the respective targets at output and outcome levels are limited to the endorsement of the respective products (output level: toolkit for the early detection of disabilities; outcome level: integration of the revised screening tool into national guidelines). This result may be a precondition for but does not yet constitute target group benefits.

All in all, the objective of the project was realistic for the clinical aspects and possibly too ambitious regarding the increase of the EmONC coverage. This correlates with the specificity and plausibility of the results hypotheses which was high for Output A (quality) and Output B (skill development) and less evident for Output C (disability inclusion) and behaviour change communication. Given the strong emphasis on enhancing the capacities of the EmONC centres, the project design was generally adapted to the module objective (**17 out of 20 points**).

Relevance dimension 4: The project concept was adapted to changes in lines with requirements

The project operated in a relatively stable environment and was not exposed to changes in the framework conditions that would have challenged the methodological approach. The most significant change was the start, from 2017 onwards, of the Health Equity and Quality Improvement Project (HEQIP) of the MoH (financed by a multi-donor trust fund, including the World Bank, Australia South Korea and Germany/KfW). HEQIP applies the 'National Quality Enhancement Monitoring Tools' (NQEMT) including periodic quality assessments and performance grants as incentive payments for the health care providers.

Before HEQIP, annual assessments were carried out as peer reviews by the provincial health departments: (1) the so-called 'level-2' assessment, with the Muskoka project focusing the MNBC-related dimensions in comprehensive EmONC facilities; and (2) EmONC assessments for all 25 supported EmONC facilities. The TC module supported the alignment with the respective requirements (e.g. clinical guidelines and vignettes) and also used the annual assessment results for monitoring purposes. With the introduction of the NQEMT, the project started to align its own coaching approach with the coaching and assessment processes of the new national mechanism.

There were further significant (though incremental) adjustments of the project concept which were not motivated by external changes but by the recommendations of a feedback mission in the last quarter of 2017. At that time, the project still faced several implementation issues (see section 4.5), was lacking behind in the indicators and facing false initial assumptions regarding the data quality and data availability at health facility level. The mission resulted in pertinent adaptations of the goal structure and interventions, for example, an adjustment of the module objective indicators (formalised through a change offer to BMZ in May 2018), an increased focus on problematic areas, in particular the quality of neonatal care, a stronger focus on data management within the partner system, and additional operational research.

To sum up, the original project approach has been mostly implemented according to the project offer considering the abovementioned adaptations to the module objective indicators which thus become the evaluation basis for the effectiveness assessment. Gradual adjustments adequately responded to external conditions (the implementation of the NQEMT) and learning experiences during the project term (the results of the mentioned feedback mission) (**20 out of 20 points**).

Criterion	Assessment dimension	Score & Rating
Relevance	The project concept is in line with the relevant strategic reference frameworks	30 of 30 points
	The project concept matches the needs of the target group(s)	28 of 30 points
	The project concept is adequately designed to achieve the chosen project objective	17 of 20 points
	The project concept was adapted to changes in line with requirements and re-adapted where applicable	20 of 20 points
Overall Score and Rating		Score: 95 of 100 points Rating: Very successful

4.3 Effectiveness

The assessment of the effectiveness of the two modules takes into account (a) the attainment of the module objective indicators; (b) the extent to which the project's activities and outputs contributed substantially to the observed outcome; and (c) the occurrence of positive or negative unintended results at output or outcome level.

Evaluation basis and design for assessing effectiveness

First, the effectiveness is assessed against the objective and the respective indicators (Effectiveness Dimension 1) according to the evaluation matrix. In general, the current indicators (according to the latest change offer, see GIZ-Muskoka 2018a) comply with SMART criteria. The evaluation assesses the indicator values against the background of further qualitative interviews and focus group discussions with stakeholders of each intervention area to provide a comprehensive picture of the project's outcome.

Table 3: SMART analysis of the module objective indicators

Project objective indicator according to the offer/ original indicator	Assessment according to SMART criteria/assessment	Adapted project objective indicator
Modul objective indicator M1: The proportion of expected obstetric emergencies (Z) treated in EmONC facilities increases from 28% to 50% Base value (2015): 28% (x=2,622 of Z=9,363 expected obstetric emergencies) Target value (04/2019): 50% (x=4,682 of Z=9,363) Source: Assessment of data from Health Management Information at Provincial Health Department level	Specific: partly (see below) Measurable: yes Achievable: yes Relevant: yes Time-bound: yes The number of expected obstetric emergencies is calculated based on the number of expected pregnancies. In the results matrix, numbers from the base year 2014 were set constant. In reality, however, fertility rates are dynamic and have to be	The indicator has not changed. However, results for the static denominator (according to the results data) and the dynamic denominator (according to current population data) will be compared in the analysis, and differences interpreted.

	adjusted according to population data (women in reproductive age and fertility rates).	
<p>Modul objective indicator M2:</p> <p>In each hospital, the PRH Kampot and two additional referral hospitals, three problems (PPH, eclampsia, neonatal resuscitation with bag and mask) related to EmONC are measurably improved</p> <p>Base value (06/2016): 0</p> <p>Target value (04/2019): 3 measurable improvements per hospital</p> <p>Source: Assessments of reports from quality teams / long-term experts with reference to a hospital-specific problem list, taking into account indicators as agreed with the MoH. For 2016, data were taken retrospectively from hospital archives, for subsequent years from PRH registries.</p>	<p>Specific: yes (considering amended sub-indicators introduced with the latest change offer)</p> <p>Measurable: yes (see above)</p> <p>Achievable: yes</p> <p>Relevant: yes</p> <p>Time-bound: yes</p> <p>The original results matrix indicator was still un-specific since it did not properly define the problems to be addressed. The latest change offer, however, introduced a definition of the problems and added sub-indicators for each dimension, including respective baseline and target values.</p>	<p>Original indicator already adjusted by the project (GIZ 2018a: adjusted results matrix as of 8 March 2018).</p> <p>No further adjustment required; amended sub-indicators to be used for the evaluation.</p>
<p>Modul objective indicator M3:</p> <p>MoH integrates revised tools for early detection and appropriate referral of children with disabilities (boys and girls) into national guidelines for safe motherhood and delivery and another national guideline.</p> <p>Base value (2015): 0 (only a test version exists, which is not yet integrated into the national system)</p> <p>Target value (04/2019): 1 (integration completed)</p> <p>Source: Assessment of revised gender-sensitive guidelines</p>	<p>Specific: partly</p> <p>Measurable: yes</p> <p>Achievable: yes</p> <p>Relevant: yes</p> <p>Time-bound: yes</p> <p>The indicator does not measure a benefit for the target group. However, it does pertinently reflect the scope of the respective intervention area and constitutes a relevant outcome if the partner's readiness for implementation is assessed, too.</p>	<p>Indicator is maintained and further triangulated with qualitative analyses regarding the partner's readiness for the implementation of the guidelines (analysis of conducive and hindering factors).</p>

A contribution analysis is used to evaluate if and how the activities and outputs of the project have contributed to the achievement of the project outcomes (Dimension 2). The analysis follows the principles formulated by the commissioning party (see GIZ 2015). The following hypotheses guide the contribution analysis:

1. The adoption of QI processes and related mechanisms (A-2/A-3) combined with improved EmONC qualifications of health care providers (B-3) has improved specific EmONC treatment categories, i.e. for PPH, eclampsia and neonatal resuscitation (M-2).
2. Improved EmONC qualifications of health care provider staff in the project area (B-3) combined with further dissemination of capacities through lateral learning platforms (B-1) increase the proportion of obstetric emergencies that is treated in EmONC facilities (M-1).

The evaluation strategy predominantly relies on qualitative methods such as semi-structured interviews and focus groups with executive and clinical staff of health facilities and provincial health administrations, capturing the knowledge, perceptions and judgements of involved stakeholders. Quantitative data drawn from the project monitoring is used for the assessment of health service quality and clinical treatment. As already foreseen in the inception report, quantitative data for some relevant aspects could not be retrieved during the evaluation (e.g. behavioural change data at target group level).

Regarding the occurrence of unintended results ([Dimension 3](#)), the evaluation distinguishes: (a) anticipated unintended results; (b) unanticipated negative results; and (c) unintended positive results. Unintended results were addressed by open questions to all involved stakeholder groups.

Effectiveness dimension 1: The project achieved the objective on time and in accordance with the project objective indicators

- Assessment of module objective indicator M1: The proportion of expected obstetric emergencies (Z) treated in EmONC facilities increases from 28% to 50%.

Based on the number of women of reproductive age, fertility rates and internationally acknowledged estimates for the percentage of expected obstetric emergencies (15% of the total number of deliveries), the calculation of expected obstetric emergencies resulted in 9,588 in 2014 and was set as a constant denominator in the results matrix of the project. During the project term, the absolute number of complicated cases treated in the EmONC facilities has risen continuously from 2,843 (2016) and 2,938 (2017) to 3,205 (2018), thus reaching a 34.2% of expected obstetric emergencies at the end of 2018:

Table 4: Emergency cases treated in EmONC facilities of the four project provinces (static denominator)

Year (baseline: 2015)	Expected obstetric emergencies (static)	Number of cases treated in EmONC facilities	Percentage of expected cases treated in EmONC facilities
2015	9,363	(-)	28 %
2016	9,363	2,843	30.4 %
2017	9,363	2,938	31,4 %
2018	9,363	3,205	34,2 %

Source: Project-recording from the registry books according to GIZ-Muskoka 2019c

The numbers show a gradual increase of the percentage of expected cases treated in EmONC facilities, but clearly falling short of the target value (50%). However, women of reproductive age and fertility rates are not static, and therefore the number of expected deliveries and emergencies are subject to change. Based on data from the health management information system, calculations carried out by the project suggest a drop of expected obstetric emergencies to 7,867 in 2018. Based on this dynamic denominator, the project-supported EmONC facilities have treated 40.7% of expected obstetric emergencies. This is still **below the target value** but suggests a more **significant increase compared to the baseline** than the calculation based on the static denominator (see table 5). It must be noted, however, that the data basis seems not fully consistent for yearly comparisons and exposed to confounding variables (see, in particular, the significant drop of expected obstetric emergencies from 2016 to 2017).

Table 5: Emergency cases treated in EmONC facilities of the four project provinces (dynamic denominator)

Year (baseline: 2015)	Expected obstetric emergencies (static)	Number of cases treated in EmONC facilities	Percentage of expected cases treated in EmONC facilities
2015	9,363	(-)	28 %
2016	9,588	2,843	29.7 %
2017	7,753	2,938	37,9 %
2018	7,867	3,205	40,7 %

Source: Project-recording from the registry books according to GIZ-Muskoka 2019c

- *Assessment of module objective indicator M2: In each hospital, the provincial referral hospital of Kampot and two additional referral hospitals, three problems (PPH, eclampsia, neonatal resuscitation with bag and mask) related to EmONC are measurably improved.*

As mentioned in the previous section (evaluation basis), the assessment of the indicator is based on three sub-indicators, each one with its own baseline and target values. They refer to the treatment of PPH, pre-eclampsia and neonatal resuscitation. Technically, the sub-indicators measure:

1. The number of women who had experienced PPH and were discharged with permission increases from 3.2% (2016) to 60% (2018).
2. The proportion of women diagnosed as severe pre-eclampsia/eclampsia treated according to guidelines with administration of MgSO₄ increases from 28.6% (2016) to 60% (2018).
3. Number and percentage of babies who survived 3 days and were discharged healthy increases from 44.3% (2016) to 50% (2018).

Regarding **sub-indicator (a)**, 305 cases of PPH were recorded in the three provincial referral hospitals in the project area (Kampot, Kampong Thom and Kampong Speu) from 2016 to 2018. The sub-indicator implicitly provides information of positive treatment outcomes which are a precondition for discharge with permission. In the base year 2016, treatment outcomes were undocumented in over 90% of the cases. As a result of the technical assistance, this percentage sharply declined to 7.7% in the first half and close to zero in the second half of 2018. In parallel the proportion of women who had experienced PPH and were discharged with permission has risen from 3.2% in 2016 to 30.5% in 2017 and 90.4% in 2018. The disaggregation of half-yearly data shows a constant increase over the entire project term and a final value of 95.0% for the second half of 2018. Thus, the **sub-indicator has been overachieved**. It shows an improved management of the maternity registry books rather than changes in actual cure rates, but it is clinically relevant based on the assumption that the discharge with permission presupposes a clinical assessment (see GIZ-Muskoka 2019b and 2019c).

Regarding **sub-indicator (b)**, the three provincial referral hospitals recorded 276 cases of pre-eclampsia and eclampsia from 2016 to 2018. The proportion of cases with documented treatment of MgSO₄ has risen from 29% in 2016 to 37% in 2017 and 90% in 2018, which means that the **sub-indicator has been overachieved**. While in Kampong Thom and Kampong Speu the treatment was documented in 100% of the cases in 2018, there were still some undocumented cases in Kampot (9 out of 25). This gap could be closed though in the second half of 2019 and it can be assumed that currently all three PRH fully comply with the respective guidelines. However, it is not fully clear to what extent the indicator measures improved treatment vs improved case documentation (see GIZ-Muskoka 2019b and 2019c).

Regarding **sub-indicator (c)**, the three PRH recorded 221 cases of neonatal resuscitation from 2016 to 2018. The proportion of resuscitated newborns with documented survival of 72 hours out of all resuscitated babies first decreased from 44.3% in 2016 to 37.2% but could be elevated to 55.4% through intensified technical assistance in 2018, thus **slightly exceeding the target value**. The indicator is tied to the length of treatment since early discharge increases the fatality risk and makes it more difficult to follow up the health condition. The length of treatment fulfilling the criteria of the indicator (i.e. reaching 72 hours) has drastically increased during the last project year from 34.3% in the first to 74.4% in the second half of 2018 (e.g. through counselling on the risks of early discharge). Additionally, since mid-2018, the PRH (except Kampong Thom) have introduced a follow-up of cases that are discharged early on-demand which includes counselling of parents on danger signs and following up the condition of newborns by phone.

Considering the achievement or over-achievement of all three sub-indicators, **module objective indicator 2 meets the target** of three documented improvements related to EmONC treatment.

- ***Module objective indicator M3:** MoH integrates revised tools for early detection and appropriate referral of children with disabilities (boys and girls) into national guidelines for safe motherhood and delivery and another national guideline.*

The project has supported the development of screening tools for the early detection of children (up to 5 years) with disabilities. Two disability screening checklists, one for newborns (0–28 days) and one for young children (1 month–5 years), were developed. The newborn screening tool was integrated at an early stage (December 2016) into the National Safe Motherhood Clinical Management Protocol for Health Centres, and both have been integrated into the revised clinical guidelines on Minimum Package of Activities for Health Centres (MPA-HC) which were officially launched by MoH in May 2018. The MPA-HC defines the services provided at health centre level, consisting mainly of preventive and basic curative services (see GIZ-Muskoka 2019b). Health services that are part of MPA-HC are also accessible for the poor population since they are covered by the benefit package of the Health Equity Fund (HEF) through which poverty card (IDPoor) holders access free health basic health care (see also section 4.5 on impact). Thus, module **objective indicator M3 has been achieved**.

In close cooperation with the Ministry of Health, the National Paediatric Hospital, NMCHC and Handicap International, and further consultations with WHO, Save the Children and Plan International, the project developed in parallel a training toolkit for the clinical application of the guidelines. The approval process was time-consuming and did not conclude before January 2019 (though compliant with the related output-indicator 3.1) so that initial trainings of health staff could only be sporadically supported by the project (covering 126 staff members from 56 hospitals and health centres according to the final progress report – see GIZ-Muskoka 2019b). At the time of the field mission, first routine applications of the screening tools had only taken place in a few selected facilities in Kampot and Kampong Thom while the implementation process in other provinces was not yet initiated (Int-PRH, FG-PRH, Int-OD, Int-HC, FG-HC).

In summary, one module indicator (M1) was not fully achieved and two indicators achieved (M2 and M3). While the sub-indicators for M2 were somewhat overachieved, the late achievement of M3 creates certain risks for the achievement of an actual systemic outcome beyond the formal indicator achievement (see also section 4.6). All in all, however, the critical aspects are outweighed by the positive achievements **(34 of 40 points)**.

Effectiveness dimension 2: Activities and outputs of the project contributed sustainably to the project objective achievement

- (1) The adoption of QI processes and related mechanisms combined with improved EmONC qualifications of health care providers (B-3, output) has improved the specific EmONC treatment categories, i.e. for PPH, eclampsia and neonatal resuscitation (outcome).***

The results hypothesis focuses on the combined result of the closely related outputs A (Quality of emergency care) and Output B (Qualification of health staff). While Output A has a stronger focus on the organisational and the process dimension of quality improvement, Output B targets personnel skills of doctors, midwives and nurses. Though there was a distinct set of activities leading to each output, they were also closely intertwined since, for example, quality assessment processes supported through Output A actually measure the clinical practice of skills acquired through Output B. Subsequently, key interventions and respective results within the two areas are summarised:

Quality of emergency care

- Together with the TC module ‘Social Health Protection’ (PN 2017.2006.9) the project has supported advocacy meetings and workshops to align QI approaches to the nationwide Health Equity Quality Improvement Project (HEQIP), and the set-up of specific QI structures for the area of newborn care.

This included the strengthening of the so-called provincial core teams at the PHD level, hospital core teams at the three PRH of Kampot, Kampong Thom and Kampong Speu, and QI teams in the EmONC facilities. The project assisted the hospitals in building capacities for planning and checking according to the plan-do-check-act cycle, thus building management capacities and assuring the formulation of QI plans. Key results of this support were a significant improvement of treatment documentation and an increased capacity to conduct both level-2 and HEQIP assessments (Int-GIZ, Int-PHD, Int-OD, Int-HC, FG-HC). As a result, average assessment scores for the level-2 exams have increased in the project-supported hospitals from 41.3% in the base year (2015) to 80.2% at the end of 2018 (target: 65%). Since level-2 assessments are no longer routinely carried out, the value cannot be compared to non-project facilities. However, the project monitoring suggests that supported EmONC facilities scored significantly higher in HEQIP assessments on the use of clinical vignettes than non-EmONC facilities, and in all facilities visited during the evaluation mission, MCH and NCU units achieved the highest score within their facility (see GIZ-Muskoka 2019c).

- QI support particularly focused on diagnostic capacities and treatment processes of recently established neonatal care units (NCU) of the PRH. As a result, the capacity to manage and analyse patient files has significantly improved (see Int-GIZ, Int-PHD) which is a necessary precondition to analyse the treatment of cases for each diagnosis and identify gaps and non-compliance with clinical guidelines. Although hospital staff in all facilities visited during the evaluation confirm the improved management of patient files, there are still unsolved issues such as the uncertainty of diagnoses due to the lack of technical preconditions (e.g. unavailability of blood cultures for the diagnosis of neonatal sepsis, Int-PHD). Also, the documentation quality still varies among the supported facilities (e.g. due to non-compliance with the use of NCU registry books, see GIZ-Muskoka 2019c).

Qualification of health staff

- In total, six long-term experts were dedicated to training and on-site coaching health staff in the project-supported EmONC facilities on maternal and newborn care. Trainings were tailor-made according to the encountered needs and directed all involved professional groups (i.e. doctors, midwives, nurses, laboratory specialists). Different from existing training by MoH, the project provided coaching on real cases (Int-OD, Int-HC, FG-HC). It was challenging for the project to find the right balance between the mandated focus on obstetric emergencies (which relatively rarely happen due to low caseloads per facility) and developing the capacities to comply with routine practices such as workplace organisation, equipment maintenance, hygiene and others. Although the initial focus was internally assessed as technically too narrow, a more balanced approach was applied from early 2018 onwards. Further specific trainings were provided in C-sections (60 participants), blood bank and laboratory (62 participants) and newborn care (166 participants) (GIZ-Muskoka 2019b and 2019c).
- Three skill labs were established in the PRH of Kampot, Kampong Thom and Kampong Speu, plus two mini skill labs in the referral hospitals of Kep and Baray Santouk. They have been used to a considerable extent (184 sessions in the skill labs and 11 sessions in the mini skill labs in the second half of 2018 only, GIZ-Muskoka 2019c), including for regular MCAT meetings (overall 22 meetings during the project term), which is a mechanism at provincial level mandated by the MoH to foster exchange and horizontal learning among midwives on a quarterly basis (Int-GIZ, Int-PHD). In the project provinces, the participation of midwives and nurses from non-EmONC facilities was also fostered. During the field visits, midwives and nurses from all visited facilities highlighted the extent to which they benefited from both training and coaching measures carried out by the project as well as from MCAT meetings (Int-OD, Int-HC, FG-HC).

The project monitored knowledge scores and assessed skills application in real cases. Assessment scores on assessed signal functions of the EmONC facilities reached an average value of 93% compliance with the respective clinical guidelines (compared to 74.5% in 2016). Output-indicator 2.1 focused on one specific signal function, newborn resuscitation, which improved from 89.8% to 95%

(only a minor variation from the target of 96.75%). For comprehensive EmONC facilities, the capacity score for C-sections has increased from 33.5% to 39.1% (slightly above the target value of 38.83%, output-indicator 2.2). Since the assessments were carried out in the project-supported facilities only, the results cannot be compared to non-EmONC facilities. They correlate, however, with the results of the HEQIP/NQEMT assessments which show a significant difference in the compliance with clinical standards (see the section above on 'Quality of emergency care'). Despite this progress, the supported basic EmONC facilities are still far from fully compliant with all signal functions. At the end of 2018, the 25 facilities performed on average 4.77 out of the 7 signal functions, which is a noticeable improvement but also indicates that further efforts are needed until the facilities become fully functional (Int-GIZ, Int-DP, Int-NP).

The contribution of both outputs to the module objective is very immediate since interventions are taking place in the clinical context (i.e. on-site and real-case coaching). Interviews and focus group discussions with the involved health staff do not indicate the presence of any other confounding variables in the clinical environment (Int-PHD, Int-OD, Int-HC, FG-HC). Midwives and nurses involved in the evaluation state that the coaching and training has greatly enhanced their confidence to adequately manage complicated cases (Int-ID, Int-HC, FG-HC).

A significant, not project-induced influence, is exerted by the introduction of the assessment mechanisms of the HEQIP, including related financial incentives based on the performance in quarterly assessments. Results of an earlier evaluation of the SHP project showed a general pattern of a sharp increase of assessment results between the first and the second assessment even in facilities without external support (GIZ-SHP 2018). The results may not fully correlate with the actual increase in service quality and also originate from not yet being familiar with the assessment methodology. They show, however, that endogenous learning processes occur at least to a certain extent under the HEQIP mechanisms (Int-GIZ, Int-NP, INT-PHD). In the project-supported facilities, this process was further catalysed through specific coaching on the HEQIP assessment methodology and related clinical guidelines. Among the interviewees and focus group participants, there is a tendency to consider assessment results as a proof/measurement of increased capacities, whereas the capacities as such are mostly attributed to the project support (Int-PHD, Int-OD, Int-HC, FG-HC).

Consequently, when comparing the contribution of the two outputs on the treatment quality as measured by module objective indicator M2, interviewed health staff emphasises the effect of the skill development measures (training, coaching, MCAT meetings) over the support to QI processes – except for the improved documentation and management of patient files, which is now understood as an necessary condition to provide adequate treatment (Int-OD, Int-HC, FG-HC).

Summing up, the contribution analysis concludes that the hypothesis can be sustained for both assumed factors, though to a different extent: Stakeholders attribute a higher weight on the skill development than on structural QI mechanisms. Compared to endogenous learning processes stimulated by the HEQIP mechanisms, the project outputs are predominant for explaining the treatment quality outcome.

(2) Improved EmONC qualifications of health care provider staff in the project area (B-3, outcome) combined with further dissemination of capacities through lateral learning platforms (B-1, output) increase the proportion of obstetric emergencies that is treated in EmONC facilities (M-1, outcome).

The hypothesis suggests that two causal mechanisms contribute to an increase of the proportion of obstetric emergencies that is treated in EmONC facilities: (1) the assumption that an acknowledged improvement of the service quality in EmONC centres would act as a pull-factor either for referrals or for pregnant women directly visiting EmONC centres for possibly complicated deliveries; and (2) the assumption that project-supported capacity building mechanisms, by focusing on EmONC centres, also involved sufficient spill-over effects to

further health centres in the project provinces, to increase the diagnostic capacity (i.e. the detection of danger signs and anticipation of complicated cases) and thus the referral of cases to the EmONC facilities, either precautionary or during/after complicated deliveries.

The first assumption is not supported by the available evidence. Although the number of obstetric emergency cases treated in EmONC facilities (see analysis of indicator M1) equals not more than 40% of the expected number, it also represents 95.9% of those cases registered in the project provinces, that is, nearly the entire *detected* complicated cases were treated at EmONC facilities (GIZ-Muskoka 2019c). A comparison of this figure with the baseline and subsequent years shows that this value has been fairly stable and had already reached 95% at the beginning of the project. This means it was highly probable that a diagnosed complicated case was referred to an EmONC facility right from the beginning and has not changed. In other words, complicated cases are sent to the EmONC facilities in line with their mandate and function within the health system and do not depend on perceptions of the service quality.

Regarding the second assumption, midwives and nurses of non-EmONC facilities have been reached through two channels: (a) MCAT meetings have been established by the MoH as a horizontal learning mechanism which may also include non-EmONC facilities; (b) skill labs are supposed to reach out beyond the EmONC facilities and also provide training or coaching to other health centre staff.

The extent to which the skill labs (which sometimes also host the MCAT meetings) reached out towards other health centres varied among the three PRH. Whereas Kampong Thom was visited by 60 health professionals from non-EmONC facilities, the skill labs in Kampot and Kampong Speu have mostly been used for staff of the PRH only. In Kampong Speu, only one session for staff of other facilities (both EmONC and non-EmONC) has been reported. Similarly, Kampot reports 17 participants from other facilities (both EmONC and non-EmONC) (GIZ-Muskoka 2019c). Intentions of further reaching out to health centres have not yet materialised (Int-PHD). Thus, the scope of skill-lab activities beyond the EmONC facilities (or even beyond the PRH themselves) is not sufficient to explain variations in diagnostic capacities of non-EmONC health centres and the number of detected complicated cases to be referred to the EmONC centres. Thus, the hypothesis must be rejected.

Beyond the variables involved in the assessed hypothesis, further influence on the outcome variable may be exerted by the project's behaviour change communication measures. The project supported the implementation of facility-based sensitisation events, dealing with topics such as antenatal care, postnatal care and danger signs of newborns and mothers. In total, 3,420 participants (20% men) were reached in 61 villages. While contributing to anticipatory health-seeking behaviour around delivery and, thus, potentially contributing to the module objective, no outcome monitoring was carried out (e.g. influence on the compliance of pregnant women with the antenatal care schedule). Despite the significant number of people reached, the quantitative scope of the activity has most probably not been sufficient to explain variations of the respective indicator 1.

Overall, hypothesis one, regarding the project contribution on the improvement of medical treatment, has been clearly confirmed. Hypothesis two, regarding the project contribution to an increased proportion of complicated cases treated at EmONC centres, has partly been rejected (regarding the relationship between service quality and case load) and partly cannot be sustained by sufficient evidence (regarding the influence of behaviour change communication measures). The results of the contribution analysis also correlate with the degree of goal attainment, i.e. with the size of the increase of treatment variable compared to the limited, gradual improvement of the case load. Considering the fact that the project interventions clearly focused on increasing the capacity of EmONC centres, and to a much lesser extent on contributing capacities of other health centres and surrounding stakeholders, the first hypothesis is weighted higher for the assessment. Altogether, the contribution of the project to the assessed results is rated with **22 out of 30 points**.

Effectiveness dimension 3: No project-related negative results have occurred – opportunities for further positive results have been seized

No unintended negative results of the project could be identified during the evaluation. Occasional critical observations were related to impact or sustainability expectations but did not include negative side effects. On the other hand, the project has achieved further **positive results** which are not reflected in the results matrix but do not constitute unintended effects since they are planned for as integral parts of the methodological approach. These additional results include in particular the macro-level results regarding the project contribution to MNBC-related policies, strategies and guidelines beyond the explicitly mandated revision of the disability screening tool, see also section 4.4 on impact).

Whereas the results monitoring covers all indicators plus additional activity and output-indicators at health facility level, **risk monitoring** took place rather informally (Int-GIZ), based on the perceptions of staff members during implementation processes, and was not documented. However, the status of risks as identified in the results matrix was either evident (e.g. regarding government engagement in financing aspects or complementary activities) or partly situated within the system border of the project and therefore addressed by project interventions implicitly monitored (e.g. the health facility staff commitment to QI methods, the institutional capacities of the Kampot regional training centre or the acceptance of sensitisation messages in context of behaviour change communication). No evidence has been found during the evaluation mission that the lack of formal risk monitoring has had an adverse effect on the contribution of the project to intended outcome.

Considering the absence of unintended negative results and of adverse effects of the rather informal risk monitoring, the evaluation dimension is rated with **28 of 30 points**.

Criterion	Assessment dimension	Score & Rating
Effectiveness	The project achieved the objective (outcome) on time in accordance with the project objective indicators*	34 of 40 points
	The activities and outputs of the project contributed substantially to the project objective achievement (outcome)*	22 of 30 points
	No project-related negative results have occurred – and if any negative results occurred the project responded adequately	28 of 30 points
	The occurrence of additional (not formally agreed) positive results has been monitored and additional opportunities for further positive results have been seized	
Overall Score and Rating		Score: 84 of 100 points Rating: successful

4.4 Impact

The evaluation dimensions of the impact criterion cover (a) the extent to which overarching development results have occurred or are foreseen; (b) the contribution of the project outcome to the occurred or foreseen overarching development results; and (c) the occurrence of project-related negative or additional, not formally agreed positive results.

Evaluation basis and design for assessing impact

The impact assessment analyses the extent to which overarching development results have occurred or are foreseen (Dimension 1) based on the related indicator of the Social Health Protection Programme: 'Maternal and neonatal mortality of the poor and vulnerable in Cambodia decreases by 2018'.

For the contribution analysis (Dimension 2), two hypotheses were selected considering the following aspects: (1) the reduction of mortality rates as the ultimate goal in the (in-house) clinical context, and (2) the influence on system processes through macro-level interventions:

1. Improved specific EmONC treatment reduces the neonatal deaths *within the supported facilities*
2. The adoption of guidelines and tools for MNBC-related issues facilitates the respective improvement of clinical practice, thus contributing to increasing capacities of health care providers *beyond the project-supported facilities*

Hypothesis (1) was originally operationalised looking at mortality rates at the provincial level. However, this impact is not primarily mediated through further system processes but directly through the reduction of the in-house mortality in EmONC facilities of the project provinces. At the same time, the scope of the interventions (and the mandate) of the project focused strongly on the supported provinces, and mechanisms for spill-over effects to other health service providers were rather limited (see the contribution analysis in section 4.3). Therefore, the reduction of in-house mortality has been chosen as the dependent variable. The hypothesis was originally set for the effectiveness assessment. It is indeed debatable from a methodological viewpoint, if the variable reflects the highest possible outcome since it may be considered situated within the system borders of the project. On the other hand, it lies beyond the module objective indicators and reflects the ultimate goal of the project in the clinical context. The contribution analysis follows the same principles as laid out in section 4.3 (Evaluation bases – Effectiveness) and applies the same methods of data collection. Regarding the occurrence of unintended results (Dimension 3), the evaluation distinguishes: (a) anticipated unintended results; (b) unanticipated negative results; and (c) unintended positive results. Unintended results were addressed by open questions to all involved stakeholder groups.

The data basis differs among the three dimensions. Data for the programme indicator is updated only every 5 years and must therefore approximated through related proxy-indicators (see impact dimension 1). Data for the contribution of in-house mortality is documented in patient registry books and can be drawn from the project monitoring. Data for the contribution to health system processes mostly relies on stakeholder interviews and focus groups.

Impact dimension 1: The intended overarching development results have occurred or are foreseen

- Programme indicator P3: Maternal and neonatal mortality (MMR and NMR) among poor and vulnerable Cambodians decreases by 2018

The Muskoka project focuses on one out of four indicators of the German Social Health Protection Programme which pursues the reduction of maternal and neonatal mortality. Both related sub-indicators (MMR and NMR)

specify targets for the national level whereas the Muskoka project has a pronounced focus on a specific segment of health facilities in four project provinces. Since the indicator may also be influenced by contributions of other development measures (namely the SHP support towards quality assurance and QI mechanism and the KfW-supported voucher project aiming towards improved access to sexual and reproductive health services). Thus, from the programme perspective, the macro-level focus of the MMR and NMR sub-indicators is pertinent. For the Muskoka project, on the other hand – despite its far more specific thematic focus – results are more concentrated in a specific local/regional context. The key issue, however, is the fact that the target value – though set for 2018 – is based on the Demographic and Health Survey which is updated every 5 years and thus carried out in the current year. This means that no current data is available yet to compare with the baseline. Even if it were, Cambodia has relevant strategies and policies in place (i.e. FTIRM, EmONC Improvement Plan) and several development partners support their implementation. Thus, a further drop of the MMR and NMR is expected and would probably overlay the potential contribution of any single TC measure.

Still, project impact on maternal and neonatal mortality can be quantitatively approximated. Despite the presence of the project in technical working groups of the MoH and assistance to two national partners (namely the National Maternal and Child Health Centre and the National Paediatric Hospital), the project emphasis is on strengthening the quality of care at the EmONC facilities of the project-supported provinces. This means that the key contribution to the reduction of MMR and NMR is not mediated through systems processes. Instead, the project contributes rather immediately to the reduction of fatalities in the project-supported facilities and thus, to a measurable share of ‘lives saved’ to the (still unknown) values of the macro-level indicators.

Regarding the fatalities among newborns, the project monitoring provides reasonable evidence of treatment outcomes, in particular of neonatal resuscitation. Monitoring data shows that the in-house mortality of newborns in the supported facilities dropped drastically during the last year of the project, falling from a mortality of 19.7% of newborns within 72 hours after resuscitation in 2016 (12 out of 61 cases) to 1.4% in 2018 (1 out of 74 cases). No fatal case was registered in the second half of 2018 (see GIZ-Muskoka 2019c).

To adequately interpret the drop of in-house mortality of newborns, changes both in treatment patterns and in the quality of documentation must be further considered. Though the average mean time of hospitalisation of resuscitated newborns has been registered only for 2018, the data shows an increase from 2.84 days in the first to 3.59 days in the second semester, while cases of early discharge with unknown treatment outcome drastically dropped from 62.9% to 5.1% (GIZ-Muskoka 2019c). The lower the value for unknown treatment outcomes, the lower the probability of additional unregistered fatal cases occurring after discharge (Int-GIZ).

Further treatment outcomes of live-saving interventions have been registered although not for the full timeline of the project (see section 4.3 regarding previous documentation gaps). Since interventions on neonatal care were strongly intensified during 2018, comparisons between the first and second semester, however, reasonably indicate results for the following case-mix: (1) neonatal sepsis, (2) neonatal infection, (3) asphyxia, (4) low birth weight, and (5) prematurity plus a limited number of other or undocumented diagnoses. Overall, 324 cases were admitted during the first semester and 425 cases during the second semester of 2018. While documented cured cases increased from 56.8% in the first to 72.0% in the second half of 2018, fatal cases dropped from 6.2% (20 cases) to 1.6% (7 cases) (GIZ-Muskoka 2019c).

For mothers, in-house mortality due to PPH has been monitored. Contrary to the clear patterns for newborn mortality, however, the case number of treated mothers is not sufficient to detect a clear trend (Int-GIZ). As already stated in section 4.3, the documented cure rate of cases discharged with permission (sub-indicator of module indicator M2) has sharply increased from 3.2% in 2016 to 90.4% in 2018 which is mostly attributed to improved documentation so that actual (net) changes in the treatment outcome remain unknown. On the other hand, given the low case number of up to 125 in 2018, very few fatal cases have been registered. An apparent increase in 2018 (three cases) is most probably an artefact since the final progress report states that maternal

death audits in the past showed PPH as cause of death in several cases though it was not recorded as such in the hospital registry books.

In conclusion, based on the in-house mortality in the project facilities (instead of the unavailable national indicators) it can be said that the project results are in line with the expected impact for neonatal mortality and inconclusive for maternal mortality. Therefore, the indicator achievement is rated with **32 of 40 points** altogether.

Impact dimension 2: The outcome of the project contributed to the occurred or foreseen overarching development results

1. Improved specific EmONC treatment reduces the neonatal deaths in the supported facilities

The independent variable (improved EmONC treatment) refers to the treatment categories specified for module objective indicator M2 which have significantly improved (see section 4.3). The independent variable (reduced in-house mortality of neonates) coincides with the proxy-indicator used for the programme goal attainment (see section above). The targeted treatment categories can be categorised as 'life-saving interventions' which – *ceteris paribus* – may exert a direct effect on the dependent variable (mortality reduction). The treatment result, however, could be influenced – positively or negatively – by other factors which have been discussed with stakeholders for the contribution analysis. While asking open questions first and then concentrating on emerging patterns, two potentially relevant factors have been tested: (1) factors relevant for changes in the working environment (e.g. infrastructural changes, procurement, staff availability); and (2) the role of the HEQIP quality improvement mechanism.

- There is no doubt that infrastructural and resource-related conditions have a direct influence on treatment quality. Among other factors, interviewees mentioned: (a) infrastructural bottlenecks, e.g. limited space in the wards; (b) old buildings with insufficient sanitation; (c) lack of clean water supply; and (d) lack of equipment and procurement in laboratories and blood banks (Int-PHD, GIZ-Muskoka 2019c).

Although these factors are highly relevant, they were generally constant during the project term and no major changes were reported between baseline and endline, except for individual cases of maternity ward reconstructions which were introduced through project-supported QI processes (GIZ-Muskoka 2019c). Leftover funds of the KfW voucher project were supposed to be used for procurement of mother and child health equipment (see GIZ-Muskoka 2018c), thus promising synergies with the Muskoka TC module but they did not materialise until the evaluation (GIZ-Muskoka 2019b).

Furthermore, key interventions for improving neonatal care were carried out in a very condensed manner shortly after the mid-term feedback mission and related to strategic adjustments. While the short time frame of some support categories may pose sustainability challenges (see section 4.6), it further reduces the presence of possible confusing variables.

HEQIP mechanisms include a subnational governance and support structure for QI processes, regular quality assessments and performance-based incentives. It is thus plausible that HEQIP would incentivise improvement efforts even without the presence of external support. The respective patterns have already been analysed in the contribution analysis of the effectiveness section 4.3, concluding that (a) interviewees and focus group participants prioritised the effect of skill development interventions over the effect of HEQIP mechanisms; and (b) observed effects of HEQIP in the project-supported facilities were, to a significant extent, catalysed by technical assistance (INT-PHD, INT-OD, INT-HC, FG-HC).

In conclusion, observed changes in neonatal mortality are highly attributable to the project interventions.

2. The adaptation of guidelines and tools for MNBC-related issues (in particular the early detection and intervention screening tool for children with disabilities) facilitates the respective improvement of clinical practice, thus contributing to increasing capacities of health care providers beyond the project-supported facilities

Over the project term, the module has contributed to the formulation of numerous policies, strategies and guidelines at the national level, mainly through participation in technical working groups and specific MoH workshops. A (non-exhaustive) list of related outcomes adopted by the Cambodian government includes

- the Safe Motherhood Protocol for health centres and for referral hospitals (the newborn screening tool has been included into the first one)
- the National Strategy for Reproductive and Sexual Health in Cambodia 2017-2020
- the 5-year action plan for newborn care in Cambodia 2016-2020
- the early intervention and detection tools for children with disabilities (2016) and the training toolkit (2018)
- integration of the two screening tools (newborns and young children) in the MPA-HC (2017)
- integration of both screening tools into the benefit package of the HEF (2018)
- the national protocol for the Midwifery Alliance Core Teams (2016)
- manuals and guideline for Kangaroo Mother Care for premature babies (2017)
- guideline for Early Essential Newborn Care (EENC)

Interviewees at the national level (areas relevant to the MoH) and development partners were asked about both (a) the relevance of the GIZ contribution to national level policy documents and clinical guidelines and, if applicable, (b) their impact expectations for ongoing or expected implementation processes. The key obstacle for a sound contribution analysis is that virtually all results at this level have been achieved through the coordinated participation of all development partners under the lead of the MoH in the health sector. Other development partners as well as national partners confirmed a significant presence of GIZ in this context and the soundness of technical contributions (INT-DP). In general, however, it was not possible to trace specific contents back to GIZ contributions to establish a meaningful basis for analysing the actual hypothesis (i.e. the extent to which project-mediated MNBC-issues in policies/strategies/guidelines may induce further systemic impact beyond the project provinces). This conclusion does not imply a judgement on the project strategy since the collaborative working mode of development partners is more a quality characteristic fully in line with the principles of the Paris Declaration.

The arena looks different for the outcomes related to the tool for the early detection of children with disabilities. It has also been a coordinated advocacy effort at political level, in particular of WHO and Handicap International, but with the most significant technical contribution and lobbying coming from GIZ (Int-DP, INT-CSO). Thus, it can be considered a specific project outcome – including its integration in the SMP-HC, MPA-HC and the HEF benefit package.

In the visited project provinces, pilot trainings were carried out in some facilities in Kampot and Kampong Thom, and evidence of the application of tools could be observed during the evaluation mission. However, at the time of the evaluation, the roll-out of the screening tools had not been initiated either nationally or in the project provinces. At the macro-level, the integration of the tool into the SMP-HC, MPA-HC and HEF creates a positive environment. The SMP-HC contains standards of care provided to mothers and newborns at health centres, thus defining disability screening as part of these standards. The implication of the MPA-HC is that every health centre in Cambodia is required to apply the tools as part of basic health services. The integration in the HEF gives all registered poor citizens access to the service free of cost. However, the formal integration in SMP-HC, MPA-HC and HEF basic health package does not necessarily assure compliance. Interviewees

coincide in low expectations regarding the willingness of the Cambodian government to significantly invest in the roll-out and the ability to carry out sound trainings that – beyond the legitimacy introduction and distribution – would assure a comprehensive application of the tool (Int-GIZ, Int-GIZ, Int-CSO). A budgeted roadmap for the roll-out does not yet exist (Int-NP). Though there are in place public policies prioritising equal access of PwDs to health services (e.g. the Equity working principle in the Health Strategic Plan), further lobbying vis-à-vis the Cambodian government is considered essential by interviewed development partners (Int-DP, Int-CSO). On the other hand, there are expectations that through the inclusion of the early screening in the so-called 1,000-day-package (i.e. a set of essential health services free of cost for infants and children during the first 1,000 days after birth), the roll-out could be partly financed through the World Bank Nutrition Project recently initiated in April 2019. The possibility of a respective disbursement-linked indicator has been mentioned, though not confirmed during the field phase of the evaluation (Int-GIZ, Int-DP).

All in all, the hypothesis in the narrower sense cannot be confirmed since it refers to future (potential) impact. Institutional preconditions for the national roll-out (through SMP-HC, MPA-HC, HEF) have been established with crucial contributions of the project, but implementation will depend on the Ministry of Health and other development partners taking a lead.

Overall, hypothesis one fully confirms the project contribution on the reduction of in-house neonatal mortality in the project-supported facilities, whereas hypothesis two shows that the project has contributed to setting the stage for potential impact. However because of uncertainties regarding the subsequent implementation processes through MoH and other development partners, the impact dimension is rated with **22 out of 30 points**.

Impact dimension 3: No project-related negative results have occurred – opportunities for further positive results have been seized

Regarding the occurrence of **unintended negative results** and the **monitoring of risks**, the same observations apply as already specified under the same dimension of effectiveness in section 4.3. No unintended negative results were observed during the evaluation mission. As assessed in section 4.2, interactions between the different **dimensions of sustainability** (environmental, economic, social) are also limited due to the clinical focus of the project (see section 4.2, Relevance dimension 2), thus, no negative trade-offs have been observed whereas synergies between the social dimension (access to quality health services as a fundamental human right) with the economic dimension (sustainability of health financing) are sought through the coordination with the SHP TC module. Thus, the assessment equals the rating for the respective dimension of the effectiveness section: **(28 of 30 points)**.

Criterion	Assessment dimension	Score & Rating
Impact	The intended overarching development results have occurred or are foreseen	33 of 40 points
	The outcome of the project contributed to the occurred or foreseen overarching development results	22 of 30 points
	No project-related negative results at impact level have occurred – and if any negative results occurred the project responded adequately	28 of 30 points
	The occurrence of additional (not formally agreed) positive results at impact level has been monitored and additional opportunities for further positive results have been seized	
Overall Score and Rating		Score: 83 of 100 points Rating: successful

4.5 Efficiency

The evaluation dimensions of the efficiency criterion refer to (a) the appropriate use of resources with regards to the outputs achieved (production efficiency); and (b) the appropriate use of resources with regard to achieving the project objective/outcome (allocation efficiency).

Evaluation basis and design for assessing efficiency

Both dimensions are based on a cost analysis carried out in a first step. Costs were documented according to the latest GIZ cost commitment report sheets and attributed to outputs during the evaluation to provide an understanding of the relative cost-intensity of each output (follow-the-money-approach) and the appropriateness of the resource-utilisation (Dimension 1), particularly the question to what extent the outputs could have been maximised with other implementation strategies (maximum principle). More ambitious approaches (e.g. cost-benefit analysis or effects method) would require a more specific assignability of implementation/production costs to specific output or outcome measures than the follow-the-money-approach can provide in the given context because of the reliability of cost-output-relations (see the explanation below under efficiency dimension). The cost information was analysed against the evaluation indicators for the efficiency criterion (see the evaluation matrix in annex 2), partly by means of document analyses (e.g. offer, progress reporting, operational plans) and partly through interviews with project staff. An extensive interview that addressed the entire set of efficiency indicators was held with the officer responsible for the commission. Beyond the descriptive analysis of the present status quo, the discussions also questioned to what extent outputs and/or outcome could have been maximised with the same amount of resources (e.g. through different allocation among the targeted outputs) (Dimension 2), also applying the indicators as presented in the evaluation matrix.

Efficiency dimension 1: The project's use of resources is appropriate with regard to the outputs achieved (production efficiency)

The contract value of the German contribution for the whole duration of the project (01/2018 to 04/2019) was EUR 5,121,942 of which EUR 4,790,646 was spent or committed until the moment of data collection (according to the cost-commitment-sheet of 7 February 2019). Resources were fairly equally distributed among the three outputs. Resources allocated for Output 2 'qualification of health staff' were slightly above average (36%). Output 1 'quality of maternal and newborn emergency care' and Output 3 'disability-friendly organisation of health' absorbed slightly lower shares of 28% and 29% respectively. It must be considered though, that outputs 1 and 2 were closely intertwined, both targeting clinical improvements through related interventions in the same environment. For two staff members, inputs were categorised for the fourth area 'behavioural change communication' which was not formally agreed (see section 4.3, contribution analyses). However, no further costs were explicitly specified for this category so that the assigned resources do not exceed 2% of the resources. Overarching costs amount to 5% according to the cost-assignment by the project management.

The reliability of these estimations is limited for the following reasons:

- The core of Outputs 1 and 2 was outsourced to a consulting consortium; together with further contracted expert services, over EUR 1.6 million are registered as third-party contributions, exceeding the personnel input of GIZ staff by more than EUR 300,000. Since the GIZ Excel tool for the tracking of personnel instruments does not further differentiate external staff contributions, it does not picture the overall personnel input of the project.
- Staff members contributed to more than one output, or even to all outputs, and there was no tracking of output-specific personnel inputs (not required at that time), so that the distribution of each staff member's working time had to be roughly estimated; this is also the case for other input categories.

According to regulations at the time of the project offer, programme expenditures were not planned according to costs per output, thus cost-output-relations were established by retrospective estimations during the evaluation. Leaving aside the considerable share of project resources bound by the outsourcing of Output 1 and 2, resources were shifted flexibly between the outputs according to current milestones, identified needs and arising opportunities (Int-GIZ). An example for a resource shift between outputs includes (1) an increased input in the implementation of QI governance and support structures and capacitation for HEQIP assessments, versus (2) reduced input in the development and follow-up of the so-called Developmental Milestones Assessment Tool in Output 3, since the required input was considered too high against the expected contribution to the project outcome. According to project staff, costs for core activities related to results matrix indicators were projected with enough financial scope to flexibly adjust accompanying activities without indicator-related trade-offs, that is, allocation decisions could be taken without the need of negotiating results matrix adjustments (Int-GIZ). The evaluation concludes, that this ability to quickly respond to needs and opportunities has been functional for the project, and thus a success factor, though a strict **comparison between projected and identified costs** cannot be applied as a meaningful assessment criterion in this context. However, it clearly followed the **maximum principle** (i.e. the maximisation of outputs with the same of resources).

The maximisation of outputs – although in line with the output-indicators (except for the roll-out of Kangaroo Mother Care) – was compromised by false assumptions on documentation quality at the health facility level, resulting in fail assessments of treatment patterns and uneven implementation of planned activities (in particular regarding neonatal resuscitation) in the first half of the project (Int-GIZ). After an internal feedback mission, operational planning was adjusted accordingly, and every effort was made to close existing gaps (see GIZ-Muskoka 2018c). Though assessed positively with regard to the adaptivity of the project management (see section 4.3), efficiency losses during the first half of the project have impeded further maximisation of results. Considering the strong focus on needs-based interventions within the EmONC centres and the surrounding

governance and support structure, no significant potential for the maximisation of individual outputs through alternative approaches *within* each output area was identified during the evaluation. The high-level of goal attainment at the output level indicates that **the output/resource ratio** was adequately planned for.

Overarching costs were relatively minor compared to overall budget and are mostly related to the presence of the project in national discussions (e.g. participation in the technical and sub-technical working groups of the MoH). Interviewed programme management staff assessed that personnel input invested at the different levels was generally well balanced (Int-GIZ). **Internal services by other GIZ units** (remunerated according to time recording, i.e. 'Zeitaufschriebe'/ZAS) accounted for a total cost of EUR 165,729 at the time of data collection, that is, less than 4% of the overall cost. Since relative costs (i.e. cost per time-unit) and even the decision for the utilisation of some of the services (e.g. of GIZ country office) are beyond the influence of the project management, the assessment does not focus on the actual amounts, but on the usefulness for the programme. Project staff highlighted contributions of the related sectoral departments (*Fach- und Methodenbereich/FMB*) which were used in two directions as a dissemination channel and to obtain technical or strategical input for the project (e.g. the aforementioned feedback mission was carried out by an FMB member, Int-GIZ). Services invoiced by the GIZ country office dealt with routine administrative issues and were not meant to support implementation or dissemination processes. Overall, the cost-benefit relation of ZAS is assessed as medium to high.

The **instrument concept** was implemented as projected, and no cost-related bottlenecks were mentioned in programme documents or by interviewed project staff. However, the configuration was considered very resource intensive by several interviewees (Int-GIZ): A high proportion of the overall project budget was outsourced to a consulting consortium of two international and one national consultants (see cost analysis), and requirements for GIZ-steering related to the outsourced outputs were higher than anticipated, and involved significant conceptual and managerial adjustments during the implementation process (see also section 4.3 regarding the results of the feedback mission in early 2018). Thus, potential efficiency gains pursued through the outsourcing could not be fully realised. The project set-up, with GIZ engaging in national policy level processes for the thematic areas outsourced to the consortium, required close interaction between GIZ and the consortium and careful balancing of the leadership functions of the GIZ project manager and the consulting team manager. Whereas the implied risk of potential steering conflicts could be mitigated due to good working relationships (Int-GIZ), some interviewees point at redundant costs and frictional losses caused by this setting (Int-GIZ).

The personnel concept for the GIZ team included two long-term experts, a development adviser at KpRTC and an integrated expert at the National Paediatric Hospital, vis-à-vis two national experts at national level and two national experts at provincial level plus the shared financing of two provincial health managers and a disability adviser together with the 'Social Health Protection' project (1/3 of the cost assumed by the Muskoka project, see below under 'allocation efficiency' for the assessment of the coordination/cooperation between both projects). Although the integrated expert and the development adviser positions systemically supported important organisations, it took time in both cases for the placements to show results. This lowers the cost-effectiveness given the relatively short time frame and frictional losses due to the language barrier (Int-GIZ). The staff concept of the consortium included as long-term expert as team leader, one national long-term expert as deputy team leader and supervisor of five national long-term experts (midwives/nurses). In addition, a pool of international and national long-term experts was used for consultancies on specific topics. Overall, the staff concept was balanced, though national personnel recruitment, particularly for specific qualifications (e.g. neonatologist, c-section specialist) was more challenging than expected (Int-GIZ) thus consuming further efforts not directly benefiting the implementation process. In conclusion, there were no resource-related bottlenecks for implementing the instrument concept based on the available budget, but some efficiency losses related to the design of the instrument concept and placement/recruitment challenges. However, it should be noted that the aforementioned issues arise more from the project design than from the project management

(e.g. configuration of the outsourcing, integrated experts and development adviser placements following externally set provisions).

The **partner constellation** was set and followed up as planned, without resource-related constraints. The main focus was on the provincial and district level where the number of key stakeholders is limited. The selection of project provinces was predetermined by the path-dependency of previous and parallel interventions, requirements of the BMZ and distribution of intervention areas among development partners. Thus, considering a different **regional scope** would not have been a realistic alternative. Hence, the two aspects are not relevant for the assessment.

Overall, the critical assessment of the frictional losses and redundancies related with the instrument concept significantly lower the production efficiency of the project. Among the positive aspects, a resource allocation that is flexible, needs- and opportunity-based within and between outputs has contributed most to production efficiency. Altogether, production efficiency is rated with **49 of 70 points**.

Efficiency dimension 2: The project's use of resources is appropriate with regard to achieving the projects objective (allocation efficiency)

Regarding the extent to which the outcome could have been maximised with the same resources (**maximum principle**), conclusions must rely on stakeholder opinions and qualitative analysis since **benchmarks** for a comparable package (improvement of EmONC and disability inclusion) do not exist. Particularly the requirements for disability inclusion are very context specific and depend on the specific stakeholder landscape.

The results chains of both areas (Output 1 and 2 vs Output 3) are not fully integrated. Both areas have an interface where they pursue the same objective (i.e. sensitisation of disabled people on sexual and reproductive health may improve access to MNBC). But the scope of Output 3 is thematically broader (i.e. not limited to EmONC) and addresses a broader target group (i.e. children up to 5 years, but also adults with disabilities). On the other hand, the outcome expectation is lower, which is why the related module objective indicator does not define a treatment-related benefit for the target group. Given that the output areas are only partly integrated, allocation decisions inevitably imply trade-offs.

From this viewpoint, it is evident that the outputs related to strengthening EmONC are the core contributors to the module objective and necessarily require the major proportion of the project budget. The distribution of two-thirds the project budget for EmONC-related interventions versus slightly below 30% for the disability-related output seems well balanced. Observed reallocations during the project period (i.e. the input for HEQIP mechanisms vs the reduction of inputs for the Developmental Milestones Assessment Tool) were effectively geared towards enhancing the outcome as defined in the module objective. Broader and more intense interventions in the field of behavioural change communication (which was not a formally agreed output area in the official design) could have enhanced the potential effect on the module indicator 1 (i.e. the coverage of EmONC services). Under the available budget of just over EUR 5.1 million, however, shifting additional resources towards behaviour change communication would have overstretched the financial scope and led to further, probably unacceptable, trade-offs (Int-GIZ).

Synergies with other development partners were mostly pursued at the policy level but also for some joint operations on specific topics. Opportunities for collaborative activities at the provincial level were limited though since development partner support is distributed by target provinces (i.e. project areas do not overlap). Mandates of each development partner are thus separate from each other and complementary (Int-GIZ, Int-DP). At policy level, the project participated in the technical and sub-technical working groups relevant for project, namely the technical working group for health (TWG-H), the sub-technical working group for maternal and neonatal care (sub-TWG MCH), and the working group on newborn care and integrated management of

childhood illness (WG NBC & IMCI). Project contributions were related to the policy documents listed in the contribution analysis in section 4.4, and were concerted within the development partner community (Int-GIZ, Int-DP). Specific cooperation included (a) close exchange with WHO, implementing early essential newborn care according to WHO criteria in the project area; (b) cooperation with JICA on developing a neonatal care unit (NCU) nursing manual for the NMCHC; (c) technical inputs for the planning process of the World Bank financed Cambodia Nutrition Programme; and (d) the joint core activity with Handicap International on the early detection and intervention tools for children with disabilities (see contribution analysis in section 4.4) which was coordinated with further development partners to assure the continuation of lobbying after the end of the project term. Overall, all interviewed GIZ, development partner and MoH staff agree that coordination processes worked smoothly (Int-GIZ, Int-DP, Int-NP), and no efficiency losses due to insufficient donor coordination were observed.

Synergies within the German development cooperation (GDC) originate from close cooperation between the Muskoka and the SHP module. Both projects supported their partners in the field of quality assurance and continuous quality improvement. The quality component of SHP addresses quality structures and processes from a health system strengthening perspective, both at national and subnational level. The Muskoka project focuses on MNBC-related assessment dimensions and the capacities of subnational partners (PHD and health facilities) to comply with the requirements of the national NQEMT. The systemic vs clinical focus are perfectly complementary and closely related. In order to maximise synergies and avoid frictional losses, the two projects engaged in a staff-sharing model for two provincial health managers and one disability adviser (with Muskoka assuming one-third the cost), thus assuring efficient cooperation of both projects and consistent interaction with partners, particularly in the fields of quality management and inclusion of people with disabilities. Staff-sharing ensured that both modules could speak with 'one voice' to the provincial partners, that both projects smoothly connected at the interface of systemic and clinical dimensions of QI, and meant that interventions were more cost-effective compared to a scenario of each project working on its own without that kind of cooperation (Int-GIZ). Further synergies include the training of Muskoka staff by SHP personnel on the NQEMT (GIZ-Muskoka 2019b and 2019c)

In the first half of the project, the Muskoka TC module further cooperated with the KfW-funded Voucher Management Agency (VMA) project, focusing for example on the needs of children with disabilities. Over 30 disabled children had been supported by the VMA to seek treatment in the National Paediatric Hospital which hosted an integrated expert financed by the Muskoka project. Furthermore, Muskoka and VMA carried out a joint assessment of MNBC-related equipment needs in referral and provincial referral hospitals in the target area of the VMA project. According to the final progress report (GIZ-Muskoka 2019b) expected synergies in the Muskoka target facilities did not materialise due to procurement delays beyond the project's control. Since no stakeholder involved in this process was interviewed, this cooperation is not further assessed for the evaluation. Further interfaces with other GDC measures include the 'Multisectoral Food and Nutrition Security – Special Initiative "One World Without Hunger"' (MUSEFO, PN 2014.0968.9) in the area of behaviour change communication (e.g. common participation in national events) and with the 'Support to the Identification of Poor Households Programme' (PN 2015.2093.1) for a study on the impact of the IDPoor poverty card on the utilisation of MCH services.

While the depth and scope (and with regard the VMA project, also the success) of the aforementioned cooperation varied, no efficiency losses due to insufficient coordination and cooperation with other GDC measures has been identified during the field mission.

The agreed **partner input** (junior and senior staff for purposes of steering and implementation at provincial level, office space, administrative cost) were met. The estimated value of EUR 100,000 seems low against the background of the project's contract value but realistic considering the limited financial scope of the partner for further commitment. The limited budgetary scope, however, may compromise the continuity of some

organisational/institutional mechanisms which the project has supported with financial subsidies or cost reimbursement (see section 4.6, sustainability).

In summary, the project has adequately dealt with trade-offs inherent to the only partial integration of the output areas. Coordination with other development partners was sought where relevant and no synergy losses due to insufficient coordination and cooperation were observed. Particularly the cooperation with the SHP project leveraged significant synergies. Thus, the allocation efficiency is rated with **27 out of 30 points**.

Criterion	Assessment dimension	Score & Rating
Efficiency	The project's use of resources is appropriate with regard to the outputs achieved. [Production efficiency]	49 of 70 points
	The project's use of resources is appropriate with regard to achieving the projects objective (outcome). [Allocation efficiency]	27 of 30 points
Overall Score and Rating		Score: 76 of 100 points Rating: Rather successful

4.6 Sustainability

The evaluation dimensions of the sustainability criterion are (a) the extent to which results are anchored in partner structures; and (b) a forecast of the durability of results.

Evaluation basis and design for assessing sustainability

For dimension 1, the evaluation assesses the extent to which QI processes and structures (Output A) are followed up in the project provinces, to what extent improved staff capacities in EmONC (Output B) can be retained and if capacities of disabled peoples' organisations to continue contributing to better inclusion (Output C) have been enhanced. The forecast of the durability of results (dimension 2) focuses on the preconditions for achieving sustainability (i.e. durability of outputs and outcome) and the sustainability expectations of stakeholders. Interviews and focus groups with stakeholders at all levels (national and subnational administration, facility level) were held in order to identify conducive factors as well as threats to the durability of results. Due to the timing of the evaluation (final evaluation that coincides with the termination of the project) the focus lies on assessing preconditions for sustainability and an educated forecast instead of observing factual sustainability. Data collection was mainly based on the interviews and focus groups held during the evaluation phase and the criterion was addressed with all involved stakeholder groups, discussing potential drivers, obstacles and risks for sustainability. Interviews / focus group assessed known risks (see results model in section 2.2) but also applied open questions to explore further unanticipated risks.

Sustainability dimension 1: Extent to which results are anchored in the partner structure

For each thematic area, the capacity development strategy of the project considered specific measures to anchor achieved results in the partner structure. The programme invested significant efforts in building ownership and strengthening existing partner mechanisms responsible for the continuation of achieved results:

- To sustain MNBC-related QI processes, the project supported – in close cooperation with the SHP – the QI governance and support structures at subnational level as well as related structures within the facilities. From 2017 onwards, so-called provincial core teams were established and assisted in carrying out supportive supervision function through QI consultation visits to the health facilities. According to interviews and focus groups held at PHD and facility level, the respective processes are established and functioning (e.g. regular visits continue to take place) though the existing personnel and financial resources restrict the frequency and available time per facility and do not assure the necessary scrutiny and comprehensiveness of consultation visits (Int-GIZ, Int-HC, FG-HC). PHD and OD staff were also addressed to take over coaching and training activities and thus continue health facility support as provided by the project under Output 2 ‘qualification of health staff’ (e.g. training of coaches, provision of a coaching manual).
- At facility level, the hospital core teams (stipulated by the Early Essential Newborn Care guidelines) and QI groups (stipulated by HEQIP) include facility managers, doctors, midwives and nurses. The implementation and functioning of these groups were assisted, especially for the formulation and follow-up of QI plans. Since the structures are mandated by MoH, interviewees and focus group participants expect them to continue, and meetings are taking place regularly in the visited health facilities. There are, however, issues with the effective follow-up and implementation of QI plans (Int-HC, FG-HC, Int-GIZ) which were already observed during the implementation period in several facilities (see GIZ-Muskoka 2019c). The extent to which existing structures will effectively catalyse further quality improvement mainly depends on the quality of leadership (Int-HC, FG-HC) which according to the project reporting varies among the facilities and is not assured in several cases (see GIZ-Muskoka 2019c). To facilitate the compliance with HEQIP beyond the duration of the project, a HEQIP assessment tool book for maternity wards has been developed which has been very well accepted at the facility level and is considered to be a helpful resource by facility health staff (Int-OD, Int-HC, FG-HC).
- The quality of documentation at the health facilities was a highly critical issue which was not systematically attended to until the second half of the project term. Once identified as a priority issue, significant improvement was achieved in a short space of time. This was highlighted as a key achievement by health centre staff (see section 4.3 on ‘effectiveness’). To assure the continuity of project-assisted documentation efforts, the project developed checklists and procedures on how to manage patient files; health facilities visited during the evaluation mission confirmed adherence to existing formats and processes (Int-OD, Int-HC, FG-HC). Given the extent to which facility staff highlights the value added to the patient and treatment management, improved documentation quality is likely to be sustained.
- In the area of skill development, fully equipped skill labs are functional to continue operating without further project support. Conditions for sustainable (and potentially increased) use and maintenance were discussed with involved stakeholders, including advice on 3-monthly activity plans and training-of-trainer activities. Progress reports of the responsible consulting firm identified the lack of comprehensive management strategies as a possible sustainability threat and counteracted through trainings for a core group of coaches (GIZ-Muskoka 2019c). During the evaluation mission, interviewed stakeholders were confident that the skill labs will remain functional as an effective training resource for the provincial referral hospitals (Int-PHD) but partly confirmed management/leadership and resource-related limitations for expanding/maintaining the coverage of target groups’ other health facilities (Int-PHD).
- Skill labs are also used for MCAT meetings which are currently the most important mechanism to reach to basic EmONC facility staff (health centre staff frequently stated that they could participate in MCAT meetings since they are mandated by the MoH whereas they did not get permission or required support to attend other training opportunities, Int-HC, FG-HC). MCAT meetings are very much appreciated by the involved midwives (Int-PHD, Int-OD, Int-HC, FG-HC) and PHDs are assuming ownership though financial challenges to maintain a broad participation (e.g. for reimbursing related travel costs) was mentioned by some interviewees (Int-PHD, Int-OD). All in all, however, MCAT

meetings are likely to continue as a government-mandated mechanism, and the quality and scope has been gradually enhanced.

- To improve the skills of midwives and nurses in EmONC facilities, the project mostly focused on in-house training and coaching. The focus was pertinent to have a substantial effect on the clinical practice, but on-the-job training has its limitations when pre-service training is insufficient (Int-GIZ). These limitations cannot be remedied through in-service training alone, although the MoH and its partners are trying their best to improve the situation (Int-NP). Muskoka addressed this issue through the placement of a development adviser in the Kampot Regional Training Centre for Nurses and Midwives (KpRTC). The support focused on strengthening the clinical practice in pre-service training, for example through training of clinical instructors and preceptors and enhancing the cooperation between the KpRTC and Kampot provincial referral hospital. Interviews held during the evaluation mission do not provide evidence to assess the effect on the training quality, the impact on graduates' skills and the extent to which results are consolidated. However, the case experience built into the methodological design of the Muskoka project highlights the system-wide need for better pre-service training as a crucial precondition for the long-term sustainability of any skill development effort at the health facility level.
- Output 3 ('disability-friendly organisation of health services') included sexual and reproductive health and rights knowledge and awareness-raising measures for PwD, partnering with then national Cambodian Disabled People's Organisation and local DPOs and health authorities in the project provinces. Significant coverage was achieved during the project term (over 50 trainings with approximately 350 participants, see GIZ-Muskoka 2019b), and DPOs interviewed during the evaluation confirmed that they acquired the capacity to communicate messages on sexual and reproductive health to their members (Int-CSO). They will probably be able to occasionally apply acquired knowledge and benefit from enhanced visibility (e.g. when collaborating with health facilities or health authorities) but do not have the personnel or financial resources for the perpetuation of project activities such as trainings/sensitisation events (Int-CSO). While they are a key channel to reach target groups of PwD, their organisational capacities are still limited and realising their potential will require external support for an indefinite period, despite efforts made by the project in coordination with SHP to strengthen their organisational and technical capacities.
- Another lasting effort of the project to improve the access of children and adults with disabilities to health and rehabilitation services is the **Online Disability Service Directory**. It allows users to look for specific services according to the kind of service provided and the service provider's location. The project coordinated the development of the directory together with the Disability Action Council, the government's disability coordination body, and other development partners including UNICEF. While being integrated into the website of the Disability Action Council in 2015, the project continued to support the promotion of the directory to foster its utilisation (e.g. by organising an information event with health and rehabilitation providers). Up to now, almost 50 entries have been made in the directory.

Considering the newly created and/or strengthened capacities anchored in the partner structures as well as the challenges described above, the **anchoring of results in the partner structure is rated with 37 out of 50 points**.

Sustainability dimension 2: Anticipated durability of results

All in all, the project has undertaken consistent efforts to build partner capacity at various levels in different thematic areas in order to increase the sustainability of achieved results. Different mechanisms are in place to further support skill development of EmONC health centre staff, QI mechanisms and the achieved improvement of different treatment categories. Based on conditions, health centre staff involved during the field mission have expressed confidence to retain improved capacities and continue clinical application – with low caseloads of emergency cases being the most important challenge (Int-GIZ, Int-HC, FG-HC). Less confidence

is expressed regarding the ability to keep improving treatment quality beyond the current level without ongoing external support as provided by the project (Int-OD, Int-HC, FG-HC).

To facilitate the hand-over to the partners, the project carried out sustainability workshops as early as in the third quarter 2018. Mandates and future responsibilities were discussed as well as unfinished activities and remaining implementation or anticipated sustainability challengers. As a result, the workshop documentation contains commitments of key stakeholders regarding the identified activities and related roles and functions. Whereas some stakeholders highlight positive effects of the workshops (e.g. regarding the awareness of PHDs for key sustainability issues), other interviewees observe that relevant operational planning activities, search for budgetary solutions and other commitments were not taken serious enough by key stakeholders until the very end of the project (reflected, for example, by remaining planning weaknesses observed for MCAT, the expanded use of skill labs, or QI leadership issues, Int-GIZ, Int-NP, Int-PHD).

Altogether, focusing mostly on the anticipated durability of improved treatment quality and outcomes at the supported EmONC facilities, the anticipated **durability of results achieved is rated with 38 out of 50 points**.

Criterion	Assessment dimension	Score and Rating
Sustainability	Prerequisite for ensuring the long-term success of the project: Results are anchored in (partner) structures	37 of 50 points
	Forecast of durability: Results of the project are permanent, stable and long-term resilient	38 of 50 points
Overall Score and Rating		Score: 75 of 100 points Rating: rather successful

4.7 Key results and overall rating

Relevance: The project is consistently aligned with the relevant strategic reference frameworks at all levels. The strategy of the module was generally well designed to address the core problems/needs of the target groups. The core problem is highly relevant ('life-saving interventions') and the project addresses a pertinent selection of crucial factors. Disability inclusion interventions are consistent with the LNOB principle. The project approach is not gender transformative, but the intended outcome reduces a gender-specific disadvantage. The objective of the project was realistic for the clinical aspects and possibly too ambitious regarding the increase of the EmONC coverage. The project design was generally adapted to the module objective. The original project approach has been mostly implemented according to the project offer with gradual and pertinent adjustments due to external conditions and learning experiences during the project term (**rating: very successful**).

Effectiveness: The project has achieved two out of three module objective indicators: (1) Selected clinical treatment categories (neonatal sepsis, (pre-)eclampsia and neonatal resuscitation) have measurably improved; (2) a revised screening tool for the early detection of children with disabilities has been approved by the MoH and integrated in the Safe Motherhood Protocol, the Minimum Package of Activities for Health Centres and the

HEF benefit package. The coverage of EmONC centres against the number of expected obstetric emergencies has gradually increased but does not meet the target. The contribution analysis does not provide sufficient evidence for the project effect on EmONC coverage but does so for the improvement of treatment outcomes (**rating: successful**).

Impact: Based on the in-house mortality in the project facilities (instead of the unavailable national indicators) it can be said that the project results are in line with the expected impact for neonatal mortality and inconclusive for maternal mortality. The contribution analysis does provide conclusive evidence for the project effect on the reduction of the in-house mortality in EmONC centres. Systemic impact through contributions to national policies, strategies and guidelines is likely to be achieved to a certain extent but cannot be traced due to the complexity of the involved stakeholder landscape (**rating: successful**).

Efficiency: Requirements for GIZ-steering related to the outsourced outputs was higher than anticipated, and involved significant conceptual and managerial adjustments during the implementation process. Thus, potential efficiency gains pursued through the outsourcing could not be fully realised. Due to language and cultural factors, integrated expert and development adviser placements took time to unfold results, thus lowering their cost-effectiveness. Among the positive aspects, the flexible needs and opportunity-based resource allocation within and between outputs has contributed most to production efficiency. The project has adequately dealt with trade-offs inherent to the only partial integration of the output areas. Coordination with other development partners was sought where relevant and no synergy losses due to insufficient coordination and cooperation were observed. Particularly the cooperation with the SHP project leveraged significant synergies (**rating: rather successful**).

Sustainability: The project has undertaken consistent efforts to build partner capacity at various levels in different thematic areas in order to increase the sustainability of achieved results. Different mechanisms are in place to further support skill development of EmONC health centre staff, QI mechanisms and the achieved improvement of different treatment categories. However, it varies how much these mechanisms are functional, and the extent that results are effectively anchored in the partner structure. Health centre staff involved during the field mission have expressed confidence to retain improved capacities and continue their application (with low case load per facility being a key challenge) (**rating: rather successful**).

Criterion	Score	Rating
Relevance	95 of 100 points	Very successful
Effectiveness	84 of 100 points	Successful
Impact	83 of 100 points	Successful
Efficiency	80 of 100 points	Rather successful
Sustainability	75 of 100 points	Rather successful
Overall Score and Rating for all criteria	83.4 of 100 points Average Score of all criteria (sum divided by 5, max. 100 points see below)	Successful

100-point-scale (Score)	6-level-scale (Rating)
92-100	Level 1 = very successful
81-91	Level 2 = successful
67-80	Level 3 = rather successful
50-66	Level 4 = rather unsatisfactory
30-49	Level 5 = unsatisfactory
0-29	Level 6 = very unsatisfactory

5 Conclusions and recommendations

5.1 Factors for success or failure

Factors for success or failure are summarised according to the capacity WORKS success factors and considering external factors:

Success factor ‘Strategy’

- A key success factor was the alignment with national strategy with Muskoka providing specific implementation support in the selected provinces. It provided a strong mandate that met the subnational stakeholders’ urgent needs.
- The project had a strong focus on in-house quality processes and clinical training and coaching of EmONC staff. It was a pertinent focus for having a measurable effect on treatment quality and outcomes within a 3-year project term. Balancing clinical vs systemic focus differently might have allowed to reduce remaining sustainability risks, but the evaluation results are not conclusive regarding the actual potential (whereas the trade-offs are obvious on the other hand).
- Generally speaking, a more comprehensive set of interventions balancing supply and demand-side interventions as well as interfaces of EmONC and non-EmONC facilities (e.g. regarding referral systems) could have enhanced the scope of the project but was not feasible under the given budget. Considering the available resource, the project’s strong focus on the clinical environment was pertinent.
- The clinical focus and the focus on the inclusion of PwD were partly but not fully integrated (e.g. considering the orientation towards different target groups) regarding their orientation towards a common programme goal.

Success factor ‘Steering’

- Despite a good working relationship between managers of GIZ-Muskoka and the consortium responsible for Outputs 1 and 2, requirements for GIZ-steering related to the outsourced outputs were higher than anticipated and involved significant conceptual and managerial adjustments during the implementation process (see also 5.2 for a related recommendation).

Success factor 'Cooperation'

- The close cooperation with the SHP project has been a success factor both for the effectiveness and the efficiency of the project. It provided the opportunity to engage in QI support for specific clinical areas while at the same time attending the related governance and support structures. Through the integration of inputs (staff-sharing) the project could speak with one voice to the partners.
- Cooperation with other development partners was well-coordinated, channelling advisory messages through the technical working groups of the MoH in a coordinated and collaborative manner.

Learning and innovation

- During the first half of the project, some indicators – and thus the project monitoring – relied on false assumptions and important needs of the partners were still neglected, particularly in the field of neonatal care. The feedback mission in early 2018 was a key moment to put existing bottlenecks under scrutiny and strongly enhance the project's effectiveness by regaining focus. It is a good practice example for how to manage a learning cycle self-critically and strategically.

External factors

- Partner budgets do not provide for cost categories relevant for the sustainability of certain processes supported by the project (partly with supplementary financing, e.g. for the participation of nurses and midwives in MCAT meetings). Though the respective processes are stipulated by national guidelines, it is unlikely that the subnational administrations will be able to invest (or prioritise investment) in coaching and training to an extent that would compensate the phasing out of the project's in-house support to the health facilities.
- Though HEQIP provides performance-based grants that may gradually improve the financial scope of the health facilities, grants are not yet used to further develop the health staff skills.

5.2 Conclusions and recommendations

Bearing in mind the broad spectrum of success factors summarised in section 5.1, three aspects are highlighted as key recommendations for health-related GIZ in Cambodia and the Cambodian partner (recommendations 1 and 2) and GIZ headquarter (recommendation 3):

1. **Balance between in-service and pre-service training:** To improve the skills of midwives and nurses in EmONC facilities, the project mostly focused on in-house training and coaching. The evaluation concluded that this focus was pertinent to have a substantial effect on the clinical practice within the time frame of the project (see section 4.6, p.50), but on-the-job training has its limitations when pre-service training is insufficient. Muskoka addressed this issue through the placement of a development adviser in the KpRTC. A 3-year term of TC module with a different strategic focus, however, cannot generate relevant impact on the pre-service training system but only provide field experience. Based on this field experience, it is important to highlight the system-wide need for better pre-service training as a crucial precondition for the long-term sustainability of any skill development effort at the health facility level. The SHP project could take a stake in promoting the topic within the MoH technical working group of the MoH and among donors.
2. **Further strengthening skill development in neonatal care:** The feedback mission in early 2018 found that existing gaps in neonatal care were a severe issue that had not been sufficiently addressed by the TC measure. Although the project has performed well in this area during the last year of implementation, it has also shown that from a country perspective, there are considerable gaps in health workers' skills and knowledge in regard to emergency newborn care. These include the absence of structured pre-service training in neonatal care, and the limited focus on specialised

newborn care in the current paediatrics training curriculum, including the lack of specialisation in neonatology within the Cambodian medical education system. It would be advisable to develop specific pre-service trainings to assure successful newborn care in the future.

3. **Assessing trade-offs, potentials and risks involved in the outsourcing of project outputs:** For the production efficiency of a project, outsourcing presents both opportunities and risks. In the case of the Muskoka project, the evaluation found that the configuration was highly resource intensive, in particular regarding the personnel concept and considerable steering needs, which implied a quasi-duplication of leadership functions (see section 4.5). While considering existing requirements for outsourcing, it is still essential to analyse the specific characteristics of each project, particularly the interface between outputs coming into question for outsourcing and interrelated outputs and/or intervention levels to be steered by GIZ. This interface should be thoroughly assessed regarding steering requirements and involved risks, potential efficiency gains or losses, and trade-offs originating from the comparative advantages/disadvantages of GIZ vs third parties. The recommendation does not refer to the suitability of outsourcing, but to the need of anticipating potentials and risks and invest efforts in determining the right configuration during the design phase.

Further recommendations are implicit in the 'factors for success and failure' in section 5.1, in the sense of (a) positive success factors that provide good practices either for the Cambodian health sector or development cooperation management; or (b) negative success factors providing lessons learnt.

Annex 1: List of references

Standard documents: offer and respective additional documents

German Development Cooperation (GDC 2015a): Gemeinsamer Programmvorschlag zum EZ-Programm Soziale Absicherung im Krankheitsfall vom 27.11.2015.

GIZ-Muskoka (2012): Offer for implementation of a TC measure Rights based family planning and maternal health in Cambodia (translation as of March 2013).

GIZ-Muskoka (2014a): Offer for implementation of a TC successor measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia, September 2014.

GIZ-Muskoka (2014b): Änderungsangebot für die TZ-Maßnahme 'Selbstbestimmte Familienplanung und Müttergesundheit'.

GIZ-Muskoka (2017a): Änderungsangebot für die TZ-Maßnahme 'Verbesserung der Mütter – und Neugeborenenversorgung', PN 2014.2473.8 in Kambodscha.

GIZ-Muskoka (2018a): Änderungsangebot für die TZ-Maßnahme 'Verbesserung der Mütter – und Neugeborenenversorgung', PN 2014.2473.8 in Kambodscha.

Standard documents: reporting and monitoring

GIZ-Muskoka (2012): Programme Proposal Part B 'Rights-based Family Planning and Maternal Health in Cambodia'.

GIZ-Muskoka (2013a, 2014c, 2015a): Fortschrittsberichte für die TZ-Maßnahme 'Selbstbestimmte Familienplanung und Müttergesundheit', PN 2011.2194.6 in Kambodscha – Nummer 1 to 3.

GIZ-Muskoka (2015b): Project evaluation report for the TC measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia, May 2015.

GIZ-Muskoka (2016a, 2017b, 2018b): Progress reports for the TC measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia – Number 1 to 3.

GIZ-Muskoka (2016b): Schlussbericht zu einer TZ-Maßnahme, 'Selbstbestimmte Familienplanung und Müttergesundheit', PN 2011.2194.6, July 2016.

GIZ-Muskoka (2018c): Progress report on a TC module Improving maternal and newborn care (July 2017-June 2018).

GIZ-Muskoka (2019a): Improving Maternal and Newborn Care Project – RBM Overview, last revision on 6 February 2019.

GIZ-Muskoka (2019b): Final progress report on a TC module Improving maternal and newborn care (July 2018-April /2019).

GIZ-Muskoka (2019c): Final progress report on outputs 1 and 2, by GFA consulting group.

Standard documents: quality-in-line, capacity works, context and conflict analyses

BMZ (2016a): Kambodscha – Entwicklungspolitischer Jahresbericht 2016.

German Development Cooperation (GDC 2015b): Peace and Conflict Assessment (PCA), July 2015.

German Development Cooperation (GDC 2016a, 2017a, 2018a): Gemeinsame Berichterstattung (BE) zum EZ-Programm Soziale Absicherung im Krankheitsfall.

GIZ-Muskoka (2015c): Results models for the TC measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia; six PowerPoint files for Output A, Output B, Output C, Behaviour Change Communication, Disability Mainstreaming and Gender Mainstreaming.

GIZ-Muskoka (2015d): Capacity Development Matrix for the TC measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia; Word file, May 2015.

GIZ-Muskoka (2015e): TC module 'Rights-based family planning and maternal and child health', PN 2011.2194.6), Gender Analysis, Author: Dr Gabriele Gahn, March 2015.

GIZ-Muskoka (2016c): Steering Structure for the TC measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia, 2 PowerPoint file, October 2016.

GIZ-Muskoka (2016d): Stakeholder map and analyses for the TC measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia, including (a) Word file 'Stakeholder Analysis Muskoka/GFA-RACHA' and (b) PowerPoint file 'Stakeholder mapping Muskoka', August 2016.

GIZ-Muskoka (2016e, 2017c): TC measure 'Improving maternal and newborn care', PN 2014.2473.8 in Cambodia; Operational Plans 2016 to 2018.

GDC strategy documents and international agreements

German Development Cooperation (GDC 2005): Cambodian-German Development Cooperation, Strategy for the Priority Area Health, Phnom Penh, 18 October 2005.

German Development Cooperation (GDC 2014a): Strategy Paper for the Priority Area Health (2014-2018), Social Protection in Health for the Poor and Vulnerable, July 2014.

BMZ (2009a): Health and Human Rights. BMZ-Special 165, July 2009.

BMZ (2009b): Sector Strategy 'German Development Policy in the Health Sector'. BMZ-Strategies 187, August 2009.

BMZ (2011): Human Rights in German Development Policy. BMZ Strategy Paper 4/2011e. Bonn: BMZ.

BMZ (2013a): Action Plan for the Inclusion of Persons with Disabilities, BMZ Strategy Paper 1/2013e. Bonn: BMZ.

BMZ (2014a): Gender Equality in German Development Policy. BMZ Strategy Paper 2/2014e. Bonn: BMZ.

BMZ (2015a): The BMZ's new Asia Policy – Using Asia's Dynamism. BMZ Paper 5/2015. Bonn: BMZ.

BMZ (2016): Development Policy Action Plan on Gender Equality 2016-2020. BMZ Paper 03/2016. Bonn: BMZ.

European Union (EU 2017): European Development Cooperation Strategy for Cambodia, Updated results framework 2017-2019, June 2017.

World Health Organization; United Nations Population Fund; United Nations Children's Fund (UNFPA 2009): Monitoring emergency obstetric care. A handbook.

Royal Government of Cambodia strategy

Ministry of Health (MoH 2002): Health Sector Strategic Plan 2003-2007. A strategic plan to make a difference. Phnom Penh: MoH, August 2002.

Ministry of Health (MoH 2008): Health Sector Strategic Plan 2008-2015. Accountability efficiency quality equity. Phnom Penh: MoH, April 2008.

Ministry of Health (MoH 2013a): National Disability Strategic Plan. Phnom Penh: MoH, 2013.

Ministry of Health (MoH 2015): Master Plan for Quality Improvement in Health 2010-2105. Phnom Penh: MoH, 2015.

Ministry of Health (MoH 2016a): Health Strategic Plan 2016-2020 'Quality Effective and Equitable Health Services'. Phnom Penh: MoH, May 2016.

Ministry of Health (MoH 2016b): Health Equity Fund, Operation Manual. Phnom Penh: MoH, 4 November 2016.

Ministry of Health (MoH 2016c): Fast Track Initiative Road Map for Reducing Maternal and Newborn Mortality 2016-2020, May 2016.

Ministry of Health (MoH 2016d): Emergency Obstetric & Newborn Care (EmONC) Improvement Plan 2016-2020, June 2016.

Ministry of Health (MoH 2017a): Health Sector Progress in 2016. Phnom Penh: MoH, February 2017.

Ministry of Health (MoH 2017b): National Policy for Quality and Safety in Health. Phnom Penh: MoH, 2017.

Ministry of Health (MoH 2017c): Master Plan for Quality Improvement in Health 2017-2022. Phnom Penh: MoH, 2017.

Ministry of Health (MoH 2017d): National Protocol on Kangaroo Mother Care, Training.

Ministry of Health (MoH 2017e): National Protocol on Kangaroo Mother Care, Participant Manual.

National Institute of Statistics (NIS et al. 2015); Directorate General for Health; ICF International: Cambodia Demographic and Health Survey 2014. Phnom Penh, Cambodia and Rockville/Maryland, USA.

Royal Government of Cambodia (RGC 2014): National Strategic Development Plan 2014-2018 – For growth, employment, equity and efficiency to reach the status of an upper middle-income country. Phnom Penh: RGC.

Other sources

GIZ (2015a): Wirkung erfassen mit Kontributionsanalysen – Erste Erfahrungen mit theoriebasierten Evaluierungen. Eschborn: GIZ, March 2015.

GIZ-SHP (2018): Central Project Evaluation, Social Health Protection Project in Cambodia.

Tuncalp, Ö. et al. (WHO 2015): Quality of care for pregnant women and newborns – the WHO vision. In: *BJOG* 2015, No. 122, p.1045-1049.

UNICEF; WHO, UNFPA (1997): Guidelines for Monitoring the availability and use of obstetric services. New York: August 1997.

WHO (2017): WHO standards of care to improve maternal and newborn quality of care in facilities. Prepared for the launch meeting of the Network for Improving Quality of Care for Maternal, Newborn and Child Health, 14-16 February 2017 in Lilongwe, Malawi.

WHO (2018): Assessing maternal and newborn health hospital data in Cambodia.

World Bank (2019): World Bank Open Data Portal, Free and open access to global development data, www.data.worldbank.org, last access: 18 March 2019.

Annex 2: Evaluation matrix

	Assessment Dimension	Evaluation questions (pilot-phase, work in progress)	Evaluation indicator	Available data sources	Additional data collection	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
Relevance	RELEVANCE (max. 100 points)						
	The project concept* is in line with the relevant strategic reference frameworks. Max. 30 points	Which strategic reference frameworks exist for the project? (e.g. national strategies incl. national implementation strategy for 2030 agenda, regional and international strategies, sectoral, cross-sectoral change strategies, if bilateral project especially partner strategies, internal analysis frameworks e.g. safeguards and gender**)	(1) The methodological approach is consistent with the strategic orientation of (a) GDC and (b) partners (c) international standards: - CAM: HSP 2016-2020, FTIRM 2016-2020, National EmONC Plan 2016-2020, national SDG - GDC: Health Sector Strategy, Regional Asia Strategy, Gender Strategy, PwD Strategy, programmatic framework of GDC and EU in Health	Offer Part A and B (including change offers) GDC strategy documents and guidelines (see Annex 1) Documentation of international standards and agreements (see Annex 1) Partner policy/strategy documents (see Annex 1)	Triangulation with opinions of key stakeholders in the partner country (MoH, NCMHC, PHD/MCH Units)	Document analysis Semi-structures interviews with key informants	Contrasting the methodological approach of the project against the respective strategy documents allows for a reliable judgment on the fit into relevant strategic framework). Key stakeholders are able to situate the project concept within current strategies of the partner country.
		To what extent is the project concept in line with the relevant strategic reference frameworks?					
		To what extent are the interactions (synergies/trade-offs) of the intervention with other sectors reflected in the project concept – also regarding the sustainability dimensions (ecological, economic and social)?					
		To what extent is the project concept in line with the Development Cooperation (DC) programme (If applicable), the BMZ country strategy and BMZ sectoral concepts?					
		To what extent is the project concept in line with the (national) objectives of the 2030 agenda? To which Sustainable Development Goals (SDG) is the project supposed to contribute?	(2) The methodological approach is consistent with international standards: - WHO standards on quality of maternal and newborn care - Agenda 2030, SDG				
		To what extent is the project concept subsidiary to partner efforts or efforts of other relevant organisations (subsidiary and complementarity)?	(3) Extent to which trade-offs between sustainability dimensions are considered in the project concept				
	The project concept* matches the needs of the target group(s). Max. 30 points	To what extent is the chosen project concept geared to the core problems and needs of the target group(s)?	(1) The core problem and the methodological approach are consistent with current sector analyses.	Offer Part A and B (including change offers)	Triangulation with opinions of key stakeholders in the partner country, particularly at subnational level (e.g. provincial governments, OD, civil society organizations/DPO)	Document analysis Semi-structures interviews with key informants	Available project documentation should be sufficient to determine the extent to which the project concept matches the need of the target group.
		How are the different perspectives, needs and concerns of women and men represented in the project concept?	(2) Persons with disabilities benefit directly from project interventions	Progress Reporting Gender Analysis			
		To what extent was the project concept designed to reach particularly disadvantaged groups (LNOB principle, as foreseen in the Agenda 2030)? How were identified risks and potentials for human rights and gender aspects included into the project concept?	(3) Poor target groups close or below the poverty line benefit directly from project interventions	Results of Operational Research (e.g. on results of behavioral change communication)			
		To what extent are the intended impacts realistic from today's perspective and the given resources (time, financial, partner capacities)?	(3) Methodologies applied by the project pursue stakeholder sensitization for gender-specific needs				

	<p>The project concept* is adequately designed to achieve the chosen project objective.</p> <p>Max. 20 points</p>	<p>Assessment of current results model and results hypotheses (theory of change, ToC) of actual project logic:</p> <ul style="list-style-type: none"> - To what extent is the project objective realistic from today's perspective and the given resources (time, financial, partner capacities)? - To what extent are the activities, instruments and outputs adequately designed to achieve the project objective? - To what extent are the underlying results hypotheses of the project plausible? - To what extent is the chosen system boundary (sphere of responsibility) of the project (including partner) clearly defined and plausible? - Are potential influences of other donors/organisations outside of the project's sphere of responsibility adequately considered? - To what extent are the assumptions and risks for the project complete and plausible? 	<p>(1) Extent to which the results logic obeys to current quality criteria of GIZ</p> <p>(2) The potential effectiveness of key interventions is based on previous evidence and/or validated through the project monitoring</p> <p>(3) Key stakeholders of each intervention area confirm that interventions were strategically focused</p>	<p>Offer Part A and B (including change offers), particularly the Results Matrix, Results Models, Methodological Approach, CD strategy</p> <p>Progress reporting</p>	<p>Triangulation with opinions of project staff and key stakeholders (e.g. MoH, NCMHC, PHD/MCH Units)</p>	<p>Document analysis</p> <p>Semi-structures interviews with key informants</p>	<p>The adaptation to the chosen goal is analysed regarding (1) its formal compliance, (2) its evidence-based foundations and (3) stakeholder perceptions.</p> <p>This combination of different perspectives allows for a valid evaluation judgement.</p>
	<p>The project concept* was adapted to changes in line with requirements and re-adapted where applicable.</p> <p>Max. 20 points</p>	<p>To what extent does the strategic orientation of the project address changes in its framework conditions?</p> <p>How is/was the complexity of the framework conditions and guidelines handled? How is/was any possible overloading dealt with and strategically focused?</p> <p>What changes have occurred during project implementation? (e.g. local, national, international, sectoral, including state of the art of sectoral know-how)</p> <p>How were the changes dealt with regarding the project concept?</p>					

*The 'project concept' encompasses project objective and theory of change (ToC***) with outputs, activities, instruments and results hypotheses as well as the implementation strategy (e.g. methodological approach, CD-strategy, results hypotheses)

*** Theory of Change = GIZ results model = graphic illustration and narrative results hypotheses

** In the GIZ safeguards system risks are assessed before project start regarding following aspects: gender, conflict, human rights, environment and climate. For the topics gender and human rights not only risks but also potentials are assessed. Before introducing the new safeguard system in 2016 GIZ used to examine these aspects in separate checks.

	Assessment Dimension	Evaluation questions (pilot-phase, work in progress)	Evaluation indicator	Available data sources	Additional data collection	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
	EFFECTIVENESS (max. 100 points)						
Effectiveness	The project achieved the objective (outcome) on time in accordance with the project objective indicators.* max. 40 points	To what extent has the agreed project objective (outcome) been achieved (or will be achieved until end of project), measured against the objective indicators? Are additional indicators needed to reflect the project objective adequately? To what extent is it foreseeable that unachieved aspects of the project objective will be achieved during the current project term?	Present degree of goal-attainment and anticipated degree of goal-attainment until the end of the project term for the following indicators:				
			<u>Indicator M1:</u> The proportion of expected obstetric emergencies (Z) treated in EmONC facilities increases from 28% to 50%	Progress reporting, Monitoring sheets and further disaggregated monitoring data	PHD, OD and health staff regarding on-going trends of EmONC service utilization	Document analysis, secondary data analysis additional semi-structured interviews as indicated	The indicator is objectively verifiable
			<u>Indicator M2:</u> In each hospital, the PRH Kampot and two additional referral hospitals, three problems (PPH, eclampsia, neonatal resuscitation with bag and mask) related to EmONC are measurably improved	Progress reporting, Monitoring sheets and further disaggregated monitoring data	PHD, OD and health staff regarding on-going trends of clinical practice quality	Document analysis, secondary data analysis additional semi-structured interviews as indicated	The indicator is objectively verifiable
			<u>Indicator M3:</u> MoH integrates revised tools for early detection and appropriate referral of children with disabilities (boys and girls) into national guide-lines for safe motherhood and delivery and another national guideline.	Progress reporting, Monitoring sheets, process documentation	MoH, NCMHC and international development partners regarding the prospects for the implementation of adopted tools and guidelines	Document analysis, secondary data analysis additional semi-structured interviews as indicated	The indicator is objectively verifiable
	The activities and outputs of the project contributed substantially to the project objective achievement (outcome).* max. 30 points	To what extent have the agreed project outputs been achieved (or will be achieved until end of project), measured against the output indicators? Are additional indicators needed to reflect the outputs adequately? How does project contribute via activities, instruments and outputs to the achievement project objective (outcome)? (contribution-analysis approach) Implementation strategy: Which factors in the implementation contribute successfully to or hinder the achievement of the project objective? (e.g. external factors, managerial setup of project and company, cooperation management) What other/alternative factors contributed to the fact that the objective was achieved or not achieved?	Results Hypotheses to be assessed: (1) The adoption of quality improvement processes and related mechanisms (A-2) combined with improved EmONC qualifications of health care providers (B-3, output level) has improved the quality of EmONC services (M-2, outcome level).	Offer, Results Model, CD strategy, Progress reporting, Monitoring sheets and further disaggregated monitoring data	Perspectives of involved stakeholders (PHD/MCH units, OD staff, health staff)	Document analysis, secondary data analysis Semi-structured interviews with national partners Project contribution to be estimated by the interviewees	Medium Causal factors can probably be mapped quite reliably. Interviews will probably be able to plausibly explain causal mechanisms, but availability of or access to comparative data (i.e. data for not supported facilities) is limited

	What would have happened without the project? To what extent have risks (see also Safeguards & Gender) and assumptions of the theory of change been addressed in the implementation and steering of the project?	(2) Improved quality of EmONC care (M-2, outcome level) reduces the neonatal deaths in the supported facilities (A-4, outcome level)	Offer, Results Model, CD strategy, Progress reporting, Monitoring sheets and further disaggregated monitoring data	Perspectives of involved stakeholders (PHD/MCH units, OD staff, health staff)	Document analysis, secondary data analysis Semi-structured interviews with national partners Project contribution to be estimated by the interviewees / comparison to national trends	Medium Causal factors can probably be mapped quite reliably. Interviews will probably be able to plausibly explain causal mechanisms, but availability of or access to comparative data (i.e. data for not supported facilities) is limited
		(3) Improved EmONC qualifications of health care provider staff in the project area (B-3) combined further dissemination of capacities through lateral learning platforms (B-1) and behaviour changes of the target groups (e.g. compliance with antenatal care schedule; BCC-2, output level) increase the proportion of obstetric emergencies that is treated in EmONC facilities (M-1, outcome level).	Offer, Results Model, CD strategy, Progress reporting, Monitoring sheets and further process documentation	Perspectives of involved stakeholders (PHD/MCH units, OD staff, NCHMC)	Document analysis, secondary data analysis Semi-structured interviews with national partners Project contribution to be estimated by the interviewees / comparison to national trends	Medium Causal factors can probably be mapped quite reliably. Interviews will probably be able to plausibly explain causal mechanisms, but availability of or access to comparative data (i.e. data for not supported facilities) is limited
No project-related negative results have occurred – and if any negative results occurred the project responded adequately. The occurrence of additional (not formally agreed) positive results has been monitored and additional opportunities for further positive results have been seized. max. 30 points	Which negative or positive unintended results does the project produce at output and outcome level and why?	The project periodically monitors framework conditions, risks and unintended effects based on de-fined processes/tools/instruments	Progress reporting, operational plans, 2017 feedback mission, reports of sustainability workshops	Discussion of risk monitoring with principal advisor GFA team leader	Document analysis Semi-structured interviews	High
	How were risks regarding unintended negative results at the output and outcome level assessed in the monitoring system (e.g. compass)? Were risks already known during concept phase?	The rationale of management decisions based on the identification of external changes/risks and/or unintended results is documented and conducive to-wards the project goal	Progress reporting, operational plans, 2017 feedback mission, reports of sustainability workshops	Discussion of risk monitoring with principal advisor GFA team leader	Document analysis Semi-structured interviews	
	What measures have been taken by the project to counteract the risks and (if applicable) occurred negative results? Inhowfar were these measures adequate?	No project-related negative results have occurred – and if any negative results occurred the project responded adequately.	Progress reporting, 2017 feedback mission, reports of sustainability workshops	Adressing unintended effects in all stakeholder contacts during the evaluation of the field phase	Document analysis Semi-structured interviews	Unknown Unintended results and the outcomes of risk management can be mapped only to the degree of which stakeholders are aware of the respective occurrences and changes.
	To what extend were potential unintended positive results at outcome level monitored and exploited?					

* The first and the second evaluation dimensions are interrelated: if the contribution of the project to the objective achievement is low (2nd evaluation dimension) this must be considered for the assessment of the first evaluation dimension also.

	Assessment Dimension	Evaluation questions (pilot-phase, work in progress)	Evaluation indicator	Available data sources	Additional data collection	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
	IMPACT (max. 100 points)						
Impact	The intended overarching development results have occurred or are foreseen.* Max. 40 points	To which overarching development results is the project supposed to contribute (cf. module and programme proposal, if no individual measure; indicators, identifiers, link to national strategy for implementing 2030 Agenda, link to SDGs)? Which of these intended results at the level of overarching results can be observed or are plausible to be achieved? Target group and 'Leave No One Behind' (LNOB): Is there evidence of results achieved at target group level/specific groups of population? To what extent have targeted marginalised groups (such as women, children, young people, the elderly, people with disabilities, indigenous peoples, refugees, IDPs and migrants, people living with HIV/AIDS and the poorest of the poor) been reached?	Present degree of goal-attainment and anticipated degree of goal-attainment until the end of the project term for the following indicator: <u>Programme Indicator 3:</u> Maternal and neonatal mortality of the poor and vulnerable in Cambodia decreases by 2018.				
				Cambodian Demographic Health Survey for baseline, HMIS for current situation (disaggregated by provinces)	Discussion of current trends with stakeholders at national and subnational level (MoH, PHD/MCH units)	Document analysis, secondary data analysis Semi-structured interviews with the mentioned stakeholders	Medium Comparability of current HMIS data to the CDHS (update only every 4 to 5 years) is limited.
	The outcome of the project contributed to the occurred or foreseen overarching development results.* Max. 30 points	To what extent is it plausible that the results of the project on outcome level (project objective) contributed or will contribute to the overarching results? (contribution-analysis approach) What are the alternative explanations/factors for the results observed? (e.g. the activities of other stakeholders, other policies) What would have happened without the project? To what extent is the impact of the project positively or negatively influenced by framework conditions, other policy areas, strategies or interests (German ministries, bilateral and multilateral development partners)? What are the consequences of the project To what extent has the project made an active and systematic contribution to widespread impact? (4 dimensions: relevance, quality, quantity, sustainability; scaling-up approaches: vertical, horizontal, functional or combined)? If not, could there have been potential? Why was the potential not exploited?	Results Hypotheses to be assessed: (1) Improved quality of EmONC care (M-2, outcome level) contributes to the reduction of maternal and newborn mortality in the project provinces (I-3, impact level) (2) The adoption of guidelines and tools for MNBC-related issues facilitates the respective improvement of clinical practice (I-2), thus contributing to increasing the capacities of health care providers beyond the project-supported facilities (I-1, impact level).	Offer, Results Model, CD strategy, Progress reporting, Monitoring sheets and further disaggregated monitoring data	Perspectives of involved stakeholders: Health Administration at national and subnational level International Development partners Civil Society Organizations	Document analysis, secondary data analysis, Semi-structured interviews with mentioned partners, Contribution analysis	Rather high Though there are limitations for exactly measuring the respective indicator variable (see above), project contributions can be evidenced through measurement of trends of facility-based maternal and neonatal deaths in supported facilities
				Offer, Results Model, CD strategy, Progress reporting, Monitoring sheets and further process documentation			Low Causal factors can probably be mapped quite reliably. Interview will probably be able to plausibly explain causal mechanisms though evidence on actual implementation will be difficult to achieve (partly because processes will take place in the future).
	No project-related negative results at impact level have occurred – and if any negative results occurred the project responded adequately. The occurrence of additional (not formally agreed) positive results at impact level has been monitored and additional opportunities for further positive results have been seized. Max. 30 points	Which positive or negative unintended results at impact level can be observed? Are there negative trade-offs between the ecological, economic and social dimensions (according to the three dimensions of sustainability in the Agenda 2030)? Were positive synergies between the three dimensions exploited? To what extent were risks of unintended results at the impact level assessed in the monitoring system (e.g. compass)? Were risks already known during the planning phase? What measures have been taken by the project to avoid and counteract the risks/negative results/trade-offs**? To what extent have the framework conditions for the negative results played a role? How did the project react to this? To what extent were potential unintended positive results and potential synergies between the ecological, economic and social dimensions monitored and exploited?	The project periodically monitors framework conditions, risks and unintended effects based on de-fined processes/tools/instruments The rationale of management decisions based on the identification of external changes/risks and/or unintended results is documented and conducive to-wards the project goal No project-related negative results have occurred – and if any negative results occurred the project responded adequately.	Progress reporting, operational plans, 2017 feedback mission, reports of sustainability workshops	Discussion of risk monitoring with principal advisor GFA team leader	Document analysis Semi-structured interviews	High
				Progress reporting, operational plans, 2017 feedback mission, reports of sustainability workshops	Discussion of risk monitoring with principal advisor GFA team leader	Document analysis Semi-structured interviews	
				Progress reporting, team workshop documentations	Addressing unintended effects in all stakeholder contacts during the evaluation field phase	Document analysis Semi-structured interviews	Unknown Unintended results and the outcomes of risk management can be mapped only to the degree of which stakeholders are aware of the respective occurrences and changes.

* The first and the second evaluation dimensions are interrelated: if the contribution of the project outcome to the impact is low or not plausible (2nd evaluation dimension) this must be considered for the assessment of the first evaluation dimension also.

** risks, negative results and trade-offs are separate aspects and are all to be discussed here.

	Assessment Dimension	Evaluation questions (pilot-phase, work in progress)	Evaluation indicators (pilot phase, only available in german so far)	Evaluation indicator achievement	Available data sources	Additional data collection	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
Efficiency	EFFICIENCY (max. 100 points)			0%, 25%, 50%, 75% 100%				
	The project's use of resources is appropriate with regard to the outputs achieved. [Production efficiency: Resources/Outputs] Max. 70 points	1 To what extent are there deviations between the identified costs and the projected costs? What are the reasons for the identified deviation(s)?	Das Vorhaben steuert seine Ressourcen gemäß des geplanten Kostenplans (Kostenzeilen). Nur bei nachvollziehbarer Begründung erfolgen Abweichungen vom Kostenplan.		Modulvorschlag, Kostenplan, Kost-Obligo-Daten, Effizienz-Tool, Operationspläne, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse, weitere Dokumentanalyse und semi-strukturiertes Interview Follow-the -money approach	High
		2 Focus: To what extent could the outputs have been maximised with the same amount of resources and under the same framework conditions and with the same or better quality (maximum principle)? (methodological minimum standard: Follow-the-money approach)	Das Vorhaben reflektiert, ob die vereinbarten Wirkungen mit den vorhandenen Mitteln erreicht werden können.		Operationspläne, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Dokumentenanalyse und semi-strukturiertes Interview	Medium to high
			Das Vorhaben steuert seine Ressourcen gemäß der geplanten Kosten für die vereinbarten Leistungen (Outputs). Nur bei nachvollziehbarer Begründung erfolgen Abweichungen von den Kosten.		Modulvorschlag, Kostenplan, Kost-Obligo-Daten, Effizienz-Tool, Operationspläne, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse und semi-strukturiertes Interview Follow-the -money approach	High
			Die übergreifenden Kosten des Vorhabens stehen in einem angemessenen Verhältnis zu den Kosten für die Outputs.		Modulvorschlag, Effizienz-Tool, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	Fachliche Einschätzungen Dritter (u.a. GIZ-FMB, BMZ)	Kostenanalyse und semi-strukturiertes Interview Follow-the -money approach	Medium (There is no objective benchmark for "angemessen")
			Die durch ZASS Aufschriebe erbrachten Leistungen haben einen nachvollziehbaren Mehrwert für die Erreichung der Outputs des Vorhabens.		Kost-Obligo-Daten, Effizienz-Tool, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse und semi-strukturiertes Interview Follow-the -money approach	Medium
		3 Focus: To what extent could outputs have been maximised by reallocating resources between the outputs? (methodological minimum standard: Follow-the-money approach)	Das Vorhaben steuert seine Ressourcen, um andere Outputs schneller/ besser zu erreichen, wenn Outputs erreicht wurden bzw. diese nicht erreicht werden können (Schlussevaluierung).		Modulvorschlag, Kostenplan, Kost-Obligo-Daten, Effizienz-Tool, Operationspläne, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse und semi-strukturiertes Interview Follow-the -money approach	Medium to low (indicator difficult to apply to the current module management --> from the sector point of view, outputs are rather milestones than finished deliverables, so project efforts would not be terminated just

							because an output is already achieved)
4 Were the output/resource ratio and alternatives carefully considered during the design and implementation process – and if so, how? (methodological minimum standard: Follow-the-money approach)	Das im Modulvorschlag vorgeschlagene Instrumentenkonzept konnte hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut realisiert werden.		Modulvorschlag, Instrumentenkonzept, Kost-Obligo-Daten, Effizienz-Tool, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse, weitere Dokumentanalyse und semi-strukturiertes Interview Follow-the -money approach	High (except the remark regarding the understanding of the indicator)	
	Die im Modulvorschlag vorgeschlagene Partnerkonstellation und die damit verbundenen Interventionsebenen konnte hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut realisiert werden. Anmerkung der Gutachter: Die Formulierung "hinsichtlich der veranschlagten Kosten in Bezug auf die angestebten Outputs" ist etwas kryptisch. Ist gemeint "zu den veranschlagten Kosten"? (Es gibt in der wirkungsorientierten Steuerung "Vor-GVR" keine outputspezifischen Kosten, weder im MV noch in der Berichterstattung - man kann hier also rein technisch zwar die Kostenintensität der Outputs, aber nicht die Einhaltung veranschlagter Kosten evaluieren - in Bezug auf letztere stand den AVs die Mittelallokation bislang weitgehend frei). Anmerkung gilt natürlich auch für die weiteren Indikatoren in diesem Abschnitt		Modulvorschlag, Kostenplan, Kost-Obligo-Daten, Effizienz-Tool, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse, weitere Dokumentanalyse und semi-strukturiertes Interview Follow-the -money approach	High (except the remark regarding the understanding of the indicator)	
	Der im Modulvorschlag vorgeschlagene thematische Zuschnitte für das Vorhaben konnte hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut realisiert werden.		Modulvorschlag, Kostenplan, Kost-Obligo-Daten, Effizienz-Tool, Operationspläne, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse, weitere Dokumentanalyse und semi-strukturierte Interviews Follow-the -money approach	High (except the remark regarding the understanding of the indicator)	
	Die im Modulvorschlag beschriebenen Risiken sind hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens gut nachvollziehbar Anmerkung der Gutachter: Diesen Indikator verstehen wir nicht.		(-)	(-)	(-)	(-)	
	Die im Modulvorschlag beschriebene Reichweite des Vorhabens (z.B. Regionen) konnte hinsichtlich der veranschlagten Kosten in Bezug auf die angestrebten Outputs des Vorhabens voll realisiert werden.		Modulvorschlag, Kostenplan, Kost-Obligo-Daten, Effizienz-Tool, Operationspläne, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-)	Kostenanalyse, weitere Dokumentanalyse und semi-strukturiertes Interview Follow-the -money approach	High (except the remark regarding the understanding of the indicator)	
	Der im Modulvorschlag beschriebene Ansatz des Vorhaben hinsichtlich der zu erbringenden Outputs entspricht unter den gegebenen Rahmenbedingungen dem state-of-the-art.		Modulvorschlag, Gespräche mit AV während der Inception Mission	Dokumente zu vergleichbaren Vorhaben Fachliche Einschätzungen Dritter (u.a. GIZ-FMB, BMZ)	Kostenanalyse und semi-strukturierte Interviews Follow-the -money approach	High	
5 For interim evaluations based on the analysis to date: To what extent are further planned expenditures meaningfully		(not applicable)					

	distributed among the targeted outputs?						
<p>The project's use of resources is appropriate with regard to achieving the projects objective (outcome).</p> <p>[Allocation efficiency: Resources/Outcome]</p> <p>Max. 30 points</p>	6 To what extent could the outcome have been maximised with the same amount of resources and the same or better quality (maximum principle)?	<p>Das Vorhaben orientiert sich an internen oder externen Vergleichsgrößen, um seine Wirkungen kosteneffizient zu erreichen.</p> <p>Anmerkung der Gutachter: Der Indikator misst nicht den Gegenstand der Leitfrage (bestensfalls: Mittel-Zweck-Beziehung). Was ist letztlich zu bewerten?</p>		Gespräche mit AV während der Inception Mission	Weiteres Interview mit AV und Modul-Verantwortlichem während der Hauptmission Dokumente zur Quelle der Vergleichsgrößen	Dokumentenanalyse und semi-strukturierte Interviews	High for current, low for previous management (overall: medium to high)
	7 Were the outcome-resources ratio and alternatives carefully considered during the conception and implementation process – and if so, how? Were any scaling-up options considered?	<p>Das Vorhaben steuert seine Ressourcen zwischen den Outputs, so dass die maximalen Wirkungen im Sinne des Modulziels erreicht werden. (Schlussevaluierung)</p> <p>Oder: Das Vorhaben steuert und plant seine Ressourcen zwischen den Outputs, so dass die maximalen Wirkungen im Sinne des Modulziels erreicht werden. (Zwischenevaluierung)</p> <p>Das im Modulvorschlag vorgeschlagene Instrumentenkonzept konnte hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens gut realisiert werden.</p> <p>Anmerkung der Gutachter: Die Abgrenzung zu Indikator 4.4 ist uns völlig unklar. Was bedeutet "Realisierung des Instrumentenkonzepts in Bezug auf Outputs" versus "Realisierung des Instrumentenkonzepts in Bezug auf das Modulziel"?</p> <p>Man kann hinterfragen, inwieweit Instrumentenkonzept zur Erreichung der Outputs grundsätzlich geeignet ist UND ob die Outputs zur Erreichung des Modulziels richtig gewählt sind. Aber die obige Differenzierung leuchtet uns nicht ein.</p>		Modulvorschlag, Kostenplan, Effizienz-Tool, Operationspläne, Fortschrittsberichte, Gespräche mit AV während der Inception Mission	(-=	Kostenanalyse, weitere Dokumentanalyse und semi-strukturiertes Interview Follow-the -money approach	Medium to high
		<p>Die im Modulvorschlag vorgeschlagene Partnerkonstellation und die damit verbundenen Interventionsebenen konnte hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhaben gut realisiert werden.</p> <p>Anmkerung der Gutachter: ähnliches Verständnisproblem wie oben</p>		(-)	(-)	(-)	(-)
		<p>Der im Modulvorschlag vorgeschlagene thematische Zuschnitte für das Vorhaben konnte hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens gut realisiert werden.</p> <p>Anmkerung der Gutachter: ähnliches Verständnisproblem wie oben</p>		(-)	(-)	(-)	(-)
		<p>Die im Modulvorschlag beschriebenen Risiken sind hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens gut nachvollziehbar.</p> <p>Anmerkung der Gutachter: Diesen Indikator verstehen wir nicht. (siehe auch 4.5)</p>		(-)	(-)	(-)	(-)
		<p>Die im Modulvorschlag beschriebene Reichweite des Vorhabens (z.B. Regionen) konnte hinsichtlich der veranschlagten Kosten in Bezug auf das angestrebte Modulziel des Vorhabens voll realisiert werden.</p> <p>Anmmerkung der Gutachter: ähnliches Verständnisproblem wie oben</p>		(-)	(-)	(-)	(-)

		Der im Modulvorschlag beschriebene Ansatz des Vorhaben hinsichtlich das zu erbringenden Modulziels entspricht unter den gegebenen Rahmenbedingungen dem state-of-the-art.		Modulvorschlag, Gespräche mit AV während der Inception Mission	Weiteres Interview mit AV und Modul-Verantwortlichem während der Hauptmission Dokumente zu vergleichbaren Vorhaben Fachliche Einschätzungen Dritter (u.a. GIZ-FMB, BMZ)	Kostenanalyse und semi-strukturierte Interviews Follow-the -money approach	High
8 To what extent were more results achieved through synergies and/or leverage of more resources, with the help of other bilateral and multilateral donors and organisations (e.g. Kofi)? If so, was the relationship between costs and results appropriate?		Das Vorhaben unternimmt die notwendigen Schritte, um Synergien mit Interventionen anderer Geber auf der Wirkungsebene vollständig zu realisieren.		Modulvorschlag, Fortschrittsberichte, Gespräche mit AV und Projektteam während der Inception Mission	(-)	Dokumentenanalyse und semi-strukturierte Interviews	High
		Wirtschaftlichkeitsverluste durch unzureichende Koordinierung und Komplementarität zu Interventionen anderer Geber werden ausreichend vermieden.		Modulvorschlag, Fortschrittsberichte, Gespräche mit AV und Projektteam während der Inception Mission	(-)	Dokumentenanalyse und semi-strukturierte Interviews	High
		Das Vorhaben unternimmt die notwendigen Schritte, um Synergien innerhalb der deutschen EZ vollständig zu realisieren.		Modulvorschlag, Fortschrittsberichte, Gespräche mit AV Muskoka und Projektteam während der Inception Mission	Einschätzungen von AV und Mitarbeitern anderer EZ-Vorhaben im Rahmen des Gesundheits-Programms (v.a. SHP) Landesbüro	Dokumentenanalyse und semi-strukturierte Interviews	High
		Wirtschaftlichkeitsverluste durch unzureichende Koordinierung und Komplementarität innerhalb der deutschen EZ werden ausreichend vermieden.		Modulvorschlag, Fortschrittsberichte, Gespräche mit AV Muskoka und Projektteam während der Inception Mission	Einschätzungen von AV und Mitarbeitern anderer EZ-Vorhaben im Rahmen des Gesundheits-Programms (v.a. SHP) Landesbüro	Dokumentenanalyse und semi-strukturierte Interviews	High
		Die Kombifinanzierung hat zu einer signifikanten Ausweitung der Wirkungen geführt bzw. diese ist zu erwarten.		(keine KoFi)	(-)	(-)	(-)
		Durch die Kombifinanzierung sind die übergreifenden Kosten im Verhältnis zu den Gesamtkosten nicht überproportional gestiegen.		(keine KoFi)	(-)	(-)	(-)
		Die Partnerbeiträge stehen in einem angemessenen Verhältnis zu den Kosten für die Outputs des Vorhabens		Modulvorschlag, Effizienz-Tool Fortschrittsberichte, Gespräche mit AV und Projektteam während der Inception Mission	Einschätzungen der Partner in allen Interventionsfeldern	Dokumentenanalyse und semi-strukturierte Interviews	Medium (Partnerbeiträge in der Summe schwer zu beziffern; Evaluierung wird v.a. auf Einschätzungen von Projektmitarbeitern und Partnern beruhen)

	Assessment Dimension	Evaluation questions (pilot-phase, work in progress)	Evaluation indicator	Available data sources	Additional data collection	Evaluation strategy (evaluation design, method, procedure)	Expected evidence strength (narrative)
	SUSTAINABILITY						
Sustainability	Prerequisite for ensuring the long-term success of the project: Results are anchored in (partner) structures. Max. 50 points	What has the project done to ensure that the results can be sustained in the medium to long term by the partners themselves? In which way are advisory contents, approaches, methods or concepts of the project anchored/institutionalised in the (partner) system? To what extent are the results continuously used and/or further developed by the target group and/or implementing partners? To what extent are resources and capacities at the individual, organisational or societal/political level in the partner country available (longer-term) to ensure the continuation of the results achieved? What is the project's exit strategy? How are lessons learnt prepared and documented?	(1) Extent to which processes for further continuous quality improvement are anchored in supported health facilities (2) Extent to which supported capacities are linked to clinical guidelines (3) Extent to which training capacities to maintain and further improve health staff qualifications have been developed (4) Extent to which disabled peoples' organizations are able to sustain activities on MCH/SRGR (3) The project has identified sustainability issues in the partner system and developed an exit strategy	Progress reports Progress reports Progress reports, Operational research on skill development Progress reports, Operational research on BCC Progress reports, Reports of sustainability workshops	Triangulation with perceptions of involved stakeholders (PHD, OD, health facilities) Triangulation with perceptions of MoH and international development partners Triangulation with perceptions of PHD/MCH units, OD staff, training institutions, hospital staff Triangulation with perceptions of DPOs Triangulation with perceptions of all stakeholder groups	Document analysis, secondary data analysis Semi-structured interviews with the mentioned stakeholders Document analysis, secondary data analysis Semi-structured interviews with the mentioned stakeholders Document analysis, secondary data analysis Semi-structured interviews with the mentioned stakeholders Document analysis, secondary data analysis Semi-structured interviews with the mentioned stakeholders Document analysis, secondary data analysis Semi-structured interviews with the mentioned stakeholders	Medium Short timeframe between the end of the project and the evaluation mission will limit the ability to clearly measure how consolidated the results are.
	Forecast of durability: Results of the project are permanent, stable and long-term resilient. Max. 50 points	To what extent are the results (outcome and impact) of the project durable, stable and resilient in the long-term under the given conditions? What risks and potentials are emerging for the durability of the results (outcome and impact) and how likely are these factors to occur? What has the project done to reduce these risks?	<i>The core criteria for the sustainability evaluation are assumption-based instead of measurement based. Therefore, we recommend abstaining from formulating indicators (which are associated with actual measurement) and rely on the guiding questions only.</i>	Reports of sustainability workshops carried out in the 2nd semester 2018	Opinions of all stakeholders involved in implementation and/or steering (see list of stakeholders in chapter 5 of the evaluation report)	Semi-structured interviews	Medium (assumption-based forecast; short timeframe between the end of the project and the evaluation mission, i.e. sustainability cannot yet be observed)

	Assessment Dimension	Evaluation questions (pilot phase, only available in german so far)	Evaluation Indicator	Available Data Sources	Additional Data Collection	Evaluation Strategy (Evaluation Design, Method, Procedure)	Expected Evidence Strength (narrative)
Predecessor and additional Evaluation Questions	Predecessor and additional Evaluation Questions						
	Sustainability and impact of predecessor project	1) Überblick über die Wirkungen des Vorhabens über die Zeit (Vorgänger)		Offer, Progress Reporting, Final report, Evaluation	Interviews with selected stakeholders (in the respective intervention areas widely the same as for the current module)	Document analysis, secondary data analysis Semi-structured interviews with national partners Project contribution to be estimated by the interviewees	High
		2a) Welche Wirkungen sind noch vorhanden, wurden weiterentwickelt vor Ort? 2b) Welche Wirkungen wurden in laufende Phase integriert?		Offer and progress reporting of the current module			High
		3) Wir wurde mit Veränderungen in Rahmenbedingungen umgegangen über die Jahre (Auch Übergang zwischen den einzelnen Phasen)? Welche Weichenstellungen wurden gemacht, die bis heute hierher reichen? Was für Auswirkungen hatte dies?		Offer and progress reporting of the current module			
		4) Erfolgs- / Misserfolgskriterien		Offer, Progress Reporting, Final report, Evaluation			High
		5) Wie wurden Ergebnisse verankert in Partnerstruktur? (Nachhaltigkeit)		Offer and progress reporting of the current module			In general: high (medium to low for the outphased topic family planning)
		Punkte für Kriterien vorne: - Relevanz: Erfahrungen früherer Projekte übernommen? - Nachhaltigkeit: Wurden Wirkungen des Vorgängers genutzt?					

Photo credits and sources

Photo credits/sources:

© GIZ / Ranak Martin, Carlos Alba, Dirk Ostermeier, Ala Kheir

Disclaimer:

This publication contains links to external websites. Responsibility for the content of the listed external sites always lies with their respective publishers. When the links to these sites were first posted, GIZ checked the third-party content to establish whether it could give rise to civil or criminal liability. However, the constant review of the links to external sites cannot reasonably be expected without concrete indication of a violation of rights. If GIZ itself becomes aware or is notified by a third party that an external site it has provided a link to gives rise to civil or criminal liability, it will remove the link to this site immediately. GIZ expressly dissociates itself from such content.

Maps:

The maps printed here are intended only for information purposes and in no way constitute recognition under international law of boundaries and territories. GIZ accepts no responsibility for these maps being entirely up to date, correct or complete. All liability for any damage, direct or indirect, resulting from their use is excluded.



Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 36 + 40
53113 Bonn, Germany
T +49 228 44 60-0
F +49 228 44 60-17 66

Dag-Hammarskjöld-Weg 1-5
65760 Eschborn, Germany
T +49 61 96 79-0
F +49 61 96 79-11 15

E info@giz.de
I www.giz.de