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Central project evaluation

Development of the Urban Water and Sanitation Sector (DUWSS), South Sudan

Project number 2017.2060.6

Evaluation Report

On behalf of GIZ by Susanne Thiel (Madiba Consult) and Stephen Lubang (Madiba Consult GmbH)

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Evaluator/s:
Susanne Thiel, Stephen Lubang, Madiba Consult

Author/s of the evaluation report:
Susanne Thiel, Stephen Lubang, Madiba Consult

Consulting firm:
Madiba Consult GmbH
Am Michaelshof 4:
53177 Bonn:
T: +49 (0) 228 304 278-21
E: evaluation@maba.co
I: www.madiba.group

Coordination and management:
Claudia Kornahrens, GIZ, Head of Section
Benjamin Bräuer, GIZ, Evaluation Manager
GIZ Corporate Unit Evaluation
Central Project Evaluation Section

Responsible:
Albert Engel, GIZ, Director
GIZ Corporate Unit Evaluation

Editing:
International Correspondents in Education (ICE)

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Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices:
Bonn and Eschborn
Friedrich-Ebert-Allee 32 + 36
53113 Bonn, Germany
T: +49 228 44 60-0
F: +49 228 44 60-17 66
E: evaluierung@giz.de
I: www.giz.de/evaluierung

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Abbreviations

AMREF	African Medical Research Foundation
BMZ	German Federal Ministry for Economic Cooperation and Development
DAC	Development Assistance Committee
DUWSS	Development of the Urban Water and Sanitation Sector
FGD	Focus group discussion
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
IDPs	Internally displaced people
KAP	Knowledge, attitudes and practices
KfW	Kreditanstalt für Wiederaufbau
LNOB	Leave No One Behind
MEDIWR	Ministry of Electricity, Dams, Irrigation and Water Resources
MoAF	Ministry of Agriculture and Forestry
MoGEI	Ministry of General Education and Instruction
MoPI	Ministry of Physical Infrastructure
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
PTA	Parent-teacher association
REBASE	Strengthening Resilience Through Local Capacity Building for Pro-Poor Basic Services
SDGs	Sustainable Development Goals
TdH	Terre des Hommes
ToC	Theory of change
UDDT	Urine-diverting dry toilet
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
WASH	Water, sanitation and hygiene
WASH Cluster	Consultative body of humanitarian actors in the water, sanitation and hygiene sector
WASH DoG	Water, Sanitation and Hygiene Donor Group
WHH	Welthungerhilfe
WHO	World Health Organisation
WMC	Water management committee

The project at a glance

South Sudan: Development of the Urban Water and Sanitation Sector

Project number	2017.2060.6
Creditor reporting system code(s)	14030
Project objective	Conflict-affected and vulnerable internally displaced persons and host communities have improved access to drinking water, sanitation, and hygiene measures
Project term	01 August 2017 – 31 December 2020
Project value	EUR 8,970,860
Commissioning party	German Federal Ministry for Economic Cooperation and Development (BMZ)
Lead executing agency	Ministry of Electricity, Dams, Irrigation and Water Resources (MEDIWR)
Implementing organisations (in the partner country)	African Medical Research Foundation (AMREF), Welthungerhilfe (WHH), Terre des Hommes (TdH)
Other development organisations involved	
Target group(s)	The direct target group consisted of water suppliers in the cities of Yei (210,000 inhabitants), Yambio (110,000) and Torit (57,000). The indirect target group (final beneficiaries) was the urban population of the three cities, including host communities and internally displaced people.

1 Evaluation objectives and questions

This chapter aims to describe the purpose of the evaluation, the standard evaluation criteria, and additional stakeholders' knowledge interests and evaluation questions.

1.1 Evaluation objectives

Central project evaluations of projects commissioned by BMZ fulfil three basic functions: they support evidence-based decisions, promote transparency and accountability, and foster organisational learning within the scope of contributing to effective knowledge management. GIZ structures the planning, implementation and use of evaluations so that the contribution the evaluation process and the evaluation findings make to these basic functions is optimised (GIZ, 2018a).

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 Organisation for Economic Co-operation and Development (OECD) / Development Assistance Committee (DAC) evaluation criteria (updated 2020) for international cooperation and the evaluation criteria for German bilateral cooperation (in German): **relevance, coherence, efficiency**, **effectiveness**, **impact** and **sustainability**.

Specific assessment dimensions and analytical questions have been derived from this framework. These form the basis for all central project evaluations in GIZ and can be found in the **evaluation matrix** (Annex). In addition, contributions to the 2030 Agenda for Sustainable Development and its principles are 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. To meet the additional knowledge interests of different stakeholders, additional questions were developed and added to the relevant criteria.

Table 1: Knowledge interests by main evaluation stakeholder groups

Evaluation stakeholder group	Knowledge interests in evaluation/ additional evaluation questions	Relevant section in this report
BMZ	How were the additional (short-term) COVID-19 measures implemented and what effects did they have in terms of prevention and hygiene behaviour?	included in effectiveness criterion
BMZ	Is sustainability ensured through the continuation of measures in the follow-on project Strengthening Resilience Through Local Capacity Building for Pro-Poor Basic Services (REBASE)?	included in sustainability criterion and section on follow-on measure
WZ, Embassy	How was conflict sensitivity embedded in the project's strategy and how did it affect the achievement of impacts?	included in relevance, effectiveness and impact criteria
WZ, Embassy	Could an impact be achieved with regard to supporting basic elements of social cohesion (e.g. conflict-free coexistence between different population groups)?	included in impact criterion

2 Object of the evaluation

This chapter aims to define the evaluation object, including the theory of change (ToC), and results hypotheses.

2.1 Definition of the evaluation object

The main object of evaluation was the project Development of the Urban Water and Sanitation Sector (DUWSS) (PN 2017.2060.6). The assessment and grading according to the OECD/DAC criteria refer only to this project. Specific aspects of the predecessor project Strengthening Resilience Through Local Capacity Building for Pro-Poor Basic Services (PN: 2013.2278.3) were also part of the evaluation object but were analysed separately (section 4.1). Specific aspects of the follow-on project Resilience Building for Pro-Poor Basic Support in South Sudan (PN: 2019.1855.6) were also part of the evaluation object and analysed separately (section 5.2).

DUWSS was scheduled for a term of three years and five months (01.08.2017 - 31.12.2020), with costs for German technical cooperation of up to EUR 8,970,860. The project measures were implemented in Juba (the capital city) and the cities of Yei (Yei River State), Yambio (Gbudwe State) and Torit (Imatong State). The project office was located in Juba with secondary locations in the three cities.

Political and sectoral context and the framework conditions in which the project was embedded

The project was implemented in a fragile context and was assigned a FS1 marker. The civil war, ongoing violence, numerous regional conflicts and recurring crises have contributed to the steady deterioration of basic services in South Sudan in all sectors (water, health, energy, etc.). In response to the outbreak of civil war in December 2013, German development cooperation in South Sudan was redirected. Official government negotiations remain suspended, even after the formation of the new unity government in South Sudan in February 2020. The effects of the ongoing conflicts have led to the displacement of 4 million people. South Sudan has nearly 2 million internally displaced people (IDPs), while 2.3 million people have fled the country (UNHCR, 2021; UNOCHA, 2021).

The existing basic public services are provided mainly by the international community but are inadequate. Given the poor supply situation and the high number of IDPs, the humanitarian situation is tense. According to the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA), more than 6 million of the approximately 12 million South Sudanese are currently at risk of acute food insecurity, and the lack of drinking water is forcing more people to leave their homes. There is hardly any functioning water or sanitation infrastructure in South Sudan. Existing water sources are partly destroyed and drinking water treatment plants are often dilapidated and require high maintenance. The few available facilities do not function adequately, especially in the northern regions, or have been destroyed or damaged in the ongoing civil war. The central government in Juba no longer has the financial or organisational capacity to provide an adequate response or to take measures for overall institutional development. Added to this, the economic climate (e.g. the budget crisis in public corporations and high inflation) is seriously hampering the proper operation of drinking water and sanitation utilities (UNHCR, 2021; UNOCHA, 2021; UNDP, 2019). Less than 40% of the entire population has access to safe drinking water and sanitation. In 2019, only 38% of households reported that they had access to an improved water source in less than 30 minutes without protection-related concerns. The human right to drinking water and sanitation is not guaranteed for most of the population of South Sudan (Human Rights Watch, 2021; UNDP, 2019; UNHCR, 2021; UNOCHA, 2021).

Due to a lack of funding from the central government and counties, the owners (i.e. the urban/municipal authorities) of the water utilities in Yei, Yambio and Torit are virtually unable to function, and schools and other public institutions are undersupplied. The population in the three cities is underserved and there is an increasing risk of infection from waterborne diseases. Conflict-affected IDPs and vulnerable host-community populations in particular have insufficient access to drinking water, sanitation and hygiene measures (GIZ, 2017a).

The COVID-19 pandemic is already affecting fragile state structures in South Sudan that are struggling to implement adequate measures to contain the pandemic. The economic and social consequences of the pandemic, especially for poor and vulnerable groups in South Sudan, are severe (GIZ, 2020b). The economic and social consequences of the pandemic are difficult to assess. School closures were ordered on 21 March 2020, so schooling was interrupted for over 2 million children. This was in addition to the estimated 2.4 million children who were not attending school at the time (UNOCHA Humanitarian Response Plan (HRP) 2020 - COVID-19 Addendum). The school closures meant that many children did not have access to school food and health programmes or the clean drinking water and sanitation facilities in schools (UN OCHA Humanitarian Response Plan (HRP) 2020 - COVID-19 Addendum).

Cross-cutting issues

During the project design process, cross-cutting issues were taken into account in the areas of poverty reduction (improved access to drinking water, sanitation and hygiene, especially for vulnerable groups, marker AO-1), gender equality (focus on women in the areas of access to drinking water, sanitation and hygiene, and their deployment as agents of knowledge and multipliers, marker GG-1), reproductive, maternal, newborn and child health (the marker RMNCH-1 was added subsequently, after the project was closed), peace and security (mitigation of resource conflicts by addressing IDPs and host communities equally, marker FS-1) and human rights (contribution to the basic human right to drinking water and sanitation facilities, in light of the Leave No One Behind –LNOB– principle) (GIZ, 2017a).

Levels of intervention (with reference to the multi-level approach and capacity development)

To ensure that the measures and their intended impacts were incorporated in the long term, the project pursued both a multi-level and a multi-actor approach. The focus was on the meso and organisational level, as well as civil society and private sector actors. The capacity development strategy had to be adapted to the rapidly changing framework conditions. Due to the lack of a political executing agency or an adequate comparable institution at national level, capacity building took place primarily at local level, i.e. meso level. The project focused on capacity development measures to upgrade water utility capacities and assist managers and personnel to cope with the technical and logistical challenge of enabling such structures to guarantee the efficient, reliable, inclusive and sustainable provision of public services in the water and sanitation sectors. In addition to the provision of material supplies, implementation took place primarily through the transfer of expertise, support for organisational development processes, the establishment and promotion of cooperation formats and the horizontal and vertical networking of actors (GIZ, 2017a, 2018b, 2019b, 2020b). The project was based on existing structures such as water utilities, but also parent-teacher associations (PTAs), water management committees (WMCs) and school clubs in the context of water, sanitation and health (WASH) activities in schools (GIZ, 2017a, 2018b, 2019b, 2020b).

Position and role within the stakeholder structure (including partner structure)

The project's lead executing agency was MEDIWR. The project complied with BMZ's Guidelines for the Portfolio Design of GIZ in South Sudan (06.02.2017). In particular, Section 47 of the FC-TC guidelines was

applied and the German contribution was provided remotely from the government. MEDIWR was kept informed by the German Embassy. The public water utilities and urban/municipal authorities, as the agencies responsible for the public water supply, and schools and their administrators were project partners at local level. In the context of WASH activities in schools, the Ministry of General Education and Instruction (MoGEI), the Ministry of Agriculture and Forestry (MoAF) and the Ministry of Physical Infrastructure (MoPI) were involved in planning and implementation (GIZ 2017b, 2018b, 2019b, 2020b).

The project's three implementing partners were the international non-governmental organisations (NGOs) AMREF, WHH and TdH, which supported the project in all three outputs. The project was part of the joint forum of WASH DoG (Water, Sanitation and Hygiene Donor Group) and WASH Cluster (consultative body of humanitarian actors in the water, sanitation and hygiene sector) to coordinate and better align humanitarian aid and development cooperation partners (GIZ, 2020b).

Target groups

The project's indirect target group (final beneficiaries) was the urban population of the cities of Torit (57,000 inhabitants), Yei (210,000) and Yambio (110,000). The project focused on poor households in host communities and IDPs, especially vulnerable groups such as women and young people in these cities. School staff, pupils and community groups and associations also belonged to the indirect target group. The project targeted 80,000 final water users, 7,000 households with hygiene promotion activities, and 22 schools with 20,000 students (a detailed description of the target groups is provided under the relevance criterion) (GIZ, 2017b, 2020b).

The direct target group consisted of public water utilities and urban/municipal authorities, as the agencies responsible for public water supply and sanitation, and schools and their administrators in Torit, Yei and Yambio. MoGEI, MoAF and MoPI were direct target groups in the context of water and sanitation measures in schools. Another direct target group was health facilities, which were targeted in the context of the COVID-19 prevention measures (GIZ, 2017b, 2020b).

A detailed description of the project results model, its hypotheses and its system boundary also forms part of the definition of the evaluation object, but is provided in the next section.

2.2 Results model including hypotheses

The theory of change is the central basis for the theory-based evaluation approach and is essential for assessing the six OECD/DAC criteria. The ToC used in the project was developed by the project team based on the results matrix. No further adaptations were made, although small changes were agreed upon in the change offers of 2020 (GIZ, 2020a). The ToC was updated during the inception phase of this evaluation in a joint effort by the team and the evaluators.

The core problem, i.e. 'the human right of access to safe drinking water and sanitation facilities in South Sudan cannot be assured, the population is underserved and there is an increasing risk of infection from waterborne diseases. Conflict-affected IDPs and vulnerable host-community populations have insufficient access to drinking water, sanitation and hygiene measures', remained unchanged and even intensified due to the ongoing conflict in South Sudan, the high numbers of internal refugees throughout the project's implementation process and the COVID-19 implications (GIZ, 2017b, 2020b).

Output 1 aimed to stabilise the operation of the drinking water supply facilities in Yei, Yambio and Torit. Measures included support and advisory services to maintain the public drinking water supply. The water supply utilities received financial support for personnel and structural costs and were also supported in the

procurement of the necessary operating resources and spare parts. The advisory services were aimed at improving financial and administrative processes and contributing to additional training for technical staff, thus supporting a sustainable water supply. The rehabilitation of drinking water wells and quality assurance helped maintain access to a basic supply of drinking water and included undersupplied areas and target groups. Drinking water quality was checked at regular intervals and appropriate measures were taken to protect wells from future contamination. The water operators were facing additional challenges due to the outbreak of the COVID-19 pandemic in March 2020. Thus, the aims of output 1 contributed to improving access to drinking water for vulnerable host communities and IDPs in Yambio, Torit and Yei (project objective). The key underlying assumptions were that (a) the water supply system could be stabilised through capacity development measures and advisory services to enable 80,000 people to have access to a safe water supply and (b) a long-term and sustainable financial model for water operators could be established through investments. The key risks for achieving the results of the output were that (a) the outbreak of armed conflicts in the intervention areas could impede the implementation of measures or cause them to be terminated, (b) the difficulties associated with procurement and high fuel costs could restrict the continued operation of diesel-driven drinking water pumps and (c) investment loss could prevent the project objective from being achieved (this applied to rehabilitation, construction measures, and equipment and all kinds of facilities and material that could have been be damaged, destroyed or stolen) (GIZ, 2017b, 2020b).

Output 2 aimed to raise awareness of hygiene issues among households in the target communities. Drawing on the experience gained and the contacts established through the predecessor project, household members were informed about basic hygiene practices and the risk of contamination during the transportation and storage of drinking water at home. Additionally, chlorine tablets, soaps and feminine hygiene articles were distributed. Vulnerable households (mostly households headed by women and those of IDPs) were equipped with clean drinking water canisters. Additional COVID-19 measures included awareness campaigns, preventive hygiene measures and the distribution of hygiene materials such as face masks. The activities were carried out by AMREF and WHH directly with the households and in coordination with WASH DoG. Thus, the aim of output 2 was to reduce the effects of waterborne diseases through improved hygiene practices and to counteract the effects of COVID-19.

The key underlying assumptions were that (a) households would adopt improved hygiene practices communicated through training and awareness-raising campaigns, which has an impact on their health status and (b) the effects of COVID-19 could be counteracted by prevention and related equipment. The key risks for achieving the results of the output were that (a) conflicts and/or the pandemic would restrict or prevent access to the intervention areas and (b) the project could be exploited by interest groups, partners and target groups or that its measures could inadvertently contribute to conflicts, either directly or indirectly (e.g. population groups could feel disadvantaged or could compete for project services) (GIZ, 2017b, 2020b).

Output 3 aimed to lay the foundations for improved school hygiene through sanitary facilities and hygiene awareness. As part of the construction measures, the project introduced two new technologies for newly built toilets and hand-washing stations. Urine-diverting dry toilets (UDDTs) were implemented to address the problem of non-functioning faecal sludge disposal. Another technological innovation was the WASHaLOT group hand-washing station. The innovations were implemented by TdH and WHH and accompanied by hygiene awareness, training and development of hygiene concepts. School gardens were utilised to impart knowledge and support school nutrition. Schoolchildren were deployed as multipliers for improving domestic hygiene. In the COVID-19 context, additional measures such as the improvement of public hygiene facilities and pandemic-relevant support for health stations were implemented (GIZ, 2017b, 2020b). The key underlying assumptions were that (a) selected schools would implement hygiene concepts and (b) schoolchildren would gain access to improved school hygiene through the rehabilitation or creation

of sanitary facilities and awareness measures. Key risks for achieving the results of the output were that (a) the target groups would have to flee from violence or armed conflicts and (b) schools would be occupied by the army (GIZ, 2017b, 2020b).

The three outputs aimed to improve access to drinking water, sanitation and hygiene measures for conflict-affected and vulnerable IDPs and host communities (project objective). The three outputs were interlinked: improved access to drinking water (output 1) had an impact on household hygiene behaviour (output 2) and the school water supply (output 3). Awareness-raising measures regarding hygiene and access to sanitary facilities (outputs 2 and 3) were closely interlinked, and the preventive measures in the context of COVID-19 applied to all three outputs (GIZ, 2017b, 2020b).

The impact hypothesis follows the assumption that the module objective (outcome) contributes to the improvement of framework conditions for combating poverty through affordable access to drinking water (pro-poor approach). It was assumed that it contributes to a reduced risk of infection and therefore a reduction in waterborne disease morbidity and mortality. The improved access to drinking water, sanitation and hygiene measures is supposed to contribute to conflict-free coexistence between various population groups (basic form of social cohesion) due to equal access for everyone and the improved living standards. The project's strong focus on improving access to drinking water for women and the involvement of women in measures to improve hygiene behaviour contributes to improved gender equality by addressing the needs of women and promoting their active participation in community awareness and mobilisation. The project contributes at impact level to the implementation of the 2030 Agenda Sustainable Development Goals (SDGs), in particular the goals 'Clean water and sanitation' (SDG 6), 'Good health and well-being' (SDG 3) and 'Gender equality' (SDG 5). With its pro-poor approach, the project was committed to the LNOB principle (GIZ, 2017b, 2019b, 2020b).

System boundaries, unintended results and risks

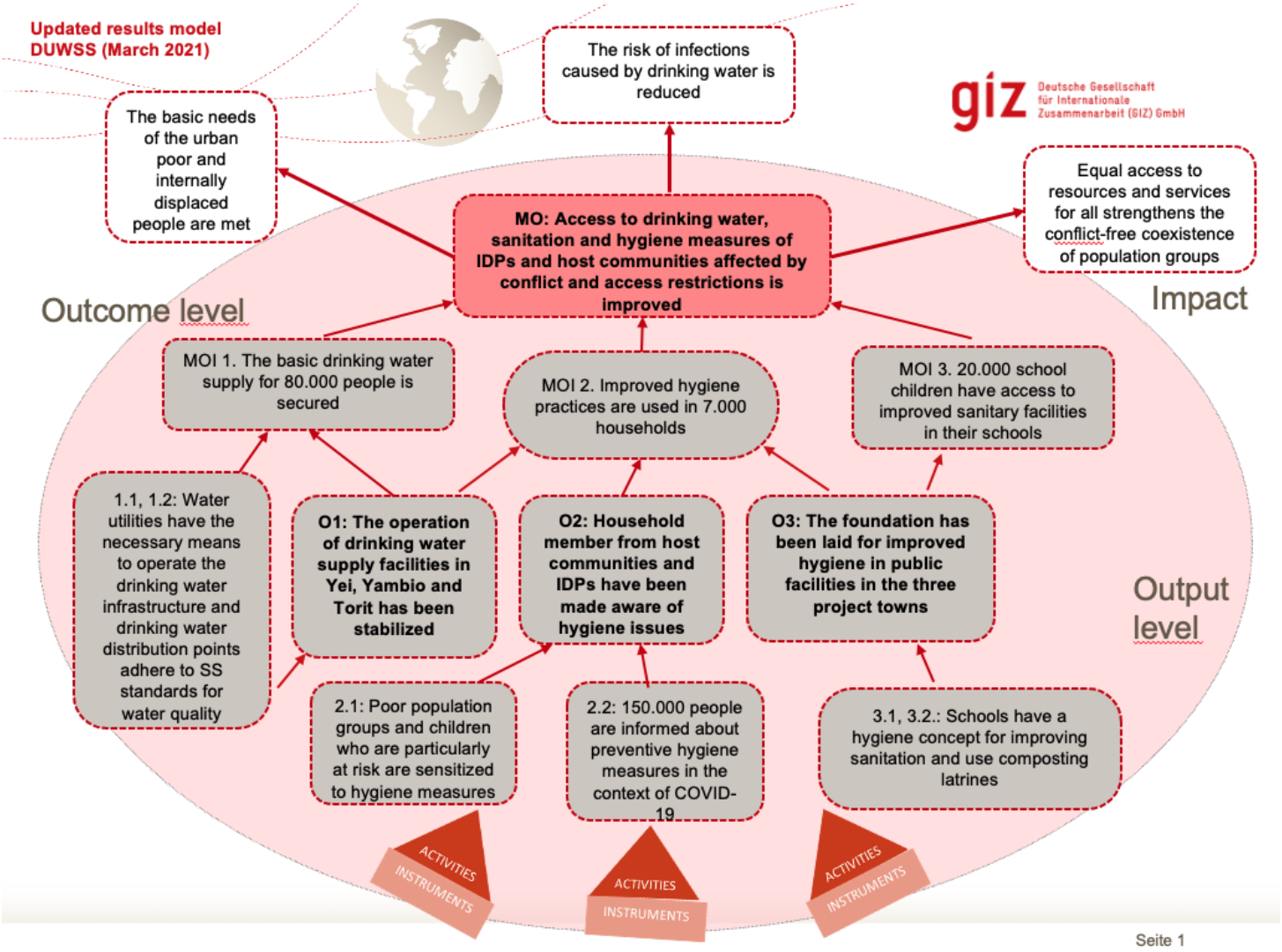
The project was responsible for the results in the red-coloured areas in the results model (see Figure 1 for the scope of the project). Different actors and framework conditions shared responsibilities for the results that fell outside this system boundary. This applies to the impacts involving the basic needs of the urban poor and IDPs being met, the risk of infection caused by drinking water being reduced and the conflict-free coexistence of population groups being strengthened, which cannot be accomplished by one project alone, but require cooperation and coordination with other projects (especially the WASH Cluster and WASH DoG. In addition, the context-related factors had to remain stable. The ToC was based on the overriding assumption that further developments in the conflict would allow the measures to be implemented (GIZ, 2017b, 2019b, 2020b).

Changes during implementation

During the project, two change offers were approved by BMZ. The first change offer was accepted by BMZ in May 2019. It included an increase in the project budget with residual funds from the previous project (PN 2013.2278.3) in the amount of EUR 2,170,860.23 and an extension of the project duration by 12 months until December 2020. No changes were made to the strategy or impact matrix; only new activities (e.g. training for water suppliers) were added. The second change offer was accepted by BMZ in July 2020. It included a contract value increase of EUR 800,000.00 to finance additional services in the area of COVID-19 prevention. In this context, changes were made to the project's impact matrix. The value of one project objective indicator (MOI 1) was increased (a drinking water supply was ensured for a higher number of people), another indicator (OI 2.2 – preventive hygiene measures) was added to output 2, and additional measures, such as the improvement of public hygiene facilities in Yei, Torit, Yambio and Juba and

pandemic-relevant support for health stations, were implemented as part of output 3 (without changing the indicators). The project duration remained unchanged (GIZ, 2017b, 2019a, 2019b, 2020a, 2020b).

Figure 1: Current result model (March 2021), adapted during the evaluation



3 Evaluability and evaluation process

This chapter aims to clarify the availability and quality of data and the process of the evaluation.

3.1 Evaluability: data availability and quality

This section covers the following aspects:

- availability of essential documents,
- monitoring and baseline data including partner data, and
- secondary data.

Availability of essential documents

The evaluability of the project was confirmed by the evaluators. All basic documents as defined by the GIZ Evaluation Unit were available (e.g. offers to BMZ, yearly progress reporting, relevant BMZ and international strategies, GIZ standard documents and cost commitment data). The information provided was exhaustive, and the overall quality of the basic documents was good and met the requirements of the evaluation.

Monitoring and baseline data including partner data

The project used the GIZ Excel-based results-based monitoring tool for measuring changes in key indicators. Most of the indicators in the monitoring system were SMART (specific, measurable, achievable, relevant and time-bound). Where this was not the case, the indicators were adjusted during the inception mission together with the staff responsible for monitoring and evaluation. The results-based monitoring tool was fairly extensive in its documentation of the data contributing to each disaggregated indicator. This made it easier to trace and assign the overall numbers, even in retrospect. Furthermore, disaggregation by other factors, such as gender and IDP status, was provided wherever the challenges of implementation in a fragile context permitted such data to be collected. Progress was tracked continuously throughout the duration of the project using indicators that were outlined in results matrices and agreed upon with the project's implementation partners. The results were verified by triangulation in an individual follow-up by the project staff, wherever feasible. The monitoring results were collected and processed every six months. The fragile political context, risks and unintended results were taken into account in the conflict-sensitive monitoring process and regularly reassessed in coordination with the risk management office, embassy and partner organisations (GIZ, 2017a, 2020b; Int_1, 5 with GIZ).

Both the project and the implementing partners (WHH, TdH and AMREF) used qualitative tools for the evaluation of outputs and outcomes, including focus group discussions (FGDs), semi-structured interviews and open questionnaires. Perspectives on the project results were gathered from the direct and indirect target groups. The monitoring system was not based on a partner's monitoring and evaluation system. Due to the special political circumstances, the project was implemented remotely from the government, without direct reference to a political partner. The monitoring results of direct target groups (e.g. water utilities) were verified and integrated into the project's monitoring system. Baseline data was available; for outputs 1 and 2, data from the predecessor project could be used. The implementing partner AMREF's first household survey regarding water handling and hygiene was used as a second baseline for output 2. For output 3, baseline data on WASH facilities in schools was collected by the project team (GIZ, 2014, 2017a, 2018a, 2020b; AMREF, 2019b; TdH, 2020a; WHH, 2021; Int_1, 5 with GIZ; Int_3,4 with stakeholder).

Secondary data

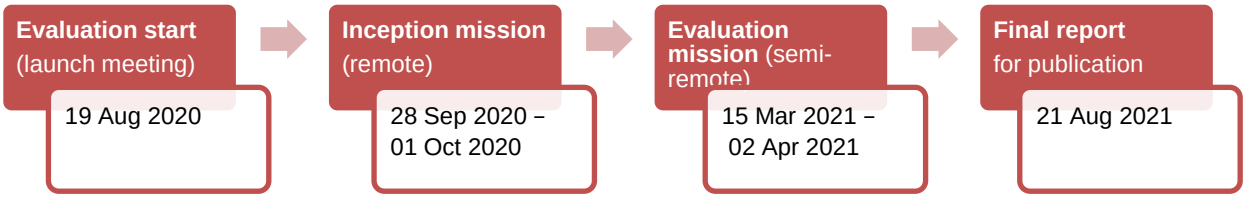
The evaluators identified and analysed additional secondary data during the evaluation phase. These included evaluation reports and assessments prepared by partner organisations and implementing partners (final and narrative reports, knowledge, attitudes and practices –KAP– assessments, data on water use at water points, etc.). Photographic documentation of water points and WASH infrastructure in schools was prepared during the field mission in the cities of Torit and Yei by the national evaluator.

3.2 Evaluation process

This section covers the following aspects:

- milestones of the evaluation process,
- involvement of stakeholders,
- selection of interviewees,
- data analysis process,
- roles of international and local evaluators,
- (semi-)remote evaluation (if applicable), and
- context and conflict sensitivity within the evaluation process (if applicable).

Figure 2: Milestones of the evaluation process



Involvement of stakeholders and selection of interviewees

The stakeholder map was used to work out, together with the project team, the list of interview partners relevant to the evaluation process.

Table 2: List of evaluation stakeholders and selected participants

Organisation/company/ target group	Overall number of persons involved in evaluation (including gender disaggregation)	No. of interview participants	No. of focus group participants	No. of workshop participants	No. of survey participants
Donors	2 (2 f)	2			
BMZ Economic Cooperation and Development (WZ), Embassy in Juba					
GIZ	6 (1 f, 5 m)	6			
GIZ project team GIZ headquarters Germany GIZ REBASE (follow-on measure)					
Partner organisations (direct target group)	14 (2 f, 12 m)				

Torit Urban Water and Sanitation Company (TUWSS) Torit Municipal Council Education Department Torit Municipal Mayor's Office Torit County Health Department Torit County WASH Department MoPI, Torit MoGEI, Torit Yei County Health Department Yei Urban Water and Sanitation (YTWSS) Yei County Education Department Yambio Urban Water and Sanitation Company (YUWASCO)					
Other stakeholders (e.g. implementing partners, public actors)	11 (3 f, 8 m)	11			
WHH AMREF Commissioner's Office, Yei Commissioner's Office, Torit Torit Relief and Rehabilitation Commission, South Sudan (RRC) Yei Relief and Rehabilitation Commission, South Sudan (RRC)					
Civil society and private sector actors	10 (3 f, 7 m)	10			
East Primary School, Torit Airport View Primary School, Torit Christ Bright Academy, Torit Dumark Primary School, Torit Cracia Primary School, Yambio St. Bakita Primary School, Yambio Luzira Primary School, Yei Royal Primary School, Yei					
Final beneficiaries/ indirect target groups (sum)	**48 (28 f, 20 m)**		**48**		
WMC, Day Secondary School, Yei	6 participants (3 f, 3 m)		6		
Water kiosk vendors in Torit	4 participants (3 f, 1 m)		4		
Water kiosk vendors in Yei	5 participants (2 f, 3 m)		5		
(WMC, Emmanuel Primary School, Yei	7 participants (4 f, 3 m)		7		
Teachers and students, Immanuel Christian Academy, Yei	5 participants (4 f, 1 m)		5		
Local leaders (water points), Yei	3 participants (1 f, 2 m)		3		
Beneficiaries of water points / kiosks, Yei	9 participants (7 f, 2 m)		9		
WMC and health club, Luzira Primary School, Yei	9 participants (4 f, 5 m)		9		
Note: f = female; m = male					

Data analysis process

Specific evaluation questions within the assessment dimensions can be found in the evaluation matrix. Each results-oriented evaluation must respond to two key challenges: (a) correctly measuring relevant changes associated with the evaluated project and (b) measuring and/or providing a qualitative explanation for the project's specific contribution to these changes. To adequately anticipate the relevant and likely results and direct the focus of the data collection and analysis process, a theory-based approach was applied based on an explicit ToC. The elements of the ToC were contrasted with evidence and the difference between the assumed versus the observed results and causal relationships largely determined the evaluation results. The OECD/DAC evaluation criteria were assessed in accordance with the analytical questions outlined in the terms of reference and the evaluation matrix (Annex 1). The selected methodologies employed elements of various analytical approaches such as contribution analysis, most significant change and storytelling. The evaluation was based mainly on qualitative data collection methods, such as open and semi-structured interviews, FGDs and workshops, and was also based on the analysis of secondary data (assessments and evaluation reports produced by implementing partners involved in evaluation processes).

The following empirical methods were selected for the evaluation and applied to all six criteria:

Analysis of documents: documentary analysis was used for all OECD/DAC criteria, all evaluation dimensions and results at all levels. Project documentation and contextual literature were reviewed, and the existing quantitative and qualitative monitoring data (including assessments and evaluation reports produced by implementing partners involved in evaluation processes) were analysed. These documents were used for triangulation.

Selection of interview partners: the project team, the main project partner representatives and evaluators jointly set up the list of potential interviewees to capture the most relevant perspectives and views. For the questionnaire design, groups of interview partners were clustered.

Documentation and analysis of interviews: semi-structured interviews were also used for all OECD/DAC criteria, all evaluation dimensions and results at all levels to collect qualitative data. Methods such as standardised interviews and the development and distribution of questionnaires and online surveys were not considered for this evaluation purpose due to the fragile context, security situation and beneficiaries' limited access to online sources. Interview guides adapted to various groups of interviewees were prepared. A format based on the evaluation matrix was used to evaluate the data from individual interviews. To draw reliable conclusions, the findings of the qualitative data collection and existing quantitative and qualitative data from the DUWSS monitoring system were combined and verified reciprocally. Transcribing and recording the audio of interviews were not options given the fragile context and the risk of jeopardising trusting relationships with interviewees.

Triangulation: triangulation was carried out in the sense that different methods or perspectives were applied to the same object of evaluation and different types of data were used in the process. During the semi-remote evaluation, it was critical that data and sources were assessed independently by each evaluator and then frequently triangulated.

(Semi-)remote evaluation

Due to restrictions caused by the COVID-19 crisis, travel to South Sudan was not possible at the time of the inception mission and the evaluation mission for the international evaluator. The evaluation mission took place from 15 March to 2 April 2021 after being postponed for a month because of COVID-19 restrictions imposed by the government of South Sudan. It was carried out in semi-remote mode. The international

evaluator was not present in the partner country, but coordinated the process from Germany and conducted the interviews with international stakeholders, the project managers and project team, GIZ headquarters and others. The evaluation mission was limited to the two project sites of Yei and Torit to minimise logistically complex travel and to avoid missing the deadline set for the mission. At the two selected locations, all three outputs were implemented during the project period and all relevant stakeholders were met. Key stakeholders at the former Yambio project site were contacted and interviewed virtually and by telephone. The evaluators used digital tools to conduct the interviews in Yambio (the third project site, which was not selected for a field visit). On the last day of the evaluation mission, a debriefing and a final workshop were held with the entire project team, colleagues from other projects and the GIZ country director for South Sudan to allow for data triangulation and validation of the results. Requests for changes and additional information were included in the debriefing presentation and considered in the analysis.

Context and conflict sensitivity within the evaluation process

The project had been assigned an FS-1 marker and was evaluated in a fragile context. The evaluators reflected on conflict sensitivity (‘Do No Harm’ approach) to avoid unintended (indirect) negative results, mitigate and deal with security risks, and avoid harming partners and stakeholders unintentionally. The evaluators were culturally sensitive and took local traditions and norms into consideration (e.g. the perception of an evaluation by partners and stakeholders).

4 Assessment according to OECD/DAC criteria

This section contains the assessments of the predecessor measure to DUWSS and the six OECD/DAC criteria.

4.1 Impact and sustainability of predecessor projects

This section analyses and assesses the impact and sustainability of the predecessor programme. To assess the long-term results of the predecessor projects, the evaluation matrix comprises the following assessment dimensions: impact and sustainability (durability) .

Analysis and assessment of predecessor project

German development cooperation has been active in South Sudan since 2009 with both financial and technical cooperation measures for the development of the urban water and sanitation sector . The technical cooperation predecessor project (PN: 2013.2278.3) was originally part of a joint programme with financial cooperation that was due to run from 2013 to 2022. The outbreak of civil war and progressive violence and insecurity in many areas of the country in 2013 and 2016 led to the indefinite suspension of the joint programme. After the programme was suspended, the financial cooperation funds from the Kreditanstalt für Wiederaufbau (KfW) project for the implementation of water supply infrastructure measures in the cities of Yei, Yambio and Torit were redirected, and UNICEF became the implementing partner (PN: 2015.6877.3). The technical cooperation module that ran from January 2014 to December 2017 was adapted to the new circumstances in 2014 and 2016. It was originally planned for two years, but was extended by two years until the end of 2017, with an amendment offer in 2015. The financial cooperation measures were intended to extend the public water supply infrastructure to provide 200,000 people with safe drinking water.

The predecessor focused primarily on the urban water and sanitation sector. Therefore, the contribution to improvements in these sectors was the focus of the assessment.

Which of the intended impacts of the predecessor project can still be observed today?

The project objective was to improve living conditions for the urban poor. The goal was to ensure that 200,000 people made use of the capacity provided for affordable drinking water and basic public sanitation and to improve their hygiene behaviour (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder). The module objective was only partially achieved (supply to 70,000 people), because political developments required that the activities be redirected at the beginning of the project. Advisory services at national level were discontinued on the instructions of BMZ. Consequently, the project focused on service delivery for the conflict-affected population (according to the 2015 change offer). Following the renewed outbreak of fighting in the Equatoria region from July 2016 and the drastically deteriorating economic situation, the project objectives were not achieved, particularly in terms of establishing self-sustaining water supply companies and covering the costs of operating water and sanitation infrastructure through water sales (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

The project had advised the South Sudanese government on the development of the National Water Bill. The bill, which was also intended to clarify the mandates and responsibilities of the various administrative levels and institutions of the water sector in South Sudan, was still in the process of departmental coordination and had not yet been passed as of March 2021, even after several years of negotiation (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

Since the end of 2015, three independent municipal utilities have been established under the project, namely in Yei, Yambio and Torit; these benefited from the cooperation of DUWSS and are also currently partners in the follow-on project REBASE (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

The project contributed to the implementation of the 2030 Agenda SDGs, especially the goals ‘Clean water and sanitation’ (SDG 6), ‘Gender equality’ (SDG 5) and ‘Peace, justice and strong institutions ’ (SDG 16). With its pro-poor approach and focus on vulnerable groups (women, IDPs, and conflict-affected and poor households), the project was committed to the LNOB principle and was based on the Do-No-Harm principle, with conflict-sensitive planning and implementation (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

Which of the achieved results (output, outcome) of the predecessor project can still be observed?

The water suppliers were supported through training and advisory services, with repairs and procurement of equipment and supplies, and were also provided with financial support to enable them to supply water to up to 70,000 people, facilities that would be continuously maintained, even in times of crisis (2016). Through the project, access to sanitation was provided through public toilets for at least 3,500 people in Yei and Juba. The results of the predecessor project can be partly confirmed at the output and outcome level. Improved access to water and sanitation facilities was envisaged and achieved to a certain degree (GIZ, 2014, 2018d; AMREF, 2019b; Int_1, 6 with GIZ; Int_1, 2, 3 with stakeholder).

With the establishment of WASH DoG, donors were provided with an important information platform that paved the way for aligning the activities of the various organisations. Cooperation arrangements were made principally in the WASH Cluster (GIZ, 2014, 2018d; AMREF, 2019b; Int_1, 6 with GIZ; Int_1, 2, 3 with stakeholder).

In what way were the results embedded/institutionalised in the (partner) system?

In response to the outbreak of civil war in December 2013, German development cooperation in South Sudan was redirected. The focus of the engagement was shifted to supporting particularly vulnerable target groups and cooperating with NGOs and international organisations. The strategic approach focused on the local (meso) level) (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

How were changes in the project context dealt with? What important strategic decisions were made? What were the consequences?

The technical cooperation module (January 2014 to December 2017) was adapted to changes caused by the volatile security situation and the consequences in 2014 and 2016. The module was originally planned for two years, but was extended by two years until the end of 2017 based on a change offer in 2015 and increased by EUR 7 million. The predecessor project responded appropriately to changes and strategic decisions were adjusted accordingly (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

Sustainability was to be achieved through the phased development of urban utilities. However, the delay in infrastructure investments, hyperinflation and the effects of the civil war were so severe that economic sustainability could not be achieved. The goals of poverty orientation and cost recovery could no longer be reconciled under the general conditions of the time. As a result, the focus shifted from cost recovery to maintaining the water supply and local structures so that activities could quickly resume when the situation in the country improved (GIZ, 2014, 2018d; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

How much did DUWSS build on the predecessor project? Which aspects (including results) were used in or integrated into DUWSS?

DUWSS built on the predecessor project and reinforced its results at outcome and output levels, and also, to a certain degree, at impact level. The DUWSS strategy took account of the restrictive effects of the ongoing crisis by focusing even more strongly on the basic needs of the target group and by prioritising measures that were effective in the short to medium term. Experience, baseline studies, contacts with target groups and existing structures were used as the basis for DUWSS (GIZ, 2014, 2018d, 2017a, 2020b; Int_1, 6 with GIZ; Int_1, 2 with stakeholder).

Methodology for assessing predecessor project

Table 3: Methodology for predecessor project

Assessment dimension: predecessor project	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Impact of the predecessor project	The predecessor programme was assessed in terms of impact based on the results logic and the results of the project. The contribution to improvements in the urban water and sanitation sector was the focus of the assessment.	**Evaluation design:** It was decided with the project team that the analysis would follow the evaluation questions in the evaluation matrix; no specific design was applied. **Empirical methods:** Relevant documents on the predecessor programme were analysed. Interviews with stakeholders involved in the planning and implementation of the follow-on project, DUWSS, were conducted.	Relevant documentation for the programme was available and of good quality. The conflict, fragile context and lack of capacity of local authorities and ministries in terms of data management and statistics were a limiting factor for the evidence strength of secondary data (e.g. official statistics on health and water-related diseases).

Assessment dimension: predecessor project	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Sustainability of the predecessor project	The contribution to sustainable long-term impacts in the urban water and sanitation sector was the focus of the assessment.	**Evaluation design:** No specific design was applied. **Empirical methods:** Same methods as in impact.	Same data quality and limitations as impact.

4.2 Relevance

This section analyses and assesses the relevance of the project Development of the Urban Water and Sanitation Sector in South Sudan. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summarising assessment and rating of relevance

Table 4. Rating of OECD/DAC criterion: relevance

Criterion	Assessment dimension	Score and rating
Relevance	Alignment with policies and priorities	30 out of 30 points
	Alignment with the needs and capacities of the beneficiaries and stakeholders	28 out of 30 points
	Appropriateness of the design*	18 out of 20 points
	Adaptability – response to change	20 out of 20 points
Relevance total score and rating		Score: **96 out of 100 points** Rating: **Level 1: highly successful**

The project was aligned with the relevant strategic reference frameworks (international and national policies and strategies, and German development cooperation strategies). The project design adequately considered the conflict situation in South Sudan and took risk assessments, peace and conflict analyses, and context analyses into account. The strategy was geared towards the core problems and needs of the direct and indirect target groups, and direct benefits were achieved for the target groups during the project term. The project was designed to reach particularly disadvantaged groups, as foreseen in the 2030 Agenda (LNOB), and the risks and potential identified in relation to human rights and gender aspects were included in the project design. Assumptions and risks were complete and plausible; the risk assessment had been updated in the progress and monitoring reports. The project design responded to the project objective (outcome). The conceptual design of the project was adapted to changes in line with requirements that arose due to changing framework conditions, and the appropriateness of the underlying strategic decisions was assessed positively. Synergies were used both internally between measures and implementing partners and between the module and other projects in the WASH Cluster.

In total, the relevance of the project is rated as Level 1: highly successful, with 96 out of 100 points.

Analysis and assessment of relevance

Relevance – Dimension 1: Alignment with policies and priorities

Relevant strategic reference frameworks and relevant BMZ strategies provided the basis for evaluating this assessment dimension. Internal frameworks such as Safeguards and Gender were also considered.

The project was aligned with the most recent international and national strategies, conventions and frameworks. It was based on the South Sudan Humanitarian Needs Overview by UNOCHA (2021), which defines the strategic frame of reference for the international donor community's goals for South Sudan. The regularly updated South Sudan Humanitarian Needs Overview, which is published annually by UNOCHA, formed the basis for the planning and coordination of measures by the international community. The coordination took place in the WASH Cluster and WASH DoG. The refugee situation in South Sudan, reported by UNHCR (2021), was considered. The project was aligned with the Republic of South Sudan National Development Strategy 2018 – 2021 (2018), the South Sudan National COVID-19 Response Plan (2020) and South Sudan's inaugural SDG report: A Roadmap Towards Sustainable Development by the Government of the Republic of South Sudan and UN South Sudan (2017). The project was based on the BMZ position paper 'Creating Prospects for Refugees: Fighting the Causes of Flight, Stabilising Host Regions, Supporting Refugees' (2017), the German government's guidelines 'Preventing Crises, Overcoming Conflict, Promoting Peace' (2017) and the BMZ strategy '2030 Agenda. Synergies and Conflicts Between Water (SDG 6) and Other Goals' (2019). Furthermore, the project followed the overarching BMZ strategy 'Equal Opportunities in German Development Policy' and the corresponding BMZ Gender Action Plan 2016–2020. Currently, there is no BMZ country strategy for South Sudan. Internal analysis frameworks like Safeguards and Gender were in place and considered (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; GRSS, 2018, 2020, 2017; UNDP, 2019; UNHCR, 2021; UNOCHA, 2021; Int_1, 5, 6 with GIZ; Int_1, 2 with stakeholder).

The 2030 Agenda is officially designated as a reference framework by the government of South Sudan and is also reflected in South Sudan's National Development Strategy for 2018-2021. Based on the outcomes of the World Humanitarian Summit, the National Development Strategy also focuses on creating better links between humanitarian assistance and development cooperation and peacebuilding measures in South Sudan. SDG 6 (Clean water and sanitation) and SDG 3 (Good health and well-being) were identified as 'of utmost importance' by the population of South Sudan in a UNDP-supported data collection exercise (Sustainable Development Goals of Immediate Concern to South Sudanese and their Families) by UNDP to monitor the achievement of the SDGs in 2019. Due to the important role played by women and girls in collecting and handling water supplies, the project measures also improved the living conditions of women in particular and thus contributed to achieving the goals of the German government's action plan for implementing UN Resolution 1325 (the Women, Peace and Security Agenda). The project contributed to the implementation of the 2030 Agenda SDGs, in particular SDG 3 on 'Good health and well-being', SDG 6 on 'Clean water and sanitation' and SDG 5 on 'Gender equality' . With its pro-poor approach, the project was committed to the LNOB principle and the No Lost Generation initiative. Specific attention was paid to vulnerable population groups, including women, female-headed households, young people, IDPs and returnees (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; GRSS, 2018, 2020, 2017; UNDP, 2019; UNHCR, 2021; UNOCHA, 2021; Int_1, 5, 6 with GIZ; Int_1, 2 with stakeholder).

The project design adequately considered the conflict situation in South Sudan and took risk assessments, peace and conflict analyses, and context analyses into account. The project was in regular communication with the Risk Management Office, the embassy and the WASH Cluster regarding risks and the assessment of the conflict situation. The risk situation was analysed in detail in the progress reports to BMZ and in the change offers. Mitigation measures were developed and regularly adjusted. The project was based on the

Do-No-Harm principle, with conflict-sensitive planning and implementation (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; Int_1, 5, 6 with GIZ; Int_1, 2 with stakeholder).

Relevance dimension 1 – Alignment with policies and priorities – scores **30 out of 30 points.**

Relevance – Dimension 2: Alignment with the needs and capacities of the beneficiaries and stakeholders

The direct target groups (partners) were water utilities in the cities of Yei, Yambio and Torit and local authorities. Alignment with their capacity development needs was assessed. The indirect target groups (beneficiaries) were vulnerable host communities, IDPs, returnees, women and children. Alignment with their needs in terms of improved access to water and sanitation was assessed.

The project's indirect target group (final beneficiaries) was the population of the cities of Yei (approximately 210,000 inhabitants), Yambio (110,000) and Torit (57,000). With its focus on pro-poor basic services, the project particularly benefited the vulnerable population (IDPs, returnees, women and children, and poor households). A drinking water supply was ensured for over 90,000 people from the three cities. Given the important role played by women and girls in terms of water collection and household hygiene, safer and easier access to drinking water benefited them in particular, and hygiene awareness-raising activities focused on women as knowledge carriers and multipliers. According to data from MEDIWR, the level of access to a source of drinking water in sufficient qualities is estimated to be only 34% in rural areas; furthermore, just 13% of the population have access to adequate sanitation facilities. Sixty-six percent of the population travel more than 30 minutes to and from a water source (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; GRSS, 2018, 2020, 2017; UNDP, 2019; UNHCR, 2021; UNOCHA, 2021; World Bank, 2021; Int_1, 5, 6 with GIZ; Int_1, 2 with stakeholder).

At local level, the project worked with the public water supply companies in Yei, Yambio and Torit and the municipal authorities responsible for the public water supply, as well as schools and their administrators. Due to the effects of the civil war, the water utilities were not able to maintain the basic drinking water supply for the population in a financially independent way. In view of the water utilities' insufficient commercial base, caused by infrastructure investments by KfW/UNICEF that had been announced but not yet implemented due to the outbreak of the conflict, they were unable to use their own funds to finance structural and operating costs. The water utility experts and staff and the local administration were the project's direct target groups. By strengthening capacities at local level and qualifying staff beyond the direct needs of the water utility to be developed, the population of neighbouring communities also benefited indirectly. As part of the COVID-19 measures, staff members of three urban health stations were added as a direct target group and trained in preventive measures and hygiene concepts (GIZ, 2020a, 2020b).

The selected project design was geared towards the direct and indirect target groups' core problems and needs. According to feedback from interviews, the measures were highly relevant for the beneficiaries, especially with respect to increased access to water and sanitation, clean drinking water, the hygienic handling and storage of water, sanitary facilities in schools and prevention measures in the context of COVID-19. The examples mentioned most frequently in interviews and FGDs included the benefits of the significantly shorter distances to water points, the possibility of obtaining clean water at affordable prices even for poor families, and the reduction in water-related diseases in families, especially among small children (Foc_Dis_2, 3 with beneficiaries). Many interviewees emphasised that women's safety situation had improved, as the distances they have to travel to water points are shorter. Sanitation in schools also meant increased safety for girls, as there were fewer assaults (Int_3, 5, 7 with beneficiaries; Foc_Dis_1, 4, 5 with beneficiaries). An overall improvement in living conditions was mentioned by various stakeholders (Int_3, 6, 9 with partner; Foc_Dis_ 2, 3 with beneficiaries).

The different perspectives, needs and concerns of women and men were appropriately represented in the project design. The project actively involved women and girls throughout the planning and implementation process (GIZ, 2017b, 2020b). Needs assessments were conducted during the project with an equal representation of men and women and different age groups to ensure that appropriate, differentiated knowledge was accessed and specific vulnerabilities and risks understood and mitigated during the project. The implementing partners WHH, TdH and AMREF emphasised gender equality concepts. Women's participation in WMCs was promoted, with 30% of members being women. Health and school gardening clubs were gender equal to enhance the participation of women and girls in activities and foster their decision-making power in shaping the sustainable improvement of agricultural and hygiene practices (AMREF, 2019a; TdH, 2020a, 2020b, 2020c; WHH, 2021).

Potential security risks for GIZ staff, partners, target groups and final beneficiaries were identified and considered in the project design; mitigation measures were developed and successfully implemented (GIZ, 2017c, 2017a, 2020a; Int_1, 4, 5, 7 with GIZ). The project design took account of escalating and deescalating factors, as identified by the project, risk assessments and peace and conflict analyses (GIZ, 2020). Evidence that escalating and deescalating factors were taken into consideration was also revealed in interviews with partners and stakeholders (Int_1, 2 with stakeholder; Int_1, 2 with partners; Int_1, 4, 5, 7 with GIZ).

Relevance dimension 2 – Alignment with the needs and capacities of the beneficiaries and stakeholders – scores **28 out of 30 points.**

Relevance – Dimension 3: Appropriateness of the design

The assessment was based on an analysis of the plausibility of the hypotheses in the ToC and whether the project objective and project design were in line with the hypotheses. As the project was undertaken in a fragile context, the evaluation examined the extent to which the conflict situation was adequately analysed and considered in the project design.

In the project's results model, inputs, activities, outputs, outcome and overarching objective (impact) were adequately mapped on a large scale. The evidence in the results model was clearly based on relevant documents, studies and experiences of international cooperation. The results hypotheses that connected the project outputs with the intended objective were plausible. Whereas each intervention area in DUWSS contributed individually to a specific dimension of the module objective (basic drinking water supply secured, hygiene practices improved, sanitary facilities in schools improved), the intervention areas were also closely interlinked, in terms, for example, of access to water, improved hygiene behaviour and the mainstreaming of the needs of vulnerable populations in all intervention areas covered by DUWSS. The project's underlying results hypotheses were partly plausible (the impact was only partly realistic and the contribution was difficult to measure). The system boundary was defined and plausible. The potential influences of other donors and organisations outside the project's sphere of responsibility were adequately considered, especially with respect to cooperation and coordination with WASH DoG and the WASH Cluster (GIZ, 2017a, 2020b; Int_1, 2 with partner).

Assumptions and risks were complete and plausible; the risk assessment had been updated in the progress and monitoring reports. Challenges arose due to changes in the political setup and the tense security situation, as well as the COVID-19 pandemic, which led to school closures and implementation delays in 2020. The project's strategic orientation addressed changes in its framework conditions. The project managers were flexible, which allowed them to react to changes (Int_1 with GIZ; Int_1, 2 with stakeholder).

Conflict sensitivity in the project design

Table 5: Dividers/escalating factors in the project context

What escalating factors/dividers and deescalating factors/connectors were identified?	Were they addressed by the project? (yes/no)	If they were addressed, how were they considered in the project concept?
South Sudan gained independence from Sudan on 9 July 2011. Due to the civil war that lasted from 2013 to 2018, South Sudan is considered a fragile state. The years after 2018 were still marked by conflict between the government and opposition forces, security force violations, entrenched impunity and a lack of respect for the rule of law. The government, the Sudan People's Liberation Movement-in-Opposition (SPLM/IO), the National Democratic Front and non-signatory groups to the 2018 peace deal reaffirmed their commitment to a ceasefire in January 2020. In February 2020, the parties to the 2018 peace deal formed a transitional government of national unity led by president Salva Kiir, with Riek Machar as the first vice president and four other vice presidents from opposition groups. This ceasefire broke down in April 2020, when fighting resumed in Yei, Lobonok, Mundri, Maridi and other parts of the Equatoria region. Peace talks restarted in October 2020.	Yes	The project had no influence on the political situation but took the most conflict-sensitive approach possible to working in the fragile and volatile context. It was based on current context and conflict analyses and regular assessments of the situation were conducted. Security risks were continuously monitored and assessed together with the German Embassy and GIZ's Security Risk Management team to ensure that adequate measures could be taken to protect staff and projects at the earliest possible stage. The project was undertaken in strict compliance with the Do-No-Harm approach. Due to the crisis classification, all international and regional experts were evacuated from South Sudan from July 2016, except for essential staff (the Head of Finance & Administration and the Security Risk Manager), and the project was implemented remotely with regular business trips (Greater Juba) by the international experts. Only national staff and third parties were able to travel to the rest of the project area (Yei, Yambio and Torit).
Leaders from all parties involved in the conflict failed to prevent abuse by their forces and hold perpetrators to account, with few exceptions. Eight leaders and commanders representing both government forces and rebel groups are subject to United Nations individual sanctions for war crimes and other roles played in the conflict. Inter-communal fighting, cattle raiding and revenge attacks between armed youth groups have resulted in hundreds of deaths and injuries, displaced hundreds of thousands of people, and led to the suspension of humanitarian services in some areas.	Yes	The project had no influence on the political situation but took the most conflict-sensitive approach possible to working in the fragile and volatile context. The volatile situation required continuous coordination with relevant humanitarian actors while flexibly adapting activities and timeframes, including the reinforcement of digital formats for project management and implementation. The project was carried out in cooperation with partner institutions and local authorities at meso and micro level. Maintenance of a water supply helped improve the living conditions of the population in the areas covered by the project.
The highly volatile security situation had an impact on basic services for the population, including water and healthcare. The provision of humanitarian aid was hampered by the conflict.	Yes	The project had significant potential to make a positive contribution to peace and security, particularly since measures involved the transfer of skills that were necessary for maintenance of essential water infrastructure, to ease the negative consequences of rising migration numbers, foster the resilience of the population to war-related insecurity and promote self-sufficiency in clean water and sanitation (e.g. focus on affordable access to water).
The country was in a state of crisis during the project term (2017-2020) and was struggling with a humanitarian disaster on several fronts, including rising numbers of infections in the wake of the COVID-19 pandemic and the downstream effects of the crisis. Healthcare facilities were poorly staffed and ill-equipped, and COVID-19 testing and access to information were inadequate. Schools were closed for six months due to COVID-19, which forced 2.2 million children out of school in 2020.	Yes	Due to the COVID-19 pandemic, no further business trips took place in 2020. The implementation of individual measures was also affected. Strict adherence to hygiene concepts was applied to all measures. Additional funding made it possible to implement further measures in the COVID-19 context. The number of beneficiaries of water and hygiene measures could be increased.
Given the scarcity of resources, the high number of IDPs led to tensions with host communities.	Yes	IDPs are distributed among the host population in cities and thus could not be clearly delimited regionally. Both groups benefited equally from improved access to water and hygiene measures. Through a reduction in the overall pressure on basic service provision related to the water

What escalating factors/dividers and deescalating factors/connectors were identified?	Were they addressed by the project? (yes/no)	If they were addressed, how were they considered in the project concept?
		supply, more favourable conditions were created to cope with the rising migration numbers.

Table 6: Connectors/deescalating factors in the project context

Which deescalating factors/connectors were identified in the project context?	Addressed by the project? (yes/no)	If addressed, how is it considered by the project design?
The local water suppliers and local administrations were included among the deescalating factors. The water suppliers in particular created non-discriminatory access to infrastructure and thus services on the basis of pro-poor tariffs. The wells with hand pumps were under the supervision of local administrations. So far, risks of resource monopolisation by local elites have been avoided.	Yes	The local implementation partners were primarily water suppliers and partly local administrations. There was no evidence that access in the project regions was regulated on the basis of ethnic or other factors. The project established management committees and similar structures for the sustainable and inclusive administration of the infrastructure and management of conflicts of use. By ensuring access to water points within the city, the project beneficiaries were already exposed to fewer dangers when collecting water. In view of the high number of sexual assaults against women, special consideration was given to women's safety when designing support in the drinking water and sanitation sector.
Civil society was described in context and integrated peace and conflict analyses were conducted for the project as a potential driver for peaceful and inclusive development. Civil society actors contributed to peacefully resolving conflicts and tensions.	Yes	Developing the capacities of civil society actors helped ensure that the basic needs of the indirect target groups were met, their self-help capacities increased and the legitimacy of civil society groups strengthened. The project promoted inclusive and representative participation processes in relation to the water supply through the involvement of the supervisory board, local administrations, WASH clubs in schools, women's groups and the traditional authorities.

Relevance dimension 3 – Appropriateness of the design – scores **18 out of 20 points.**

Relevance – Dimension 4: Adaptability – response to change

The assessment was based on changes in the project context and whether or not the project responded appropriately. This also included two official change offers from May 2019 and July 2020.

The project's conceptual design was adapted to changes in the framework conditions caused by the COVID-19 pandemic that took place in the last year of the project term (2020). Changes in the project's implementation also occurred based on two change offers (May 2019 and July 2020). The first included an increase in the project budget through the transfer of residual funds (EUR 2,170,860.23) from the previous project (PN 2013.2278.3) and an extension of the 12-month term until December 2020, without any changes to the strategy or results matrix. In output 1, advisory services and technical training on the topics of the sustainability and resilience of enterprises and further training measures to strengthen the capacities of water supply company supervisory boards were added. In output 3, the extension of the term allowed the sustainable operation and maintenance of the sanitary facilities to be further consolidated; awareness-raising measures relating to hygiene issues were also added. The project responded appropriately to the changes. The second change offer included a contract value increase of EUR 800,000 to finance additional services in the area of COVID-19 prevention. In this context, changes were made to the project's results matrix. The values of one module objective indicator (MOI 1) were increased (a drinking water supply was to be ensured for 80,000 instead of 50,000 people), another indicator was added to output 2 (OI 2.2) (preventive hygiene measures), and additional measures were implemented as part of output 3, such as the improvement of public hygiene facilities in Yei, Torit, Yambio and Juba and the provision of pandemic-

relevant support to health stations (without changing the indicators). The duration remained unchanged. All activities were aligned with the national action plan to combat COVID-19 (April 2020 - March 2021, Ministry of Health, South Sudan). Synergies were exploited both internally between measures and implementing partners and between the module and other projects in the WASH Cluster (GIZ, 2017a, 2019a, 2020a, 2020b; Int_1 with GIZ; Int_1, 2, 3, 4 with stakeholder). The project responded appropriately to the changes and made the best use of the additional funds.

Relevance dimension 4 – Adaptability – response to change – scores **20 out of 20 points.**

Methodology for assessing relevance

Table 7: Methodology for assessing OECD/DAC criterion: relevance

Relevance: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Alignment with policies and priorities	Relevant strategic reference frameworks formed the basis for evaluating this dimension: the South Sudan Humanitarian Needs Overview by UNOCHA (2021), the refugee situation in South Sudan, as reported by UNHCR (2021), South Sudan's National Development Strategy 2018 – 2021 (2018), the South Sudan National COVID-19 Response Plan (2020), South Sudan's inaugural SDG report (2017) and relevant BMZ strategies. Internal frameworks such as Safeguards and Gender were also considered.	**Evaluation design:** The analysis was conducted in line with the evaluation questions in the evaluation matrix; no specific design was applied. No additional evaluation questions arose during the evaluation. **Empirical methods:** Relevant documents were analysed. Interviews with BMZ, GIZ representatives and implementing partners on important aspects of the strategies and frameworks embedded in the design were conducted.	Relevant strategic reference frameworks and project documentation were available and of good quality. The evidence strength was good. There is currently no BMZ country strategy for South Sudan.
Alignment with the needs and capacities of the beneficiaries and stakeholders	Alignment with the needs of direct and indirect target groups in terms of improved access to water and sanitation was assessed.	**Evaluation design:** No specific design was applied. **Empirical methods:** A target group analysis was conducted based on the assessment of relevant project documents and empirical data, collected through interviews and FGDs with the project team, implementing partners and target groups.	The specific stakeholders and target groups and their needs were represented in the available documents. The evidence strength was good.
Appropriateness of the design*	The assessment was based on the plausibility of the hypotheses in the ToC and on whether the project objective and project design were in line with the hypotheses. As the project was undertaken in a fragile context, the	**Evaluation design:** No specific design was applied. **Empirical methods:** Relevant project documents were analysed to provide evidence of the plausibility of the results	Documents were available and of good quality. The Integrated Peace and Conflict Assessment (iPCA) was outdated; secondary data was used to analyse the conflict context.

Relevance: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
	evaluation examined the extent to which the conflict situation was adequately analysed and considered in the project design.	model. Workshops and interviews with the project team and key stakeholders were conducted.	
Adaptability – response to change	An analysis of changes in the project context and of whether the project responded appropriately was carried out. This also included two official change offers in May 2019 and July 2020.	**Evaluation design:** No specific design was applied. **Empirical methods:** Analysis of relevant project documents (change offers, progress reports, etc.) and interviews with the BMZ and project team.	Documents were available and of good quality.
*The project design encompassed the project's objective and ToC (GIZ results model, graphic illustration and narrative results hypotheses), with outputs, activities, instruments, results hypotheses and the implementation strategy (e.g. methodological approach, capacity development strategy and results hypotheses).			

4.3 Coherence

This section analyses and assesses the coherence of the project. It is structured according to the assessment dimensions in the GIZ project **evaluation matrix** (see annex 1).

Summarising assessment and rating of coherence

Table 8. Rating of OECD/DAC criterion: coherence

Criterion	Assessment dimension	Score and rating
Coherence	Internal Coherence	45 out of 50 points
	External Coherence	45 out of 50 points
Overall score and rating		Score: **90 out of 100 points** Rating: **Level 2: successful**

Within German development cooperation, the project was designed and implemented in a complementary manner, based on the division of tasks. The intervention fully exploited the synergies within German development cooperation. To improve information management in the WASH sector, maintenance of the web-based WASH information platform was supported. The intervention was consistent with the international and national norms and standards to which German development cooperation is committed. DUWSS created synergies with the implementing partners WHH, TdH and AMREF by sharing experiences and harnessing and combining different resources. The intervention complemented and supported the partner's own efforts to improve access to drinking water, awareness-raising (also concerning COVID-19 prevention measures) and WASH facilities in schools by following national development plans and guidelines, adapting to the local conditions and promoting existing approaches in the various institutions.

In total, the coherence of the project is rated as Level 2: successful, with 90 out of 100 points.

Analysis and assessment of coherence

Coherence – Dimension 1: Internal Coherence

The assessment examined whether the intervention in South Sudan was designed and implemented in a complementary manner, based on the division of tasks within German development cooperation, and whether the necessary steps were taken to fully exploit the synergies within German development cooperation. Consistency with international and national norms and standards (especially those relating to human rights) was another basis for the assessment.

Within German development cooperation, the project was designed and implemented in a complementary manner, based on the division of tasks. For example, further training measures to strengthen the capacities of water company supervisory boards, with a special focus on the areas of good governance and anti-corruption, were carried out in cooperation with the technical cooperation measure Strengthening the Competence and Resilience of Local Governments in South Sudan (PN 2015.2098.0). To improve information management in the WASH sector, maintenance of the web-based WASH information platform was supported within the framework of the Study and Expert Fund's individual measure Maintenance and Further Development of the WASH Information Platform with the implementation partner REACH and funds from other donors (the Office of US Foreign Disaster Assistance and UNICEF). Its development was driven largely by the completed Study and Expert Fund measure Information System for the Water and Sanitation Sector (PN: 2005.3504.7-011.00). The platform was created with the aim of improving information management in the WASH sector. In terms of the nexus, exchanges within the framework of these forums and at implementation level supported the complementary planning of measures, enabled synergy effects to be utilised and increased the efficient dovetailing and coherence of humanitarian aid and development cooperation activities. After the Study and Expert Fund measure Anti-Corruption and Promotion of Integration in Urban Water Utilities (2005.3504.7-013.00) was commissioned in April 2020, the corresponding activities were prepared and cooperation was initiated, especially with the Water Integrity Network (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; Int_1, 5, 6 with GIZ; Int_1 - 4 with stakeholder; Int_1, 2, 4, 6, 7, 8, 10, 11, 12 with partner).

The instruments of German development cooperation (technical and financial cooperation) were meaningfully interlinked within the intervention in terms of both design and implementation. After the joint development cooperation programme Development of the Urban Water and Sanitation Sector in South Sudan was suspended, the financial cooperation funds from the KfW project for the implementation of water supply infrastructure measures in the cities of Torit, Yambio and Yei, with UNICEF as the implementing partner, were redirected in 2018 (PN: 2015.6877.3). The end of the technical cooperation project would have meant that support for the water supply companies in Torit, Yambio and Yei, which were not yet economically viable, would have ended even before the necessary extensions to the drinking water distribution systems had been carried out. The REBASE project (PN: 2019.1855.6), which includes continued support for the project regions of Torit, Yambio and Yei and can be regarded as a follow-on measure, ensures the sustainability of the follow-up capacity of the infrastructure investments (Int_1, 5, 6 with GIZ; Int_1 - 4 with stakeholder).

The intervention was consistent with the international and national norms and standards to which German development cooperation is committed. In particular, the human right to water and sanitation (United Nations General Assembly Resolution 64/292), Resolution 1325 on women, peace and security, and the rights of individuals with disabilities should be highlighted here (GRSS, 2018, 2020; UNDP, 2019; BMZ, 2019; GIZ, 2017a, 2020b). The project created the conditions for water and sanitation services to be physically accessible in the immediate vicinity of households and educational institutions. Through support for the water suppliers, the project ensured that water facilities and services are affordable for all. The project's planning and implementation were based on guidelines from the World Health Organisation (WHO)

on drinking-water quality, acceptability, access and affordability (WHO, 2017). Gender equity and the rights of individuals with disabilities were not addressed in explicit strategies, nor were they comprehensively monitored or evaluated at impact level (UNDP, 2019; BMZ, 2019; GIZ, 2017a, 2020b; AMREF, 2019a, 2019b; TdH, 2020a; WHH, 2021).

Coherence dimension 1 – Internal Coherence – scores **45 out of 50 points**.

Coherence – Dimension 2: External Coherence

The assessment examined whether the intervention complemented and supported the partner's own efforts (principle of subsidiarity) and whether the intervention's design and implementation had been coordinated with the activities of other donors. In particular, the link with UNICEF ensured continuous exchange and coordination with the humanitarian sector. At the same time, continued participation in donor coordination meetings in the field of WASH (WASH DoG) in South Sudan, which were also chaired by Germany on a rotational basis, was used for coordination and consultation in the sector. To coordinate and better align humanitarian and development partners, the joint forum of WASH DoG and the WASH Cluster met continuously, albeit intermittently. The meetings helped ensure coordination, avoided overlaps and supported the setup of strategies for the Humanitarian Response Plan. The projects were based on the indicators developed within the plan's framework (Int_1-6 with GIZ; Int_3, 4 with stakeholder). The intervention's design and implementation were well coordinated with the activities of other donors, through the use of the existing systems and structures of international organisations for implementation.

DUWSS created synergies with the implementing partners WHH, TdH and AMREF through the exchange of experiences and the use and combination of different resources in terms of assessments, analyses, monitoring and evaluations. The success of WASH activities in school programmes depended on the expertise of relevant government departments (e.g. MoPI and MoGEI), the WASH sector and implementing partners for the standardisation of designs and standards and the alignment of existing policy guidelines. This ensured, firstly, compliance with international standards and, secondly, efficient and cost-effective implementation (AMREF, 2019a, 2019b; TdH, 2020a; WHH, 2021; GIZ, 2020b).

The intervention complemented and supported the partner's own efforts to improve access to drinking water, awareness-raising activities with respect to COVID-19 prevention measures and WASH facilities in schools, by following national development plans and guidelines, adapting to local conditions and promoting existing approaches in the various institutions. Synergies were created with partners and implementing organisations through the use of common systems, e.g. in the area of monitoring and evaluation. Continuous exchanges between relevant actors concerning learning experiences, risks, unintended effects and mitigation measures fostered a culture of shared learning from which partners also benefited (AMREF, 2019a, 2019b; TdH, 2020a; WHH, 2021; GIZ, 2020b; WHO, 2017; GRSS, 2018).

Coherence dimension 2 – External Coherence – scores **45 out of 50 points.**

Methodology for assessing coherence

Table 9: Methodology for assessing OECD/DAC criterion: coherence

Coherence: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Internal coherence	The assessment examined whether the intervention in South Sudan was designed and implemented in a complementary manner, based on the division of tasks within German development cooperation, and whether the necessary steps were taken to fully exploit synergies within German development cooperation. Consistency with international and national norms and standards (especially those relating to human rights) was another basis for the assessment.	**Evaluation design:** The analysis was conducted in accordance with the evaluation questions in the evaluation matrix; no specific design was applied. No additional evaluation questions arose during the evaluation. **Empirical methods:** Relevant documents were analysed. Interviews with BMZ, GIZ representatives and implementing partners on important aspects of the strategies and frameworks embedded in the design were conducted.	Relevant strategic reference frameworks and project documentation were available and of good quality. The evidence strength was good.
External coherence	The assessment examined whether the intervention complemented and supported the partner's own efforts (principle of subsidiarity) and whether the intervention's design and implementation had been coordinated with the activities of other donors.	**Evaluation design:** No specific design was applied. **Empirical methods:** The same methods as for internal coherence were used.	Relevant strategic reference frameworks and project documentation were available and of good quality. The evidence strength was good.

4.4 Effectiveness

This section analyses and assesses the effectiveness of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summarising assessment and rating of effectiveness

Table 10. Rating of OECD/DAC criterion: effectiveness

Criterion	Assessment dimension	Score and rating
Effectiveness	Achievement of the (intended) objectives	27 out of 30 points
	Contribution to achievement of objectives	27 out of 30 points
	Quality of implementation	18 out of 20 points
	Unintended results	18 out of 20 points
Overall score and rating		Score: **90 out of 100 points** Rating: **Level 2: successful**

The project objective (outcome) was achieved on time and in accordance with the project objective indicators agreed upon in the offer. The project objective was specific; the indicators fulfilled the SMART criteria and could be evaluated. Monitoring of the project was effective in proving the results of the project. All planned target groups were reached by the project. The evaluators used the contribution analysis based on three hypotheses that were selected jointly by the project team and the evaluators to assess the effectiveness of the project. The hypotheses of the results model were compared to the actual results to find empirical evidence of the results chains described. They reflected the main assumptions in this respect and mirrored the most relevant processes according to the project team and the main project partners, and were confirmed by the evaluators. The project responded adequately to project-related (unintended) negative results and monitored and utilised additional (not formally agreed) positive results.

In total, the effectiveness of the project is rated Level 2: successful, with 90 out of 100 points.

Analysis and assessment of effectiveness

Effectiveness– Dimension 1: Achievement of the (intended) objectives

The evaluation was based on whether the project achieved the objective on time and in accordance with the project objective indicators agreed upon in the offer.

The target value of outcome indicator 1 (drinking water supply based on South Sudanese standards) had been overachieved by the end of the project term. The capacity to supply drinking water to 90,100 people was ensured and the value exceeded (achievement of 113%). To achieve the target value, the project focused on support for the water utilities at the three locations of Yei, Torit and Yambio. The project rehabilitated a total of 61 drinking water wells and created the capacity to supply up to 30,500 people. The capacity of the public drinking water supply was expanded through the commissioning of water kiosks. Compliance with South Sudanese drinking water quality standards was demonstrated for 77% of the 150 water delivery points inspected (target value 80%) (OI 1.2). The structure of the water utilities as publicly owned companies ensured local ownership, participation of the population and accountability of the water utilities to the public in all matters relating to the drinking water supply (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; AMREF, 2019a, 2019b; TdH, 2020a; WHH, 2021).

According to outcome indicator 1, output 1 (stabilised operation of drinking water supply facilities) contributed significantly to the project outcome; access to drinking water, sanitation and hygiene measures improved for conflict-affected and vulnerable IDPs and host communities. Despite the volatile and fragile situation, the technical and operational capacities of local actors in the water utilities for the provision of drinking water and sanitation were strengthened. Employees of the water utilities were able to expand their technical, administrative, organisational and accounting expertise. To assess outcome indicator 1, documentation and monitoring results for the project were used. In addition to these secondary sources, primary sources in the form of interviews with partner organisations and beneficiaries provided evidence for the evaluators (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; AMREF, 2019a, 2019b; TdH, 2020a; WHH, 2021; Int_1 - 6 with GIZ; Int_1 - 4 with stakeholder; Int_1, 2, 4, 6, 7, 8, 10, 11, 12, 14 with partner; Int_1, 3, 7, 8 with beneficiaries; Foc_Dis_1, 4, 8 with beneficiaries).

According to outcome indicator 2 (improved hygiene practices), the target value with regard to the number of households (8,960) using improved hygiene practices was overachieved (target value of 7,000 households; achievement of 128%). A total of 11,200 households (with an average of six members) were reached through the Safe Water Champions campaign at the project sites in Torit and Yambio in coordination with AMREF to raise awareness about water hygiene among households. The hygiene measures promoted by the project to prevent renewed contamination of the drinking water, which were easy to implement even under the difficult conditions, motivated the households to take more responsibility

and were positively accepted. Unfortunately, the data quality (the data was collected by the multipliers during household visits) made it impossible to accurately determine how many of the households reached applied at least two new hygiene practices in their everyday lives. However, an evaluation of the data concluded that two or more hygiene practices were applied in 8,960 households (e.g. disinfection of water containers and separation of water areas for humans and animals). Although the module target indicator was exceeded in terms of numbers, the value should be treated with caution. According to data from the female multipliers, hardly any water hygiene measures were applied before the budget consultations, so the result is plausible (GIZ, 2017a, 2017b, 2017c, 2020a, 2020b, 2020c; AMREF, 2019a, 2019b; WHH, 2021). According to different stakeholders, 'people in the neighbouring communities adopted different hygiene behaviour. This increased the impact of the project. The most common hygiene practice adopted was the cleaning of water containers. This improved the health of community members in areas that were not even targeted by the project' (Int_4 with partner). 'Some of the direct beneficiaries also shared the knowledge they had acquired during the training with other people in the neighbouring communities' (Int_3, 4 with stakeholder). 'Water hygiene became an important issue during COVID-19 times, as it helped reduce infections between people. Access to safe water played an important role to ensure that community members remained safe from COVID-19 infection' (Int_3, 4 with stakeholder).

According to outcome indicator 2, output 2 (awareness of hygiene issues) contributed significantly to the project outcome. The project team cooperated closely with the implementing partner AMREF and used the Safe Water Champions model as a participatory multiplier system in which women were closely involved in the implementation process. Women as multipliers facilitated access to women and girls, the majority of whom are responsible for fetching water and handling it in the household. The impact assessment and narrative reports of the implementing partner were used for the assessment of outcome indicator 2. In addition to these secondary sources, primary sources in the form of interviews with target groups, local health departments and facilities provided evidence for the evaluators. Interviews and FGDs with final beneficiaries were not possible during the evaluations, since the COVID-19-related restrictions meant that no household visits and surveys were permitted (GIZ, 2017a, 2017b, 2017c, 2020a, 2020b, 2020c; AMREF, 2019a, 2019b).

The target value of outcome indicator 3 (improved sanitary facilities in schools) was almost achieved (96%). A total of 19,152 students (9,688 schoolgirls) at the 22 partner schools in Yei, Yambio and Torit benefited from improved access to school sanitation facilities in accordance with South Sudanese standards (40 girls per toilet, 50 boys per toilet, 25 boys per urinal and 25 teachers per toilet). The construction measures to repair or build new sanitary facilities as a basis for improving school hygiene were completed. The needs of schoolgirls were adequately taken into account, since washing facilities were built and the issue of menstrual hygiene addressed. In addition to rehabilitating water points in schools and constructing sanitation facilities, awareness-raising sessions and training were provided for UDDT and WASHaLOT station stakeholders in the school environment, such as school administrators, headteachers and teachers, hygiene measures were incorporated into teaching activities and schoolchildren were instructed in the correct use of water and hygiene items. Students and parents were involved through existing structures such as PTAs, or through the promotion of new initiatives such as school water and health clubs and school garden clubs. Module objective indicator 3 contributed significantly to the project outcome as a result of the improved facilities and promotion of the hygienic use of the facilities by initiating behavioural change among schoolchildren. The outbreak of the COVID-19 pandemic posed a particular challenge for the implementation of activities in schools, since they were closed in March 2020. It will only be possible to fully assess whether the long-term use of the sanitary facilities and the application of lessons learned have been successful after the schools open. The cooperation in this context is being continued by the follow-on measure REBASE. The assessment and monitoring results of the implementing partners WHH and TdH were verified by the project and used for the assessment of this indicator. In addition to these secondary sources, primary sources in the form of interviews with partner organisations, school administrators,

teachers, members of different school clubs and schoolchildren provided evidence for evaluators (GIZ, 2017a, 2017b, 2017c, 2020a, 2020b, 2020c; TdH, 2020a; WHH, 2021; Int_1 - 6 with GIZ; Int_1 - 4 with stakeholder; Int_1, 2, 4, 6, 7, 8, 10, 11, 12, 14 with partner; Int_1, 3, 7, 8 with beneficiaries; Foc_Dis_1, 4, 8 with beneficiaries).

The following table shows the original indicators, as well as the results and further explanations.

Table 11: Assessed and adapted objective indicators for specific modules (outcome level)

Project's objective indicator according to the (last change) offer	**Assessment according to SMART criteria**	**Adapted project objective indicator**
Outcome indicator 1: a drinking water supply for 80,000 persons (host communities, IDPs) has been ensured to South Sudanese standards (8 l/cap-day). Base value: 0 Target value: 80,000 Current value: 90,100 Achievement in %: 113% Source: written assessment of user statistics from the water utilities, reports by the NGO contracted to carry out implementation in the various intervention areas, and representative sample surveys conducted separately by the project.	The indicator meets the SMART criteria. **Specific**: number of beneficiaries correctly identified. **Measurable**: it can be measured by verifying access to the water supply. **Achievable/Realistic**: the indicator target is realistic in light of the coverage of the cities involved. **Time-Bound**: until the end of the project term.	
Outcome indicator 2: in 7,000 households (host communities, IDPs), two new improved hygiene practices promoted by the project are being applied, largely for the benefit of women and girls. Base value: 0 Target value: 7,000 Current value: 8,960 Achievement in %: 128% Source: assessment of reports by the NGO contracted for implementation and semi-annual representative sample surveys in households in the project area carried out by a separately contracted NGO.	The indicator meets the SMART criteria. **Specific**: number of beneficiaries correctly identified. **Measurable**: it can be measured by verifying attendance at hygiene sessions and by observing changes in behaviour regarding the application of hygiene practices. **Achievable/Realistic**: the indicator target is realistic in view of the staff employed – hygiene promoters each assigned to 20 households. **Time-Bound**: until the end of the project term.	
Outcome indicator 3: 20,000 schoolchildren (from households of host communities and IDPs, 10,000 of whom are schoolgirls) have access to improved sanitary facilities (hand-washing stations, latrines) in their schools. Base value: 0 Target value: 20,000 Current value: 19,152 (9,688 schoolgirls) Achievement in %: 96% Source: assessment of monitoring data from the NGO contracted, representative sample surveys conducted separately by the project team and information on schoolchildren numbers from school administrators.	The indicator meets the SMART criteria. **Specific**: number of beneficiaries correctly identified. **Measurable**: it can be measured by the number of schoolchildren (boys and girls) per facility. **Achievable/Realistic**: the indicator target is realistic in light of the coverage and selection of schools. **Time-Bound**: until the end of the project term.	-

The evaluation team concluded that all three project objective indicators had been fully achieved by the end of the project.

Effectiveness dimension 1 – Achievement of the (intended) objectives – scores **27 out of 30 points.**

Effectiveness– Dimension 2: Contribution to achievement of objectives

The assessment of the activities' contribution to the achievement of the project objective was based on the results matrix and the updated results model. The causal links (or 'least plausible links') between the project activities, instruments and implementation strategies and the results at the outcome level were assessed based on the contribution analysis.

The target value for output indicator 1.1 of output 1 (drinking water) was achieved, and output indicator 1.2 was almost achieved (77% of the target value of 80%). The measures implemented in output 1 were aimed at further stabilising the operation of the drinking water supply facilities in Yei, Yambio and Torit, which faced particular challenges due to the outbreak of the COVID-19 pandemic (GIZ, 2017a, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; AMREF, 2019a, 2019b; Int_1–5 with GIZ).

With support from the project, the water utilities in Yei, Yambio and Torit had continuously provided safe drinking water in accordance with the South Sudanese standard of 8l/capita/day for drinking, food preparation and personal hygiene. As part of the project, a total of 61 drinking water wells were repaired and capacity to supply up to 30,500 people was created (GIZ, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; Int_1 - 6 with GIZ; Int_1 - 4 with stakeholder).

With respect to output 2 (hygiene awareness), the project achieved the target values of the two output indicators (output indicators 2.1 and 2.2). Ninety-one percent of the participants in the Safe Water Champions campaign (25,000 campaign participants were surveyed) were able to name the main waterborne diseases and were aware of the modes of transmission and corresponding prevention measures. This result exceeded output indicator 2.1 (target value 75%). A total of 11,200 households (with an average of six members) were reached through the Safe Water Champions campaign at the project sites in Torit and Yambio, in coordination with AMREF, to raise awareness about water hygiene among households.

Output indicator 2.2 (which was added in the last year of implementation) was achieved. A total of 150,000 people were reached through public hygiene education and COVID-19 prevention campaigns, with a focus on hand hygiene and social distancing (radio, megaphone campaigns etc.), in Torit, Yei and Yambio.

The indicators measured the project's contribution to the improved awareness of hygiene issues among households in Torit and Yambio and preventive hygiene measures in the context of COVID-19 at the three project locations (output 2), which, in turn, contributed to the project objective of improved access to hygiene measures. Evidence was found in the project's and partners' monitoring documents and final assessments and surveys conducted by the implementing partner. The evaluators also used primary sources in the form of interviews with partner organisations and local government institutions (e.g. health departments and facilities, mayors, and local leaders) (GIZ, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; AMREF, 2019a, 2019b; TdH, 2020a; Int_1 - 6 with GIZ; Int_1 - 4 with stakeholder).

The target values for the two output indicators (output indicators 3.1 and 3.2) of output 3 (school hygiene) were exceeded. The measures to improve sanitation and hygiene awareness at the 22 partner schools reached a total of 9,464 schoolboys and 9,688 schoolgirls (a total of 19,152), thus laying the foundations for improved school hygiene. Hygiene concepts were implemented in 22 schools instead of 20 (output indicator 3.1). The design of UDDTs and the group handwashing station WASHaLOT relies on materials that are available as locally as possible, which means that acquisition and any necessary repairs are as cheap as possible; it is also

characterised by high water efficiency, which teaches pupils to use water sparingly. The Blue School approach teaches a holistic, resource-conservation approach to water and demonstrates the relationship between the topics of water, wastewater, hygiene and agricultural production. The project cooperated with TdH at the project site in Yei, and with WHH in Yambio and Torit.

Although the government-mandated school closures in March 2020 did not affect completion of the construction measures, the accompanying training sessions to instil the processes of cleaning, maintenance and operation of the facilities could not be fully implemented. As part of the COVID-19 prevention measures, the project supported basic water and sanitation services at health facilities and implementation of hygiene concepts. The indicators measured the project's contribution to laying the foundation for improved school hygiene in the three project areas (output 3), which, in turn, contributed to the project objective of improved access to water, sanitation and hygiene. Evidence was found in the project's and partners' monitoring documents and assessments, training materials, photo documentation and surveys conducted by the implementing partners WHH and TdH. The evaluators also used primary sources in the form of interviews with implementing partners, local government institutions (e.g. education departments), school administrators, headteachers, teachers, school club members and schoolchildren (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a; WHH, 2021; Int_1 - 6 with GIZ; Int_1 - 4 with stakeholder).

Hypotheses 1, 2 and 3 were jointly selected by the project team and the evaluators to assess the project's effectiveness. They reflected the main assumptions in this respect and mirrored the most relevant processes according to the project team and main project partners.

Table 12: Selected results hypotheses for effectiveness

Hypothesis 1 (activity – output – outcome)	If the three water utilities in Yambio, Torit and Yei are constantly supported and the drinking water wells rehabilitated, then the water system will be stabilised (output 1). This will enable 80,000 people (vulnerable host communities and IDPs, especially poor households) to have regular access to a safe water supply. According to a baseline assessment conducted for output 1 by the predecessor and supplemented by the project, the water utilities in Torit, Yei and Yambio received financial subsidies for personnel and structural costs and were supported in the procurement of necessary operating materials and spare parts, as well as lesser rehabilitation measures carried out at the water kiosks to improve hygiene conditions (indicator 1.1). With the project's support, a total of 61 drinking water wells were repaired. To ensure that water distribution points adhered to the minimum South Sudanese standards for water quality (8l/cap/day), the water utilities were supplied with the chemicals and equipment necessary for water quality control and water treatment (indicator 1.2). Through constant support for the three water utilities, development of their capacities and the rehabilitation of drinking water wells, the project contributed to the stabilisation of the water system (output 1). The target value for output indicator 1.1 was fully achieved, and output indicator 1.2 was almost achieved (77% of the target value of 80%). Due to bottlenecks in the supply of the chemicals and equipment necessary for water quality control and water treatment, it was not always possible to carry out all controls (GIZ, 2020b; Int_1, 2, 4 with GIZ). As a result of the stabilisation of the water system, a drinking water supply for over 90,000 people was guaranteed (MOI 1). Evidence was found in the monitoring reports (GIZ, 2020b). Stabilisation of the water system meant not only a sufficient supply of clean drinking water for the final beneficiaries, but also shorter distances to water dispensing points and shorter waiting times (Foc_Dis_1, 2 with beneficiaries). This had a particularly positive effect on women and girls, whose responsibilities include the household water supply, since it minimised the dangers to which they are exposed on long trips and at remote water points and also reduced their workload. In numerous interviews and discussions, the final beneficiaries, especially women, confirmed these positive effects (Foc_Dis_1, 2, 5, 7 with beneficiaries). Vulnerable groups, poor households, IDPs and returnees in particular benefited from the safe and affordable water supply (GIZ, 2020b, Int_1, 2, 4 with GIZ; Int_1, 6, 11, 14

	with partner; Foc_Dis_1, 5, 7 with beneficiaries). The stabilisation of the water system contributed to the outcome of improving access to drinking water for the target groups.
Main assumptions	The water supply system would be stabilised through capacity development measures and advisory services. A long-term, sustainable financial model for the water utilities would be established through investments.
Risks/unintended results	The conflict situation and restrictions in the context of the COVID-19 pandemic prevented cooperation with target groups and implementation. A lack of investment prevented the water utilities from providing the population with a sustainable supply. Difficulties with procurement and high fuel costs restricted the continued operation of diesel-driven drinking water pumps.
Alternative explanation	Other organisations, projects and political initiatives unrelated to the project provided more significant contributions to stabilise the water system.
Confirmed/partly confirmed/not confirmed	This hypothesis was confirmed.

Hypothesis 2 (activity – output – outcome)	If 7,000 households are informed through awareness-raising campaigns (output 2), household members will apply improved hygiene practices (such as treating drinking water, cleaning water containers and separating water containers for humans and animals) in their daily lives. This will have an impact on the health status of household members. According to a baseline assessment conducted by the predecessor and expanded and supplemented by AMREF, the implementing partner applied the safe water chain model for household campaigns in Torit and Yambio (output 2). A total of 280 Safe Water Champions (volunteers, all of them women) were trained to raise awareness among households of water hygiene issues throughout a 12-week household campaign in each project area. A total of 11,200 households (with an average of six members) were reached through the campaign. A total of 25,000 people who had participated in the campaign took part in a survey on their knowledge of the main hygiene practices; 91% were aware of them after the campaign (the target value of indicator 2.1 was 70%). As a result of the intervention, 8,960 households applied improved hygiene practices in their daily lives (MOI 2, target value 7,000) (GIZ, 2020b; AMREF, 2019a, 2019b; Int_1, 2, 4 with GIZ; Int_3 with stakeholder). The hygiene measures promoted by the project to prevent renewed contamination of the drinking water, which were easy to implement even under the difficult conditions, motivated the households to take more responsibility and were positively accepted. The data quality (the data was collected by the multipliers during household visits) made it impossible to accurately determine how many of the households reached applied at least two new hygiene practices in their everyday lives (AMREF, 2019a, 2019b). However, evaluation of the data revealed that two or more hygiene practices (e.g. separation of water for drinking and household use, disinfection of water containers and separation of water areas for humans and animals) were applied. According to statements from the water and hygiene experts of the implementing organisation, this is sufficient to achieve a significant effect (AMREF, 2019a, 2019b; Int_3 with stakeholder). According to data from the female multipliers, hardly any water hygiene measures had been applied before the household awareness activities, so the result is plausible. The deployment of women as multipliers facilitated access to women and girls, the majority of whom are responsible for handling water in the household. The impact assessment and narrative reports of the implementing partner were used for the assessment. In addition to these secondary sources, primary sources in the form of interviews with target groups, local health departments and facilities provided evidence for the evaluators (GIZ, 2020b; AMREF, 2019a, 2019b; Int_4, 6 with partner; Int_3 with stakeholder). Output 2 contributed significantly to the outcome of improving access to

	hygiene measures.
Main assumptions	The key underlying assumptions were that households would adopt improved hygiene practices taught through training and awareness-raising campaigns and the conflict situation would allow interventions to take place in the project's target locations.
Risks/unintended results	The key risks were that conflicts and/or the pandemic would restrict or prevent access to the intervention areas, and that the project would be exploited by interest groups, partners and target groups or that its measures would inadvertently contribute to conflicts, whether directly or indirectly.
Alternative explanation	Other organisations, projects or political initiatives unrelated to the project provided more significant contributions to behavioural change in terms of hygiene practices.
Confirmed/partly confirmed/not confirmed	This hypothesis was confirmed.

Hypothesis 3 (activity – output – outcome)	If the project constructs or repairs sanitary facilities and provides schools with advice on hygiene concepts (output 3), 20,000 schoolchildren will have access to improved sanitation facilities in schools and will use them in a hygienic way. According to a baseline assessment conducted as part of the project for output 3, to determine the needs of the selected schools, hygiene concepts were drawn up for each school and the necessary construction measures were implemented in accordance with the water supply plan. Cooperation was carried out with TdH at the project site in Yei, while it was carried out with WHH in Yambio and Torit (GIZ, 2020b; TdH, 2020a, 2020b; WHH, 2021; Int_1, 3 with GIZ; Int_3-6 with stakeholder). As part of the construction measures, the project had introduced two new technologies: UDDT and the group hand-washing station WASHaLOT. UDDTs were introduced into 21 schools, which exceeded the original target of 10 schools (output indicator 3.2). The design relied on materials that were available as locally as possible, which meant that acquisition and any necessary repairs were as cheap as possible. It was also characterised by high water efficiency. Accompanying measures included training, workshops and action days to raise awareness of hygiene issues among teachers, students and residents of the neighbourhood and to train them in the maintenance and operation of the sanitation facilities. The measures to improve sanitation and hygiene awareness at the 22 partner schools reached a total of 9,464 schoolboys and 9,688 schoolgirls (a total of 19,152) (MOI 3, target value 20,000), thus laying the foundations for improved school hygiene. Hygiene concepts were implemented in 22 schools instead of 20 (output indicator 3.1). The needs of schoolgirls were adequately considered, since washing facilities were built and the issue of menstrual hygiene was addressed (GIZ, 2020b; TDH, 2020a, 2020b; WHH, 2021; Int_1, 3 with GIZ; Int_3-6 with stakeholder). Students and parents were involved through existing structures such as PTAs and the promotion of new structures such as school water and health clubs and school garden clubs (Int_ 1, 3, 6 with beneficiaries; Foc_Dis_1, 3, 5, 8 with beneficiaries). The implementing partners used the Blue School approach to teach a holistic, resource-conservation approach to water and highlight the links between water, wastewater, hygiene and agricultural production (TdH, 2020c). School closures from March 2020 in the context of the COVID-19 pandemic prevented the application of training content and the completion of UDDT cycles. In some cased, conflicts were observed when neighbouring communities were using school sanitation facilities. Mitigation measures were participatory approaches that included communities and parents in the implementation process. Through the construction or repair of sanitary facilities in schools (hygiene preconditions) and awareness-raising measures, almost 20,000 schoolchildren had de facto access to improved sanitation facilities (MOI 3) and used them in a hygienic way. Output 3 contributed significantly to the outcome of improved access to drinking water, sanitation facilities and hygiene measures. Evidence was found in the project's and partners' monitoring documents and assessments, training materials, photo

	documentation and surveys conducted by the implementing partners WHH and TdH (GIZ, 2020b; TDH, 2020a, 2020b; WHH, 2021; Int_1, 3 with GIZ). The evaluators also used primary sources in the form of interviews with implementing partners, local government institutions (e.g., education departments), school administrators, headteachers, teachers, school club members and schoolchildren (Int_3-6 with stakeholder; Int_2, 6, 8, 12, 13 with partner; Int_2, 3, 7 with beneficiaries; Foc_Dis_4, 5, 8 with beneficiaries).
Main assumptions	The key underlying assumptions were that (a) selected schools would implement hygiene concepts and (b) schoolchildren would gain access to improved school hygiene through the rehabilitation or creation of sanitary facilities and awareness-raising measures. Despite the restrictions in the context of the COVID-19 pandemic, communication and cooperation with relevant actors would take place and measures could be implemented.
Risks/unintended results	The conflict situation and restrictions in the context of the COVID-19 pandemic prevented cooperation with target groups and implementation. School closures prevented the application of training content and completion of a UDDT cycle. The measures contributed to conflicts with the schools' neighbouring communities regarding the use of sanitary facilities.
Alternative explanation	Other organisations, projects or political initiatives unrelated to the project provided more significant contributions to improve school hygiene.
Confirmed/partly confirmed/not confirmed	This hypothesis was confirmed.

Effectiveness dimension 2 – Contribution to achievement of objectives – scores **27 out of 30 points.**

Effectiveness– Dimension 3: Quality of implementation

An assessment of whether the quality of steering and implementation made it possible to achieve the objectives was carried out (assessed on the basis of the project's ROM, communication strategy, cooperation behaviour, steering strategy, quality of internal processes and the existence of a learning culture).

The project's implementation strategy has proven successful despite the fragile environment marked by violent conflict. The consequences of the conflict and the country's economic situation, which resulted in procurement delays, travel restrictions and the need to implement part of the project semi-remotely (steering by international project staff from Germany), posed serious challenges. The outbreak of the pandemic, which gave rise to further restrictions in the final year of the project, presented further barriers to implementation. The volatile and dynamic situation caused time lags in procurement, construction and implementation activities. The additional activities made a necessary and immediate contribution to the implementation of the national action plan to combat COVID-19 (April 2020 - March 2021, South Sudan Ministry of Health). The key actions to contain the transmission of COVID-19 were supporting healthcare facilities in their hygiene approach, raising awareness among the general public and ensuring that the population had safe drinking water and sanitation. The implementation strategy was expanded and adapted, thus enabling the project team to effectively and quickly implement the measures required to contain the pandemic.

Furthermore, close coordination and planning took place with other German development cooperation projects and measures, implementing partners and the WASH Cluster with a view to using existing capacities and structures as effectively as possible, generating synergies and avoiding overlaps. The project's management setup, which was characterised by a high level of flexibility and willingness to change and adapt the strategy frequently, a highly dedicated and motivated team with awareness of the fragile local context, and a well-functioning, transparent cooperation management system, was a factor in the success of the implementation process (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021; Int_1, 5, 6 with GIZ; Int_1 - 4 with stakeholder). A results-oriented monitoring system was established and used, e.g. for evidence-based decisions and conflict-sensitive and

explicit risk-safety monitoring. The project team had created an innovation-friendly, learning work culture that promoted the exchange of experiences; learning processes with context-specific adjustments were also established (GIZ, 2020b; Int_1-4 with GIZ).

Effectiveness dimension 3 – Quality of implementation – scores **18 out of 20 points.**

Effectiveness– Dimension 4: Unintended results

An assessment of whether project-related (unintended) negative results occurred and whether the project responded adequately was carried out. The evaluation assessed whether additional (not formally agreed) positive results occurred, if they had been monitored and if the additional opportunities had been seized.

The project measures had raised expectations among the population in the selected implementation areas with respect to, for example, the continuation or extension of measures that provided access to nearby water kiosks. Corresponding statements were collected during interviews at water kiosks as part of the evaluation (Foc_Dis_2, 3, 6, 7). Due to the high return rate of IDPs, the population of the cities has risen and the pressure on the available resources is growing. In discussions with school headteachers and teachers, expectations were also expressed regarding the selection of more schools for the implementation of EcoSan and WASH interventions. Schools with adequate facilities would have a higher influx of students and lower dropout rates (although these statements could not be backed up by figures) (Int_ 2, 6, 7 with beneficiaries). The fluctuating numbers may also have other causes (return of IDPs, influx of rural population, COVID-19-related factors, etc.). In discussions with implementing partners, frustrations were occasionally expressed by participants in outreach activities who had been educated about hygiene measures, regular hand washing, the use of soap and the need to disinfect water containers, but who did not have any of these facilities in their homes (Int_ 3-6 with stakeholder). There have been reports of conflicts with people living near schools who were using the schools' sanitary facilities due to a lack of access to such facilities elsewhere (Int_ 3-6 with stakeholder). As a rule, this did not seem to be a problem; the population had used the water points on school grounds anyway. Some schools had fenced areas, while others locked the buildings housing the sanitary facilities to protect them from vandalism and misuse, since the schools' facilities were not fully maintained, especially during the pandemic (Int_ 3-6 with stakeholder; Int_1, 6, 7 with beneficiaries). In many cases, the parents of students and the immediate neighbourhood had already received training during the implementation phase with a view to avoiding conflicts. Possible solutions included implementing education measures and providing the surrounding communities with their own sanitary facilities (Int_ 3-6 with stakeholder).

Additional positive results were as follows: the project and the three implementing partners actively involved women and girls throughout the project planning and implementation process. The participation opportunities were perceived and assessed very positively; this became clear in numerous interviews and conversations. Girls and women appreciated being involved in gender-equal health and school gardening clubs. Furthermore, women's participation in WMCs was also promoted, and 30% of members were women. Women's capacities to rehabilitate boreholes were also reinforced through training, which was appreciated by participants (TdH, 2020a, 2020b, 2020c). Unexpectedly, the Safe Water Chain campaign was hugely successful due to the participation of women as multipliers (or Safe Water Champions). Moreover, this resulted in better access to women and girls in households, who traditionally carry out water-related activities. Many of the women regarded their new roles as genuinely empowering, and the small allowance represented a welcome addition to their income. Men were not interested in the task because it was on a voluntary basis or was just a 'small amount of money'. Even after the project had closed, some women continued and turned up at the local office to ask for materials for further discussion with community members. The model was even adopted in neighbouring communities (AMREF, 2019a; WHH, 2021; Int_1, 5, 6 with GIZ; Int_3, 4, 5, 6 with stakeholder).

The most significant challenges and risks to the project's implementation were related to the fragile, volatile environment in which the project was undertaken. The risk of the outbreak of armed conflict in intervention

areas limiting the implementation of measures, including the discontinuation of measures, was known about as early as the concept phase. The security risks were continuously monitored and assessed by GIZ's Risk Management Office, together with the German Embassy, so that adequate measures could be taken to protect personnel and projects as early as possible. At the same time, there was also close contact with cooperation partners concerning the security situation. However, the Risk Management Office's sphere of influence was limited outside the capital city of Juba. The project's conceptual framework continued to offer the necessary flexibility to reprioritise fields of action and redefine geographical target areas in the event of changes in the security situation. There was a risk that the project could be exploited by interest groups, partners and target groups or that project measures would unintentionally contribute to conflicts, either directly or indirectly. For example, there may have been perceived disadvantages for population groups or competition for the project's services. Relations with the local water utilities and local administrations as project partners were good at all levels, and they were involved in fair and transparent communication on the operator model and pro-poor water tariffs. They acted as important intermediaries in the local contexts. GIZ had local staff in all three locations. For the most part, the implementing partners also carried out implementation with local staff. Their local knowledge and, in some cases, years of being present on the ground made it possible to maintain partner contacts and access the target group. To avoid effects that may have exacerbated the conflict, the project team and partners had aligned the measures in accordance with the Do-No-Harm principle, which was also subject to monitoring. Digital monitoring supported the verification of activities and information. Overall, the project refrained from the broad-based distribution of goods to the target groups. To control the support provided to the water utilities, the expected fuel consumption was calculated in advance and provided accordingly. The water utilities also reported on production, which allowed conclusions to be drawn about consumption. Moreover, the advisory services in the financial and administrative area and external audits ensured the earmarked use of funds. Delivery bottlenecks and transport difficulties with construction materials caused minor delays in the project's implementation. The COVID-19 pandemic and restrictions on public life posed a further risk (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021; Int_1 - 6 with GIZ; Int_3, 4 with stakeholders).

The project strengthened deescalating factors and connectors and avoided strengthening escalating factors. These factors are described in detail under the relevance criterion. The project's approach to the fragile, volatile context was as conflict-sensitive as possible. This was based on current context and conflict analyses; the project team regularly conducted assessments of the prevailing situation. These were done together with the Risk Management Office, the German Embassy and other projects in South Sudan. The results of the integrated peace and conflict analyses were taken into account in the project. However, this analysis should have been updated due to the highly dynamic nature of the situation during the project term (GIZ, 2017c). The project's potential to make a positive and significant contribution to peace and security was utilised, particularly since its measures involved the transfer of skills that were necessary for the rehabilitation and maintenance of essential water infrastructure and the water supply, mitigation of the negative consequences of rising migration numbers and the fostering of the population's resilience in the face of conflict- and poverty-related insecurities (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021; Int_1 - 6 with GIZ; Int_3, 4 with stakeholders).

Effectiveness dimension 4 – Unintended results – scores **18 out of 20 points.**

Methodology for assessing effectiveness

Table 13: Methodology for assessing OECD/DAC criterion: effectiveness (max. 1–2 pages)

Effectiveness: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Achievement of the (intended) objectives	The evaluation was based on whether the project achieved the objective on time and in accordance with the module objective indicators that were agreed upon in the offer. Were objective indicators well formulated in technical terms, did they comply with the SMART criteria and were they suitable for measuring the results of the three outputs and indicating their contribution to the project objective?	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1); no specific evaluation design was applied. **Empirical methods:** Relevant project documents and implementing partner assessments, monitoring and surveys were analysed (AMREF endline survey Improved Hygiene Behaviour with 785 households; TdH KAP survey WASH in Schools with 170 schoolchildren (49% girls and 51% boys; WHH endline survey Hygiene in Schools with 217 schoolchildren and 195 community members (no gender-disaggregated data). Interviews with GIZ, implementing partners, and target groups were conducted.	Relevant documentation (monitoring, progress reports, baseline and final assessments, surveys of implementing partners) was available and of good quality. The evidence strength was good.
Contribution to achievement of objectives	The evaluators used the contribution analysis based on three hypotheses (1, 2, 3), which were selected jointly by the project team and the evaluators to assess the achievement of objectives.	**Evaluation design:** The causal links (or the 'least plausible links') between the results at outcome level and the project's activities, instruments and implementation strategies were assessed based on the contribution analysis. The hypotheses of the results model were compared to actual results to find empirical evidence for the results chains described. **Empirical methods:** As in dimension 1.	Relevant documentation (monitoring, progress reports, baseline and final assessments, surveys of implementing partners) was available and of good quality. The evidence strength was good.
Quality of implementation	An assessment was conducted on whether the quality of steering and implementation made it possible to achieve the objectives (assessed on the basis of the project's results-oriented monitoring (ROM), communication	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1); no specific evaluation design was applied.	Relevant project documents and results-oriented monitoring (ROM) were available and of good quality. A steering strategy was not developed. Lessons learned will form part of the final project report, which was not yet

Effectiveness: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
	strategy, cooperation behaviour, steering strategy, quality of internal processes and whether a learning culture existed).	**Empirical methods:** See above.	available.
Unintended results	An assessment was carried out to examine whether project-related (unintended) negative results had occurred and whether the project had responded adequately. The evaluation assessed whether additional (not formally agreed) positive results had occurred, if they had been monitored and if the additional opportunities had been seized.	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1). **Empirical methods:** Documentary analysis and interviews and FGDs with implementing partners and direct and indirect beneficiaries.	Unintended results were partly covered by relevant documentation from the project and implementing partners. Moderate evidence strength was balanced by primary information (stakeholder interviews and FGDs).
* SMART: specific, measurable, achievable, relevant and time-bound			

4.5 Impact

This section analyses and assesses the impact of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summarising assessment and rating of impact

Table 14. Rating of OECD/DAC criterion: impact

Criterion	Assessment dimension	Score and rating
Impact	Higher-level (intended) development changes/results	25 out of 30 points
	Contribution to higher-level (intended) development results/changes	30 out of 40 points
	Contribution to higher-level (unintended) development results/changes	27 out of 30 points
Impact score and rating		Score: **82 out of 100 points** Rating: **Level 2: successful**

The intended overarching development results are foreseen, and relevant project contributions can be plausibly assumed. There is also evidence that results have been achieved at beneficiary level, including vulnerable groups. The project stressed the importance of the 2030 Agenda and contributed to three of the SDGs (3, 5, 6). Based on two hypotheses (5, 6), the evaluators concluded that relevant contributions of the project to the impact can be plausibly assumed. Positive trends were assumed for both, based on the data available and the stakeholder responses. Evidence of intended changes with respect to the reduction in waterborne infection risks and a conflict-free coexistence remained weak. An impact assessment regarding overarching development goals was missing from the project's monitoring system. Relevant contributions to cross-cutting issues such as gender equity were observed, and risk monitoring and response was adequate.

In total, the impact of the project is rated Level 2: successful, with 82 out of 100 points.

Analysis and assessment of impact

Impact – Dimension 1: Higher-level (intended) development changes/results

According to the reconstructed results model, the impact of the project was assessed based on its contribution to the overarching development results: the basic needs of the urban poor and IDPs are met, the risk of infections caused by drinking water is reduced and equal access for all to resources and services strengthens the conflict-free coexistence of the various population groups.

The South Sudan Humanitarian Needs Overview, defined by the international donor community and published annually by UNOCHA, was the reference framework for DUWSS. The refugee situation in South Sudan, as reported by UNHCR (2021), was considered. With its goal of improving access of conflict-affected and vulnerable IDPs and host communities to drinking water, sanitation and hygiene measures, DUWSS responded to the National Development Strategy, and with regard to measures in the context of the pandemic, to the South Sudan National COVID-19 Response Plan (2020) (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; GRSS, 2018, 2020, 2017; UNDP, 2019; UNHCR, 2021; UNOCHA, 2021).

The higher-level development changes (social, economic and environmental factors, and the interactions between them) that the intervention was designed to target can be foreseen at the level of target groups, particularly vulnerable groups of beneficiaries and stakeholders. The assigned identifiers, as outlined in the project proposal in the fields of gender equity, maternal and child health, poverty elimination and peace and security (GG-1, RMNCH-1, AO-1, FS-1), were considered to have achieved an impact. The project contributed to the implementation of the 2030 Agenda SDGs, in particular SDG 3 on ‘Good health and well-being’, SDG 6 on ‘Clean water and sanitation’ and SDG 5 on ‘Gender equality’. Measurable progress towards achieving the SDGs has not yet been recorded due to a lack of available data. With its pro-poor approach, the project was committed to the LNOB principle and the No Lost Generation initiative. Specific attention was paid to vulnerable population groups, including women, women-headed households, young people, IDPs and returnees. Due to the important role of women and girls in handling water and hygiene issues, the project measures also improved the living conditions of women in particular (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021).

The project’s outcome contributed to the impact that the basic needs of the urban poor and IDPs are being met (1) through improved access to drinking water, sanitation and hygiene measures. Drinking water supplies were secured for over 90,000 people in the three project regions (MOI 1), distances to water points were shortened, water quality was ensured, and water utilities were supported and strengthened to maintain water supplies. Approximately 9,000 households and their members increased their WASH knowledge and adopted hygiene practices to protect their health (MOI 2). A total of 150,000 people in the project sites were educated on preventive hygiene measures in the context of the COVID-19 pandemic. The beneficiaries of these measures were particularly vulnerable groups and poor households. Nearly 20,000 schoolchildren (equal numbers of girls and boys) gained access to improved sanitation facilities and learned hygiene practices at the three sites (MOI 3). This part of the impact hypothesis was confirmed. Evidence was found in assessments, surveys and monitoring documents, as well as primary sources such as interviews and focus groups with partners and beneficiaries (Int_2, 4, 6, 10, with partner, Int_3, 4, 5, 6 with stakeholder, Foc_Dis_2, 3, 6, 7 with beneficiaries). No evidence was found for the impact of a reduced risk of infection caused by drinking water (2). A lack of data made it impossible to accurately determine the status of water-induced health risks nationwide and to make any possible changes. Corresponding state-of-the-art findings are available from sources such as WHO. Numerous analyses, studies and case studies are available in this context. In addition, there are indications and statistics (unfortunately incomplete and inaccurate) from the health stations in the project area to suggest that the incidence of waterborne diseases has decreased. According to studies by international organisations,

the risk remains very high in South Sudan (UNDP, 2019; WHO, 2017; World Bank, 2021). However, it seems plausible that the risk was reduced locally at the project sites due to the improved water quality and supply (MOI 1) and the application of hygiene measures (MOI 2). Statements from partner organisations, health stations and beneficiaries also supported this conclusion (Int_2, 4, 6, 10, with partner, Int_3, 4, 5, 6 with stakeholder, Foc_Dis_2, 3, 6, 7 with beneficiaries).

The impact of strengthened, conflict-free coexistence between the various population groups through equal access for all to resources and services (3) could not be proven. No studies or data were available and these aspects were not considered in the monitoring process. However, the assumption remains plausible, as improved and low-cost water and sanitation, the establishment of numerous water kiosks and the use of mobile water providers (MOI 1) reduced resource-related tension in the communities, which had a strong influx of IDPs and returnees. Statements from partner organisations, local administrations and beneficiaries also point in this direction (Int_2, 6, 8, 12 with partner, Int_4 with stakeholder, Int_1, 5, 8 with beneficiaries, Foc_Dis_1, 4, 8 with beneficiaries).

Impact dimension 1 – Higher-level (intended) development changes/results – scores **25 out of 30 points.**

Impact – Dimension 2: Contribution to higher-level (intended) development results/changes

Contribution analysis was used to assess the project, which involved multiple areas of intervention, and the partners. The ToC was adjusted together with the project team, thus leading to a plausible association between the outcome and impact. It included the main assumptions, as well as the risks and external influences at play. The main weaknesses in the contribution story were identified. Additional evidence to supplement the initial data was found. The assigned markers, as outlined in the project proposal (markers GG-1, RMNCH-1, AO-1, FS-1), were considered. The project's contribution to three of the 17 SDGs was taken into account.

Hypotheses 4 and 5 were chosen to describe the causal relationships between the project's outcome and impact, as defined in the results model.

Table 15: Selected results hypotheses for impact

Results Hypothesis 4 (outcome – impact)	If access to drinking water, sanitation and hygiene measures is improved (outcome), this will contribute to the impact of a reduced risk of infection and, therefore, a reduction in waterborne disease morbidity and mortality. The project contributed to improved access to drinking water, sanitation and hygiene measures (outcome). No evidence based on data or statistics was found for a reduced risk of infections caused by drinking water in South Sudan (impact). A lack of data made it impossible to make accurate statements about the situation of water-induced health risks nationwide and possible changes. The conflict situation in South Sudan had an impact on the availability of and access to data. Corresponding state-of-the-art findings are available from sources such as WHO. Numerous analyses, studies and case studies are available in this context. In addition, there are indications and statistics (unfortunately incomplete and inaccurate) from the health stations in the project area to suggest that the incidence of waterborne diseases has decreased (WHO, 2017). According to studies by international organisations such as UNICEF and WHO, the risk remains very high in South Sudan due to the war, ongoing conflicts, environmental and climate factors, inadequate healthcare and a lack of access to sufficient clean water, sanitation and hygiene measures (UNDP, 2019; WHO, 2017; World Bank, 2021). Current statistics and studies on the risk of infection and waterborne disease morbidity and mortality were not available. Despite this initial situation, the evaluators concluded that it seemed plausible that the risk of infection caused by drinking water had reduced locally at the project sites due to the improved water quality and supply for more than 90,000 people (MOI 1), the awareness of hygiene practices among more than 20,000 people (indicator 2.1), the application of improved hygiene

	measures in almost 9,000 households (MOI 2) and access to improved sanitation facilities for almost 20,000 schoolchildren. When one considers the initial conditions (e.g. a lack of hygiene practices and a lack of access to sanitation and clean water), then the plausibility of the statement increases. The final assessment of implementing partners and statements from partner organisations, health stations and final beneficiaries also supported this conclusion (GIZ, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021; Int_2, 4, 6, 10, with partner, Int_3, 4, 5, 6 with stakeholder, Foc_Dis_2, 3, 6, 7 with beneficiaries). Local health stations had records that described a decline in cases of cholera and typhoid fever in the project areas in recent years, but these were statistically unusable and incomplete. Local authorities and final beneficiaries also reported a decrease in illnesses ('there has not been a case of cholera in Torit for two years' and 'before this project, Yei had a high rate of waterborne diseases, but this rate decreased in 2020') and said that their families were 'healthier' (('the children don't fall ill with diarrhoea as often as before') (Int_ 4, 6, 10 with partner; Foc_Dis_2, 3, 6, 7 with beneficiaries). Even though evidence of intended changes regarding a reduction in the risk of waterborne infections remained weak, the evaluators concluded that it can be plausibly assumed that the project made relevant contributions to the impact, based on the aspects described above.
Main assumption	The improved access to drinking water, sanitation and hygiene measures would result in a reduced risk of infection caused by drinking water.
Risks	The ongoing conflict and fragility in South Sudan would prevent the project from being implemented. Implementation of the project would have to be interrupted due to the pandemic. The partner country would no longer be willing to cooperate with German development cooperation.
Alternative explanation	Other organisations, projects or political initiatives unrelated to the project provided more significant contributions to the reduction in waterborne disease morbidity and mortality.
Confirmed/partly confirmed/not confirmed	The hypothesis was partly confirmed.

Results Hypothesis 5 (outcome – impact)	If access to drinking water, sanitation and hygiene measures is improved (outcome), this will contribute to equal access to resources for all and improved living standards (impact). This, in turn, will contribute to conflict-free coexistence (basic form of social cohesion) between various population groups e.g. host communities, IDPs and returnees. The project contributed to improved access to drinking water, sanitation and hygiene measures (outcome). No evidence based on data from assessments and evaluations that this led to the impact of conflict-free coexistence between various population groups (basic form of social cohesion) was found. No indicators were developed to measure these aspects and they were not considered in surveys, final assessments or monitoring, either by the project or by the implementing partners. Moreover, the surveys by other international organisations did not address aspects of social cohesion; on the contrary, they tended to emphasise the conflicts between the different groups as a result of the war (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; GRSS, 2018, 2020, 2017; UNDP, 2019; UNHCR, 2021; UNOCHA, 2021; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021). Despite this starting point and the lack of concrete evidence, the evaluators concluded that it was plausible that the project contributed to peaceful coexistence. As the residents of the project sites had to share their scarce resources with an increasing number of IDPs and returnees, local authorities and final beneficiaries reported social tensions that arose, for example, when people had to stand in long queues at water dispensing points. The project's measures focused on fair and equal access to services for all, especially vulnerable groups such as poor host communities, IDPs, returnees, women

	and children. Given its pro-poor approach, the project contributed to poverty alleviation at the project sites in South Sudan through access to inexpensive water and sanitation resources. It was plausible that improved, low-cost water and sanitation, the establishment of numerous water kiosks and the use of mobile water providers (MOI 1) reduced resource-related tensions in the communities (GIZ, 2020b; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021). Statements from partner organisations, local authorities and final beneficiaries also suggested that this was the case: 'Everybody, even the poorest people, have the chance to access clean, safe water now – we have not noticed any conflicts due to resources recently' (Foc_Dis_6, 7 with beneficiaries) and 'Nobody is discriminated against at water points, whatever his or her background' (Foc_Dis_2, 3 with beneficiaries). According to local authorities (local 'chiefs'), they 'convey messages of peace at water kiosks' during hygiene-awareness measures to minimise and mitigate conflict-related issues (Foc_Dis_6). The contribution of the project to a conflict-free coexistence between various population groups such as host communities, IDPs and returnees was considered plausible.
Main assumption	The improved access to drinking water, sanitation and hygiene measures would result in conflict-free coexistence between various population groups in South Sudan.
Risks	The ongoing conflict and fragility in South Sudan would prevent project implementation. Implementation of the project would have to be interrupted due to the pandemic. The partner country would no longer be willing to cooperate with German development cooperation.
Alternative explanation	Other organisations, projects or political initiatives unrelated to the project provided more significant contributions to conflict-free coexistence between various population groups.
Confirmed/partly confirmed/not confirmed	The hypothesis was partly confirmed.

Impact dimension 2 – Contribution to higher-level (intended) development results/changes – scores **30 out of 40 points**.

Impact – Dimension 3: Contribution to higher-level (unintended) development results/changes

The evaluators assessed whether additional (not formally agreed) positive and negative results at impact level occurred, and whether additional opportunities for further positive results had been seized. To take the fragile context into account, they also assessed the extent to which the project ensured that escalating factors / dividers were not strengthened (indirectly) and whether violent or 'dividing' actors had been unintentionally (indirectly) supported. This also encompassed the extent to which risks had been systematically monitored (context/conflict-sensitive monitoring).

Additional positive results (partly anticipated in the narrative of the strategic approach and partly achieved by using windows of opportunity) and potential synergies between the ecological, economic and social dimensions were monitored and exploited by the project. The project contributed to a tangible, long-term improvement in living conditions for the target group, especially vulnerable groups (IDPs, women and girls, and poor households). It is likely that addressing the lack of basic services and public services will strengthen trust in local administrative structures and thus contribute to the creation of framework conditions for peaceful and inclusive development in drinking water and sanitation. Economically sustainable water utilities were established and promoted. Operation of the water kiosks enabled people from the project area to earn an independent income, thereby indirectly contributing to a reduction in poverty. The decentralised water utilities will contribute to environmental protection and resource conservation policies implemented by the government of Southern Sudan in the future. The stakeholder processes initiated between the civilian population, local government and water utilities strengthened mandates and roles, created transparency and thus also

integrated governance issues. Analyses and assessments conducted by the project team and implementing partners, as well as numerous interviews with organisations and beneficiaries, confirmed the assumption that a contribution to gender equality could be made at societal level, albeit only regionally and limited to specific areas and population groups (WHH, 2021; AMREF, 2019a; Int_1, 5, 6 with GIZ; Int_3, 4, 5, 6 with stakeholder). These impacts were explained in detail in the section Effectiveness, Dimension 3.

During the evaluation, no indications of project-related negative results at impact level were observed or mentioned by the respondents (Int_1-6 with GIZ; Int_1-4 with stakeholders; GIZ, 2020b; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021). At impact level, no (unintended) negative/escalating effects or positive/deescalating effects on the conflict or the context of fragility (e.g. conflict dynamics, violence, legitimacy of state and non-state actors/institutions) were observed. The project's adequate risk management and monitoring were analysed under the effectiveness criterion and the escalating and deescalating effects under the relevance criterion (GIZ, 2017b, 2017c, 2020b; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021).

Impact dimension 3 – Contribution to higher-level (unintended) development results/changes – scores **27 out of 30 points**.

Methodology for assessing impact

Table 16: Methodology for assessing OECD/DAC criterion: impact *(max. 1–2 pages)*

Impact: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Higher-level (intended) development changes/results	The impact of the project was assessed based on its contribution to the overarching development results: the basic needs of the urban poor and IDPs are met, the risk of infections caused by drinking water is reduced and equal access for all to resources and services strengthens conflict-free coexistence among the various population groups.	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1); no specific evaluation design was applied. **Empirical methods:** Relevant project documents and implementing partner assessments, monitoring and surveys (AMREF endline survey Improved Hygiene Behaviour with 785 households; TdH KAP survey WASH in Schools with 170 schoolchildren (49% girls, 51% boys; WHH endline survey Hygiene in Schools with 217 schoolchildren and 195 community members, with no gender-disaggregated data) were analysed. Interviews with GIZ, implementing partners and target groups were conducted.	Relevant documentation (monitoring, progress reports, baseline and final assessments, surveys of implementing partners) was available and of good quality. The evidence strength was good.
Contribution to higher-level (intended) development results/changes	The evaluators used the contribution analysis based on two hypotheses (4, 5), which were selected jointly by the project team	**Evaluation design:** The causal links between the project's activities, instruments and implementation strategies	The research, data and statistics needed to demonstrate the contribution to higher development goals were

Impact: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
	and the evaluators to assess the contribution to higher-level development changes.	and the results at outcome level were assessed using the contribution analysis. The hypotheses of the results model were compared to actual results to find empirical evidence for the results chains described. **Empirical methods:** As in dimension 1.	not available or were rudimentary in South Sudan. As a result, the evidence remains weak. Plausible inferences and anecdotal examples had to be used.
Contribution to higher-level (unintended) development results/changes	The evaluators assessed whether additional (not formally agreed) positive and negative results occurred at impact level and whether additional opportunities for further positive results had been seized. They also assessed whether the project ensured that escalating factors / dividers had not been strengthened and unintentionally supported violent or 'dividing' actors.	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1); no specific evaluation design was applied. **Empirical methods:** As in dimension 1.	Relevant documentation of the project and implementing partners was available, especially assessments regarding gender, the environment, conflict sensitivity and human rights (safeguards and gender documents), and was of good quality. The evidence strength was good.

4.6 Efficiency

This section analyses and assesses the efficiency of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summarising assessment and rating of efficiency

Table 17. Rating of OECD/DAC criterion: efficiency

Criterion	Assessment dimension	Score and rating
Efficiency	Production efficiency (Resources/Outputs)	60 out of 70 points
	Allocation efficiency (Resources/Outcome)	28 out of 30 points
Efficiency score and rating		Score: **88 out of 100 points** Rating: **Level 2: successful**

The evaluation concluded that the project's cost-output relationship was positive and that the distribution among intervention areas (outputs) was pertinent with respect to the relative weight of their contribution to achievement of the project objective. Resources were used efficiently; potential alternatives could not be identified by the evaluation team. Although scaling-up options could not be considered in the specific context of the sector and South Sudan, other criteria were positively assessed, including synergies with implementing partners, WASH DoG and the WASH Cluster, and other GIZ projects in the sector.

In total, the efficiency of the project is rated Level 2: successful, with 88 out of 100 points.

Analysis and assessment of efficiency

Efficiency – Dimension 1: Production efficiency

The GIZ Evaluation Unit designed the GIZ efficiency tool as an instrument to strengthen the analysis of efficiency. The assessment was based on the efficiency tool and the cost-output data to find evidence of the appropriate use of funds compared to the results achieved. The analysis focused primarily on the extent to which the outputs could have been maximised with other implementation strategies (maximum principle). The analysis of the data was conducted in accordance with the analytical questions in the evaluation matrix, which were based on the 'follow-the-money' approach. In particular, efforts were made to search for opportunities to maximise the project's outputs in terms of creating synergies through collaboration with other development partners.

The total contract value of the German contribution for the whole duration of the project (August 2017 to December 2020) was EUR 8,970,860. The change offer submitted in May 2019 was accepted by BMZ and included an increase in the project's budget with residual funds from the previous project (PN 2013.2278.3) in the amount of EUR 2,170,860.23, and an extension of the project duration by 12 months until December 2020. The second change offer was accepted by BMZ in July 2020. This included a contract value increase of EUR 800,000.00 to finance additional services in the area of COVID-19 prevention. The project cooperated with the partners WHH, AMREF and TdH in implementing activities in all three outputs (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021).

According to the Cost Commitment Report (March 2021), the total project expenditure included about EUR 2,588 million for staff costs, about EUR 256,106 for travel costs, about EUR 794,527 for the procurement of materials and technical equipment and construction, and about EUR 4,141 million for instrument financing, including about EUR 3,947 million for grant agreements. In addition, GIZ administrative overheads and other direct costs amounted to roughly EUR 430,000.

The project's personnel structure comprised one officer, who was responsible for the commission, two international long-term experts and seven national long-term experts. The officer responsible for the commission took over the project's content-related and budgetary control and was in charge of the technical implementation of the measure and interface management between the partners and the project and coordination with other projects implemented by BMZ and the German Federal Foreign Office in terms of content; this also applied to cooperation with other development partners. Another international long-term expert provided support for output 1 in advising the water supply companies, communication and impact-oriented monitoring (part-time, 50%). A national long-term expert took over coordination and communication in the field (full-time). Administration and financial management were managed by two national long-term experts (part-time, 50%) and one international long-term expert (part-time, 20%), who was responsible primarily for controlling the financing contracts. International short-term experts provided selective support, particularly in the areas of training measures, evaluation and quality assurance (audits). These personnel instruments related equally to the project's three outputs (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c).

As agreed with BMZ due to the risks and restrictions to bilateral cooperation mentioned in the offer after the outbreak of the armed conflict in Juba in 2016 (implementation without a political partner, travel restrictions for international experts, etc.), large-volume financing on the basis of financing agreements with international NGOs (WHH, TdH, AMREF) was used for outputs 2 and 3 (GIZ, 2018a, 2017a, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021).

The activities for output 1 were carried out as planned and the output was achieved. The project's main instruments were the provision of material supplies and other inputs, as well as qualification and training

measures for the target groups, which were facilitated via financing agreements and local subsidies. Local subsidies for the water utilities for an amount of EUR 200,000 ensured their operational viability by covering structural costs. The evaluation concluded that the financing agreement and local subsidies increased the efficiency of the implementation of output 1 (Int_1 with GIZ; Int_3 with stakeholder). Output 1 absorbed 35% of the project's overall cost. With regard to the use of instruments and resources, a clear alternative could not be identified (Int_1 with GIZ).

In output 2 (hygiene awareness), one national technical advisor was responsible, in addition to his tasks relating to output 1, for coordination with the implementing partner AMREF in the context of water hygiene at household level (awareness-raising on health and hygiene) and monitoring of the activities that were carried out (in addition to the monitoring conducted by the implementing partner). The activities were carried out as planned and the output was achieved. An amount of EUR 800,000 was provided to the NGO AMREF Health Africa, which is well established in the health sector in the intervention areas, on the basis of a financial agreement.

Output 2 absorbed 20% of the project's overall cost. This was the lowest cost out of the three outputs. This was due to the fact, for example, that a high number of beneficiaries were reached through educational and training measures (25,000 people) and media awareness campaigns concerning COVID-19 prevention measures (150,000 people). The cost of materials was relatively low (e.g. water containers, chlorine tablets and hygiene materials such as locally produced mouth-and-nose coverings) and no construction work took place. Regarding the maximum principle, no potential alternative was identified that could have significantly enhanced the cost-outcome ratio. The evaluation concluded that resources had been applied efficiently and in a pertinent manner, including the financing agreement and local subsidies (Int_1 with GIZ; Int_3, 4 with stakeholder).

With respect to output 3 (improved school hygiene), two national technical advisors implemented activities in addition to their tasks relating to outputs 1 and 2. The tasks performed by the national advisors covered the baseline assessment for identifying schools, coordinating and overseeing the activities of the implementing partners in terms of improving sanitary facilities, constructing composting latrines, improving hygiene concepts in schools and providing training for school administrators, teachers and schoolchildren. Cooperation was established with the NGOs TdH at the Yei site and WHH at the Yambio and Torit sites, and funds of EUR 1.2 million were provided for TdH and EUR 1.9 million for WHH. The term extension (change offer May 2019) supported consolidation in terms of the sustainable operation and maintenance of the sanitation facilities. Financing agreements and local subsidies increased the efficiency of output 3. As a result of the nationwide school closures from March 2020, the training sessions were not fully implemented at all locations. UDDTs are more expensive to construct than simple latrines, but if handled and emptied properly, they are much more durable and thus more efficient than the simple version, which are usually closed after two to three years (the lifespan of UDDTs is three times longer). However, since it was not possible to complete a full cycle during the project term, the efficiency cannot be conclusively assessed (Int_1 with GIZ; Int_3, 4 with stakeholder).

To implement measures in the context of the COVID-19 pandemic, a change offer (July 2020) was accepted and indicator 2.2 (hygiene measures) was added. The national technical advisors supported the implementing partner WHH to improve basic water and sanitation services at health facilities and the implementation of hygiene concepts (Int_ 1 – 4 with GIZ). Output 3 was almost completely achieved and absorbed 40% of the project's overall cost. This was the highest cost of the three outputs, which was due to the fact, for example, that rehabilitating and constructing latrines and sanitation facilities is much more complex, time-consuming and cost-intensive than the measures in the other outputs. There was no indication that the output could have been maximised with the same resources and under the same framework conditions and with the same or better quality (maximum principle). The EUR 800,000 increase in project funds through the change offer and the addition of output indicator 2.2 were appropriate. The awareness and hygiene measures were implemented efficiently. No potential alternative was identified that could have significantly enhanced the cost-outcome ratio. The evaluation concluded that resources had been applied efficiently (Int_1 with GIZ; Int_ 4 with stakeholder).

Efficiency dimension 1 – Production efficiency – scores **60 out of 70 points**.

Figure 3: GIZ Efficiency Tool - cost overview and achievement of project objective indicators

Module objective	Conflict-affected and vulnerable internally displaced pesonen and host communities have improved acces to drinking water, sanitation and hygiene measures				
BMZ costs (Sum of individual costs)	8.132.380,11 €				
Co-financing	0,00 €				
Partner inputs	0,00 €				
Total costs	**8.132.380,11 €**				
Residual funds (BMZ costs and co-financing)	0,00 €				
Module objective indicators	MO 1. Drinking water supply for 80,000 persons (host communities, internally displaced persons) has been assured to South Sudanese standards (8 l/cap-day)	MO 2. In 7,000 households (host communities, internally displaced persons) two new improved hygiene practises propagated by the project are being applied, largely for the benefit of women and girls	MO 3. 20,000 schoolchildren (from households of host communities, internally displaced persons, 10,000 of whom are schoolgirls) have access to improved sanitary facilities (handwashing stations, latrines) in their schools	0	0
Achievement	113%	128%	96%	#DIV/0!	#DIV/0!

Efficiency – Dimension 2: Allocation efficiency

The analysis of efficiency dimension 2 was only partly based on cost data. The analysis examined the efficiency of the project management and the extent to which better results could have been achieved through cooperation/synergies and/or the leveraging of more resources. The appropriateness of the relationship between costs and outcome level was also addressed.

The project was successful in terms of adapting to the fragile political situation and the resulting restrictions and the implications of implementing the project without a direct political partner. The evaluators assessed the question of whether a different approach that strongly supported scaling-up options with respect to access to drinking water and sanitation (in accordance with the maximum principle) could have created a more appropriate relationship between cost and potential outcome. No evidence was found to support this hypothesis. On the one hand, it was not possible to carry out the project directly with a political partner; implementation had to take place on a subnational level. On the other hand, a policy framework was lacking, and no specific water and sanitation approach was endorsed by the government. There was no updated sector strategy or other planning documents for the urban water and sanitation sector in South Sudan beyond the National Development Plan (July 2018 - June 2021), nor was there any progress on the ratification of the Water Bill, which was guided by the previous project (PN: 2013.2278.3). DUWSS was one of the few projects with a development approach. The project's focus on access to water and sanitation, especially for vulnerable groups and poor households, and the exclusion of scaling-up options was logical in this context. Technically it was a valid approach to support and learn from WASH and pilot experiences, even when they were not linked to a government policy. In the three outputs, no alternative resource allocation options that would have maximised the project outcome were identified during the evaluation. The allocation of resources among the different outputs was very much in line with their relative importance for achieving the project objective. All three outputs were instrumental in creating the basic conditions for improved access to drinking water, sanitation and hygiene measures. This was supplemented in all three outputs by preventive hygiene measures in the context of the pandemic. From a conceptual point of view, the links between the outputs were convincing. They played a major role in the allocation efficiency, since they generated synergies, which are a prerequisite for aggregated outcomes that exceed the linear results in single intervention areas (improved access to drinking water, sanitation and hygiene measures, which was a combined effect of all three intervention areas) (Int_1, 5, 6 with GIZ; Int_ 3, 4 with stakeholder). The evaluation team could not find evidence to prove that a different way of distributing funds would have led to better results at outcome or impact level, nor could such an assumption be made on the basis of information provided by the respondents or the documentation that was

reviewed (GIZ, 2018a, 2017a, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021; Int_1, 4 with GIZ; Int_3, 4 with stakeholder).

In the case of DUWSS, synergies with other development partners, the implementing partners (WHH, TdH and AMREF) and the leveraging of resources were an important contributing factor in the project's allocation efficiency. The financial agreement instrument was appropriate and increased the efficiency of the project implementation. Cooperation with the implementing partners was presented as positive; regular, intensive exchanges took place. Added value was created because the organisations shared experiences in terms of assessments, analyses, monitoring, evaluations and lessons learned. The cooperation was effective and efficient and contributed to the outcome of DUWSS (Int_3, 4 with stakeholder). The relationship between the costs and results of the cooperation was appropriate and improved the efficiency of the project.
The project was actively involved in donor coordination meetings in the area of WASH (WASH DoG and the WASH Cluster). Economic losses due to insufficient coordination and complementarity with other donors' interventions were sufficiently avoided (Int_1, 5, 6 with GIZ; Int_1,2, 3, 4 with stakeholder).

Synergies with other GIZ projects were also achieved at outcome and impact level. For example, further training measures to strengthen the capacities of the water operator supervisory boards, with a special focus on the topics of good governance and anti-corruption, were carried out in cooperation with the technical cooperation measure Strengthening the Competence and Resilience of Local Governments in South Sudan (PN 2015.2098.0). To improve information management in the WASH sector, maintenance of the web-based WASH information platform and continuous capacity building of WASH actors were supported within the framework of the Study and Expert Fund's measure Maintenance and Further Development of the WASH Information Platform (PN: 2005.3504.7-011.00). After the Study and Expert Fund's measure Anti-Corruption and Promotion of Integration in Urban Water Utilities (2005.3504.7-013.00) was commissioned in April 2020, the corresponding activities were prepared and cooperation initiated, especially with the Water Integrity Network (Int_1, 5 with GIZ). This contributed directly to increasing the effectiveness of services in the water sector and the outcome of DUWSS. The follow-on project REBASE (PN: 2019.1855.6) seeks to ensure that the experience gained in the establishment of decentralised water supply units, in the area of hygiene awareness and school sanitation, is utilised and benefits the ongoing implementation. Investments in water utilities under the financial cooperation measure of KfW/UNICEF (Development of the Urban Water and Sanitation Sector, PN: 2015.6877.3) during the DUWSS implementation period would have further strengthened the project's impact. Delays in the implementation of the planned network expansions at the project sites in Torit, Yambio and Yei had a negative impact on the financial sustainability of the urban water utilities (GIZ, 2020b; 2020c; Int_1, 5, 6 with GIZ; Int_1, 2 with stakeholder).

Efficiency dimension 2 – Allocation efficiency – **scores 28 out of 30 points**.

Methodology for assessing efficiency

Table 18: Methodology for assessing OECD/DAC criterion: efficiency

Efficiency: assessment dimensions	Basis for Assessment	Evaluation design and empirical methods	Data quality and limitations
Production efficiency (Resources/Outputs)	The analysis of this assessment dimension is based on the efficiency tool in which costs are retrospectively assigned to outputs. It assessed to what extent the intervention's inputs (financial, human and material resources) were used economically in relation to the outputs delivered (products, investment goods and services), and also whether the inputs were used economically in relation to the three outputs delivered.	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1) and was based on the efficiency tool. **Empirical methods:** Interviews and discussion of the Cost Commitment Report and personnel instruments / costs with the officer responsible for the commissioning.	Relevant data and documents (e.g. Cost Commitment Report, personnel costs) were available and of good quality.
Allocation efficiency (Resources/Outcome)	Alternative, more cost-effective designs were assessed, as was the potential to increase the positive results using the existing resources. The evaluation assessed alternative ways of achieving the results (especially at outcome level).	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1) and was only partly based on the efficiency tool. **Empirical methods:** Assessment of documents, interviews with GIZ staff.	Relevant data and documents (e.g. the Cost Commitment Report, personnel costs) were available and of good quality.

4.7 Sustainability

This section analyses and assesses the sustainability of the project. It is structured according to the assessment dimensions in the GIZ project evaluation matrix (see Annex 1).

Summarising assessment and rating of sustainability

Table 19. Rating of OECD/DAC criterion: sustainability

Criterion	Assessment dimension	Score and rating
Sustainability	Capacities of the beneficiaries and stakeholders	15 out of 20 points
	Contribution to supporting sustainable capacities	26 out of 30 points
	Durability of results over time	36 out of 50 points
Sustainability score and rating		Score: **77 out of 100 points** Rating: **Level 3: moderately successful**

The project took appropriate measures to ensure that the results can be sustained in the medium to long term by the water suppliers and civil society partners themselves, in view of the lack of a formal partner structure and the current fragile and volatile situation. Sustainable approaches in the field of capacity development were developed and the strategy was frequently adapted to the rapidly changing framework conditions. Resilience and recovery responses regarding sustainability were limited, but there was potential to link the project results with the follow-on measure (REBASE) to achieve connectedness and sustainable results.

In total, the sustainability of the project is rated Level 3: moderately successful, with 77 out of 100 points.

Analysis and assessment of sustainability

Sustainability – Dimension 1: Capacities of the beneficiaries and stakeholders

The basis of the assessment was the extent to which the beneficiaries and stakeholders (individuals, groups and organisations, and partners) have the institutional, human and financial resources and the willingness (ownership) required to sustain the positive results of the intervention over time. Their resilience to mitigate future risks that could jeopardise the intervention's results was also assessed.

In view of the economic situation and the unpredictable post-civil war situation in South Sudan during the project term, the focus of DUWSS was on ensuring that the public water utilities remained as operational as possible as a major factor in securing the successful results achieved so far, in terms of setting up companies and building infrastructure in the project locations of Torit, Yei and Yambio. An uninterrupted supply of drinking water for the population at the project sites was seen as a priority; the sustainability of the measures was not initially the focus in the context of the humanitarian crisis in the early years of project implementation. Despite the volatile and fragile situation, the technical and operational capacities of local actors in the water utilities for the provision of drinking water and sanitation were strengthened. After the project ended, the professionals were better trained in technical and operational aspects and were therefore in a better position to operate the drinking water and sanitation infrastructure in a long-term, economically sustainable manner. In parallel, trained water kiosk operators are able to ensure that quality standards and regulations are met at drinking water delivery points (GIZ, 2018a, 2017a, 2017b, 2017c, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; AMREF, 2019a, 2019b; WHH, 2021).

Implementation of the agreed investments in the drinking water supply infrastructure in the cities of Yei, Yambio and Torit by KfW/UNICEF is a prerequisite. Without these investments to create additional infrastructure, the water companies can only be provided with transitional, stabilising and degressive support to maintain the drinking water supply, especially for the vulnerable population. At operational level, there is still a lack of technical and managerial know-how and experience for the provision of pro-poor drinking water and sanitation. At the same time, the National Water Bill, which should also clarify the mandates and responsibilities of the different administrative levels and institutions in South Sudan's water sector, is still in the process of departmental coordination and has therefore not yet been adopted. For these reasons, the institutional, human and financial resources of the stakeholders required to sustain the positive results of the intervention over time are not fully available. Resilience to mitigate future risks that could jeopardise the intervention's results could only be partly developed (e.g. having a decentralised structure means that water utilities are better able to maintain operations, even when crises occur, thus contributing to resilience) (Int_1, 6, 11 with partner).

In addition to rehabilitating water points in schools and constructing sanitation facilities, awareness-raising sessions and training were provided for UDDTs and WASHaLOT station stakeholders in the school environment, such as school administrators, headteachers and teachers, hygiene measures were incorporated into teaching activities and schoolchildren were instructed in the correct use of water and hygiene items. Students and parents were involved through existing structures such as PTAs and through the promotion of new initiatives such as school water and health clubs and school garden clubs. In this way, the ownership

required to sustain the positive results of the intervention over time was developed in the school context. However, since the schools have been closed since March 2020 due to COVID-19, it will be necessary to continue providing advice and training after the schools open so that the sustainable use of the equipment is guaranteed and the knowledge acquired is applied. The school closures meant that the sanitation facilities were barely used and the UDDTs had not completed an emptying cycle, so no conclusions on the longevity and sustainability of these measures could be drawn. The follow-on project REBASE will continue to support the schools (Int_2, 8, 12, 13 with partner).

Sustainability dimension 1 – Capacities of the beneficiaries and stakeholders – scores **15 out of 20 points.**

Sustainability – Dimension 2: Contribution to supporting sustainable capacities

The assessment examined whether the project took appropriate measures to ensure that the results could be sustained in the medium to long term by the beneficiaries themselves and whether the resilience of beneficiaries and stakeholders was strengthened by the intervention to mitigate future risks to sustainability.

The project took appropriate measures to ensure that the results could be sustained in the medium to long term by the water supplier, school administrators and civil society partners themselves, in view of the lack of a formal partner structure and the current fragile and volatile situation. The capacity development strategy was frequently adapted to the rapidly changing framework conditions. The project continued to pursue a multi-level and multi-actor approach with a focus on the meso and organisational level. Due to the lack of a political body or an adequate comparable institution at national level, capacity development also took place at the level of civil society and private sector actors (micro or individual level). The necessary competencies were built, and education and training content developed. To contribute to sustainability, the project used organisational development measures to develop and strengthen decentralised water supply systems and companies. These were designed to embed the results of the advisory services at institutional level and to ensure a basic supply, especially for the vulnerable population, in the long term. Advisory services and technical training aimed to improve financial and administrative processes, make technical operations more efficient, reduce water losses, design pro-poor tariffs and ensure sustainable budget planning to achieve cost-covering operations by the water companies in the medium term. The project sought to produce a structure-building effect to strengthen the role and capacities of decentralised water supply companies and thus ensure a basic supply in South Sudan. The project was based on existing structures such as the water utilities, water kiosks, WMCs, school management committees, PTAs, school WASH clubs and school health clubs (GIZ, 2018a, 2017a, 2018a, 2019a, 2019b, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; WHH, 2021; Int_1, 6, 11 with partner; Foc_Dis_1, 4, 8 with beneficiaries).

The project also cooperated closely with the local authorities and kept them informed during all phases of the project. MoGEI, MoAF and MoPI, in particular, were involved in planning and implementation, especially with respect to the activities in output 3 (GIZ, 2020a, 2020b, 2020c; TdH, 2020a, 2020b; WHH, 2021; Int_1, 6, 11 with partner).

Examples of contributions to sustainability were collected by the evaluators in discussions and interviews with partners and beneficiaries. Members of school WMCs informed the evaluators about their enhanced ability to manage the water and sanitation resources. They also described the positive and lasting effect and mentioned that the water resources are protected by members of the club (Int_1, 6, 7, 11, 14 with partner). WASH Club members (teachers, 15 boys and 15 girls) described their responsibilities with respect to overseeing WASH facilities and toilets (with separate washing rooms for girls) after training on operational maintenance had been provided. They highlighted the well-constructed, durable facilities. Additional costs were incorporated into school fees; this procedure had been clarified during the assessment and parents had accepted it. PTA committees were involved in the development of the memorandum of understanding (Int_3 with GIZ; 1, 6, 7, 11, 14 with partner; Int_3, 4 7 with beneficiaries; Foc_Dis_1, 4, 8 with beneficiaries). Providing the departments

of MoAF and MoGEI in Yei with UDDTs was an important step towards familiarising the ministries with the new technology and created an opportunity for mutual learning and cooperation between the schools and the departments (Int_11, 12 with partner; Int_8 with beneficiaries; Foc_Dis_5 with beneficiaries).

The intervention contributed to strengthening the resilience of vulnerable groups, especially poor households, IDPs, women and children. Vulnerable host communities and IDPs benefited from affordable, clean drinking water from nearby sources, improved hygiene behaviour that led to a reduction in the risk of waterborne diseases, and preventive COVID-19 measures and hygiene supplies. An assumption was made that it is highly likely that a contribution will be made to improving the resilience of schoolchildren, especially girls, through improved hygiene measures and sanitation facilities once the schools reopen. This assumption was based on initial statements from stakeholders (Int_4 with stakeholder; Int_8, 12, 13 with partner; Foc_Dis_7, 1, 4 with beneficiaries). The positive application of gender concepts could be observed in all the project's working areas. Improving the conditions for access to drinking water and sanitation benefited women and girls, but also population groups and children who are particularly vulnerable to health risks. The project and the implementing partner AMREF offered women a prominent role as multipliers for the household water, sanitation and hygiene education activities. These supportive and participatory approaches raised the status of the women involved, strengthened their position in their own households, and enabled them to earn a small additional income (AMREF, 2019a, 2019b).

The lack of a formal partner structure and the current fragile and volatile situation will have a limiting effect on the sustainability of project results in the medium to long term. The fact that Water Bill has still not been ratified prevented further clarification of mandates and responsibilities. A lack of KfW/UNICEF investment prevented the water utilities from developing into independent, stable and sustainable institutions. The economic and social consequences of COVID-19 are difficult to assess. The onset of the pandemic and the school closures (which affected 20,000 schoolchildren in the target schools) have led to setbacks, especially in school interventions, thus making it difficult to assess the project's contribution to sustainable sanitation and hygiene interventions in schools (GIZ, 2020b, 2020c).

Sustainability dimension 2 – Contribution to supporting sustainable capacities – scores **26 out of 30 points**.

Sustainability – Dimension 3: Durability of results over time

The evaluators assessed the extent to which the project's outcome and impact were durable, stable and resilient in the long term under the given conditions. They also assessed the risks and potential that could affect the durability of the results, how likely these factors were to occur and the measures that could be taken by the project to reduce such risks.

Given the conditions, the results of the project are only stable and resilient in the long term to a certain degree and are highly dependent on future developments. The degree to which the effects have been incorporated into the partner organisations can only be observed in a fragmented manner, since sustainability cannot be fully achieved without donor funds under the given circumstances. For output 1, the exit strategy developed as part of the project design specified that water utility operations would be self-sustaining as soon as the financial cooperation investments were fully implemented. According to output 3, schools would be able to operate the sanitation facilities by themselves (after training and one UDDT emptying cycle). An overall exit strategy was not developed; the continuation of measures in the follow-on project REBASE provides further opportunities to sustainably entrench the results. The project aimed to create the structural conditions for poverty-oriented drinking water and sanitation. By focusing on capacity building at decentralised level and linking up with local administrative structures, the project promoted the independent continuation of activities. In the process, the decentralised operator structures created were positioned to operate the infrastructure investments economically and thus maintain the drinking water and sanitation supply on their own in the long term. With regard to the responsibility for continuation of the water utilities, it was expected that the adoption of the Water

Bill would contribute to further clarification of mandates and responsibilities. The KfW/UNICEF investments were a prerequisite for enabling the water utilities to maintain the drinking water supply, especially for the vulnerable population. The onset of the pandemic and the school closures have led to setbacks, especially in school interventions, thus making it difficult to assess the project's contribution to sustainable sanitation and hygiene interventions in schools. The COVID-19 measures financed by additional funds (change offer 2020) have led to a better drinking water supply for the vulnerable population, improved sanitary and hygiene conditions in selected health facilities and educated the population about preventive measures. The additional activities were geared towards prevention and rapid support measures and made no claim to sustainability (GIZ, 2020a, 2020b, 2020c).

Sustainability dimension 3 – Durability of results over time – scores **36 out of 50 points**.

Methodology for assessing sustainability

Table 20: Methodology for assessing OECD/DAC criterion: sustainability

Sustainability: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
Capacities of the beneficiaries and stakeholders	The assessment was based on the extent to which the beneficiaries and stakeholders (individuals, groups and organisations, and partners) have the institutional, human and financial resources and the willingness (ownership) required to sustain the intervention's positive results over time. Their resilience to mitigate future risks that could jeopardise the intervention's results was also assessed.	**Evaluation design:** The analysis was conducted in accordance with the analytical questions in the evaluation matrix (see Annex 1); no specific evaluation design was applied. **Empirical methods:** Document and data analysis, interviews and FGDs with project staff, partners, stakeholders and final beneficiaries.	Relevant project documents, including the REBASE offer, were available and of good quality. Implementing partners' surveys and assessments were accessible.
Contribution to supporting sustainable capacities	The assessment examined whether if the project took appropriate measures to ensure that the results could be sustained in the medium to long term by the beneficiaries themselves and whether the resilience of beneficiaries and stakeholders was strengthened by the intervention to mitigate future risks to sustainability.	**Evaluation design:** As in dimension 1. **Empirical methods:** As in dimension 1.	The conflict and the fragile context influenced the quality and validity of data concerning the resilience of beneficiaries and stakeholders. South Sudan has hardly any usable, comprehensive statistics and data on access to water and sanitation and the health status of the population. This made it difficult or even impossible to draw conclusions about interactions between the areas and changes or improvements achieved through the measures.
Durability of results over time	The assessment of the durability of the results took the country's fragile situation into account. Furthermore, it examined the resources and	**Evaluation design:** The assessment of the durability of the results was based on the evaluation questions in the matrix (see Annex 1);	As in dimensions 1 and 2

Sustainability: assessment dimensions	Basis for assessment	Evaluation design and empirical methods	Data quality and limitations
	possibilities of the follow-on project REBASE to achieve sustainable developments and of the planned investments to enable the water utilities to operate independently and sustainably.	possible scenarios for future development and the potential (and exit strategy) of REBASE were considered. **Empirical methods:** As in dimensions 2 and 3.	

4.8 Key results and overall rating

Due to the humanitarian situation regarding access to water and sanitation in South Sudan, the project had the highest priority and relevance. Despite difficult framework conditions due to the conflicts and the restrictions imposed by the pandemic, the project was implemented very effectively and efficiently and its objectives were fully achieved. Achieving the overarching development goals was a major challenge, firstly due to the fragile situation described above and secondly due to the lack of baseline data and data to indicate the project's contribution. Nevertheless, a positive impact in terms of gender equality, the reduced risk of water-induced infections and, to a certain degree, conflict-free coexistence between population groups can be described as plausible. Ensuring sustainability also presented a challenge, especially due to the lack of necessary investment in the water utilities. The project managed to create conditions for building sustainable structures among the local authorities, water suppliers and schools. It is also important to point out that the measures will be continued through the follow-on project REBASE.

Table 21: Rating and score scales

100-point scale (score)	6-level scale (rating)
92–100	Level 1: highly successful
81–91	Level 2: successful
67–80	Level 3: moderately successful
50–66	Level 4: moderately unsuccessful
30–49	Level 5: unsuccessful
0–29	Level 6: highly unsuccessful
Overall rating: The criteria of effectiveness, impact and sustainability are knock-out criteria; if one of the criteria is rated as level 4 or lower, the overall rating cannot go beyond level 4, even though the mean score may be higher.	

Table 22. Overall rating of OECD/DAC criteria and assessment dimensions

Evaluation criteria	Dimension	Max	Score	Total (max.100)	Rating
Relevance	Alignment with policies and priorities	30	30	**96**	Level 1: Highly successful
	Alignment with the needs and capacities of the beneficiaries and stakeholders	30	28		
	Appropriateness of the design*	20	18		
	Adaptability – response to change	20	20		
Coherence	Internal Coherence	50	40	**90**	Level 2: successful
	External Coherence	50	40		
Effectiveness	Achievement of the (intended) objectives	30	27	**90**	Level 2: successful
	Contribution to achievement of objectives	30	27		
	Quality of implementation	20	18		
	Unintended results	20	18		
Impact	Higher-level (intended) development changes/results	30	25	**82**	Level 2: successful
	Contribution to higher-level (intended) development results/changes	40	30		
	Contribution to higher-level (unintended) development results/changes	30	27		
Efficiency	Production efficiency	70	60	**88**	Level 2: successful
	Allocation efficiency	30	28		
Sustainability	Capacities of the beneficiaries and stakeholders	20	15	**77**	Level 3: moderately successful
	Contribution to supporting sustainable capacities	30	26		
	Durability of results over time	50	36		
Mean score and overall rating		100	**87**		**Level 2: successful ***

* the knock-out criterion effectiveness/impact/sustainability is rated level 4 or lower; therefore, the overall rating is level 4, although the mean score may be higher.

5 Conclusions and recommendations

5.1 Key findings and factors of success/failure

The most important **external factors** that influenced the project's success were:

- Negative and positive: the volatile environment in which the project was carried out remained a major concern for implementation. Travel restrictions for international staff led to semi-remote implementation. The Security and Risk Management System established in the GIZ office in South Sudan worked well for the staff located in South Sudan and, fortunately, DUWSS staff members were not directly impacted by any specific incidents. The restrictions in the context of COVID-19 posed another challenge to implementation. As the schools were closed in March 2020, the knowledge acquired could not be implemented and the EcoSan UDDT cycles could not be completed.
- Negative: the conflict and fragile situation caused delays in construction measures and procurement of necessary equipment. Transport, fuel and procurement prices were relatively high.
- Positive: the strong commitment shown by partners and target groups and the well-developed cooperation and coordination structures resulted in the timely and high-quality implementation of the measures and achievement of the expected results. Transparency and participation were ensured throughout the duration of the project to generate trust and a positive attitude among most partners.

While the above-mentioned factors were mostly beyond the scope of the project, the following **success factors** were related to the quality of implementation and/or managerial aspects:

- Positive: development of concepts and approaches to achieve a high level of participation, ownership and motivation among stakeholders and partners in the implementation of activities, including capacity development measures for relevant stakeholders and target groups.
- Positive: a high level of flexibility to make frequent strategy and implementation adjustments and adapt the project to the changing framework conditions.
- Positive: highly motivated and dedicated project staff with a high level of expertise in the specific sectors and the local context covered by the project.
- Positive: the project created added value through cooperation with implementing partners and their expertise and contributions in the fields of awareness-raising on hygiene issues, school hygiene and sanitation, and the promotion of women and gender equality.
- Positive: the project, implementing partners, the other GIZ projects in South Sudan and the UN-led WASH Cluster built proven working structures, effective networks and strategic partnerships, and contributed to coherence and synergies.
- Positive: the strong focus on indirect target groups, including vulnerable groups, and the high number of beneficiaries were very positive assets and led to important and visible contributions to the desired goal.

Findings regarding the 2030 Agenda

Interplay of economic, environmental and social development

The complementary approach of GIZ (the Humanitarian-Development-Peace Nexus) and additional financial cooperation measures are expected to lead to a tangible, long-term improvements in the living conditions of the target group, especially vulnerable groups (IDPs, women and girls, and poor households), who struggle to secure the basic services necessary for survival. By means of a poverty-oriented tariff calculation, economically sustainable water utilities were established and promoted. The country's precarious economic situation and the population's income status were limiting factors, so a viable compromise between a poverty-oriented supply for

the population and the economic sustainability of the water utilities must also be defined in the future. In the long term, behavioural change can increase the priority given to safe drinking water and, indirectly, can increase the population's income opportunities due to improved health and the reduced time spent on water procurement. In addition, the operation of the kiosks enabled people from the project area to earn an independent income, so the project has already contributed indirectly to poverty reduction. The well-organised drinking water supply through supervised, decentralised water utilities made it possible to monitor water withdrawals and check water quality and will help establish regulations for environmental protection and resource conservation implemented by the government of Southern Sudan in the future.

Environmental aspects were considered throughout to minimise potential negative impacts in terms of groundwater pollution and health. Improving the conditions for access to drinking water and sanitation benefited women and girls in particular; they were also given priority in the measures to improve domestic hygiene. The stakeholder processes initiated between the civilian population, local government and water operators strengthened mandates and roles, created transparency and thus also integrated governance issues. By respecting equal access to drinking water and sanitation, and involving all those in need (the local population, IDPs and different ethnic groups), the project contributed to fulfilling the human right to drinking water.

2030Agenda

The 2030 Agenda is officially designated as a reference framework by the government of South Sudan and is also reflected in South Sudan's National Development Strategy for 2018-2021. The Sustainable Development Goal on 'Clean water and sanitation' (SDG 6) and the goal on 'Good health and well-being' (SDG 3) were identified as 'of utmost importance' by the population of South Sudan in a UNDP-supported data collection exercise (Sustainable Development Goals of Immediate Concern to South Sudanese and their Families) by UNDP to monitor the achievement of the SDGs in 2019. The project contributed to the implementation of the 2030 Agenda SDGs, in particular SDG 3 on 'Good health and well-being', SDG 6 on 'Clean water and sanitation' and SDG 5 on 'Gender equality'. Measurable progress in achieving the SDGs has not yet been recorded, again due to a lack of available data.

Inclusiveness / LNOB

With its pro-poor approach, the project was committed to the LNOB principle and the No Lost Generation initiative. Specific attention was paid to vulnerable population groups, including women, women-headed households, young people, IDPs and returnees. Due to the important role of women and girls in handling water and hygiene issues, the project measures also improved the living conditions of women in particular.

Findings regarding the follow-on project

Assessment of the impact logic of the follow-on project REBASE (PN: 2019.1855.6)

The results model, including results hypotheses, the results-oriented monitoring system and project indicators for the follow-on project REBASE (PN: 2019.1855.6) are plausible and in line with current standards. The outcome of the project reads 'The conditions for access to drinking water and sanitation, especially for the vulnerable population, are improved'. It focuses on the urban population of the municipality belonging to Greater Juba, Gumbo, the cities of Yei, Yambio and Torit and the district of Lologo in Juba, including host communities and IDPs. There is a special focus on about 30,000 schoolchildren. The outputs are aligned with the needs of the target group and build on the results and experiences of the previous projects, which contributed to improving the living conditions of the target group in the areas of drinking water, sanitation and hygiene. The strategy focuses on an approach geared towards the basic needs of the target group; in combination with investments in water supply infrastructure by the International Committee of the Red Cross (in Gumbo) and KfW/UNICEF (in Yei, Yambio, Torit and Dschuba/Lologo), the project pursues the approach of

building the human resources and institutional capacities of local actors. It focuses on building and further developing the human resources and institutional capacities of local actors to ensure poverty-oriented drinking water and sanitation services in the long term. To this end, the operational foundations of decentralised water supply companies are being stabilised, the technical and operational capacities of local actors for the provision of pro-poor drinking water and sanitation are being strengthened, and decentralised sanitation solutions, especially for vulnerable households and schools, are being made available. In terms of content, the technical cooperation measure builds on the experiences of the predecessor projects. The end of DUWSS meant that support for the economically viable water utilities in Yei, Yambio and Torit came to an end even before the necessary distribution systems had been implemented, and the drinking water supply could not be maintained. This would have particularly affected the vulnerable population in the three cities, and the planned KfW investments would have been ineffective without active water suppliers. This is where REBASE came in, which built on the impacts of DUWSS through a pro-poor approach to ensure access to drinking water for vulnerable populations. At the same time, it is enabling the KfW investments to be put to good use, so that the water utilities in Yei, Yambio and Torit can benefit from the greater reach and make their operations economically viable (GIZ, 2020c; Int_1, 2 with stakeholder, Int_1, 5, 6 with GIZ).

5.2 Recommendations

Conclusions and recommendations regarding the ongoing follow-on project REBASE

Findings: monitoring and evaluation in DUWSS focused strongly on monitoring quantitative and qualitative data at output and outcome levels. Impact level monitoring did not take place and no indicators or milestones were developed.

- Recommendation: set up a monitoring and evaluation section with sufficient resources (and personnel) to focus on the monitoring of qualitative data, outcomes and impact, focus on beneficiaries and include risks and unintended impacts. Conduct surveys to provide sufficient baseline data for all intervention areas of the project. Develop the capacities of partner organisations in the area of monitoring and evaluation methods to facilitate data integration processes and simplify reporting. Include research activities to better understand the context and needs of the different population groups. The establishment of an effective monitoring system will have a material effect when assessing the results of each of the three REBASE outputs and when proving results regarding the outcome, overarching development results and the cross-cutting issues of gender equality and strengthening resilience.

Findings: the impact of the contribution to peaceful coexistence (basic form of resilience) could not be proven for DUWSS because the monitoring system was not sufficiently geared towards measuring impact.

- Recommendation: for the follow-on project and other projects that focus on strengthening the resilience of the target groups, the implementation of an appropriate impact monitoring system is recommended. This includes the collection of baseline data on possible conflicts and conflict resolution mechanisms (conflict analysis) in the coexistence of different population groups, the definition of resilience in the specific context, and ongoing collection of data on how the project's measures are contributing to strengthening resilience (contribution analysis).

Findings: DUWSS successfully promoted women, girls and gender equality. This was also made possible by the contributions of the implementing partners WHH, AMREF and TdH.

- Recommendation: develop a gender strategy for REBASE, based on the existing gender analysis. Women's participation and consideration of the concept of gender equity and equality should not be limited to specific activities (e.g. hygiene measures), but should be mainstreamed into all outputs. Take on board innovative approaches to mainstreaming women in traditionally male domains, such as the water technology sector, and support the economic participation of women in general. The gender focal point within REBASE (if this position has been filled) should be involved in the development of

these innovative approaches and actively consulted as an advisor on this special topic by colleagues responsible for the outputs.

Findings: in the course of the evaluation, it was observed that beneficiaries in the communities were not aware of how to give feedback on the individual activities. This was due to the lack of feedback mechanisms.

- Recommendation: develop and establish feedback mechanisms together with the implementing partners. Identify and address the barriers to giving feedback. People may fear that critical feedback will lead to a loss of assistance or have negative repercussions. There may also be cultural reasons as to why criticism of an intervention is regarded as unacceptable. Staff should be trained in how to exercise confidentiality and refer to sensitive information, such as critical feedback and the disclosure of exploitation and abuse.

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Annex: Evaluation matrix

OECD-DAC Criterion Relevance - Is the intervention doing the right things? (max. 100 points)
The 'relevance' criterion focuses on the intervention's design. It refers to the extent to which the objectives and design of a development intervention are consistent with the (global, country and institution-specific) requirements, needs, priorities and policies of beneficiaries and stakeholders (individuals, groups, organisations and development partners). It also identifies the ability of the intervention's design to adapt to a change in circumstances. "Relevance" is assessed in relation to 1) the **time of the intervention design**[1] and 2) from **today's perspective**[2].

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** *(Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)*	**Data sources** *(e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)*	**Data Quality and limitations** *(Description of limitations, assessment of data quality: poor, moderate, good, strong)*	**Data Quality Assessment** (weak, moderate, good, strong)
Alignment with policies and priorities	Standard	To what extent are the intervention's objectives aligned with the (global, regional and country specific) policies and priorities of the BMZ and of the beneficiaries and stakeholders and other (development) partners? To what extent do they take account of the relevant political and institutional environment?	• Orientation at BMZ country strategies and BMZ sector concepts • Strategic reference framework for the project (e.g. national strategies including the national implementation strategy for Agenda 2030, regional and international strategies, sectoral and cross-sectoral change strategies, in bilateral projects especially partner strategies, internal analytical framework e.g. safeguards and gender[4] • Orientation of the project design at the (national) objectives of Agenda 2030 • Project contribution to certain Sustainable Development Goals (SDGs) • Explanation of a hierarchy of the different policies, priorities (especially in case of contradictions)	The project takes into account the most recent international and national strategies, conventions and frameworks	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030, South Sudan Development Plan by the Government of the Republic of South Sudan (2015), National Development Strategy 2018 – 2021. Consolidate Peace and Stabilize the Economy by the Government of the Republic of South Sudan (2018), South Sudan National COVID-19 Response Plan (NRP) by the Government of the Republic of South Sudan (2020), South Sudan Inaugural SDG Report – A Roadmap towards sustainable development by the Government of the Republic of South Sudan and UN South Sudan (2017), Sustainable	strong data quality	strong

						Development Goals of immediate concern to South Sudanese and their families by UNDP (2019), South Sudan Emergency. The situation of refugees in South Sudan by UNHCR (2021), Humanitarian Needs Overview South Sudan by UNOCHA (2021), BMZ strategy "Development for Peace and Security. Development Policy in the Context of Conflict, Fragility and Violence" (2013), German Government's guidelines "Preventing Crises, Overcoming Conflict, Promoting Peace" (2017), BMZ strategy "Agenda 2030 konkret. Synergies and conflicts between water (SDG 6) and other goals" (2019), BMZ position paper "Creating Prospects for Refugees: Fighting the causes of flight, stabilising host regions, supporting refugees" (2017). Interviews with donor and project team.		
	and Fragility	To what extent was the (conflict) context of the project adequately analysed and considered for the project concept?	• Key documents: (Integrated) Peace and Conflict Assessment (I)PCA, Safeguard Conflict and Context Sensitivity documents	The conflict situation in the target country, South Sudan, was considered adaquately for the project concept	document analysis, interviews	Integrated Peace and Conflict Assessment (iPCA)	strong data quality	strong
	and SV/GV	To what extent does the project complement bilateral or regional projects? To what extent does it complement other global projects?	• Please use CPE factsheet on SV / GV / IZR					
	and SV/GV	To what extent is the project geared towards solving a global challenge that cannot only be effectively addressed bilaterally/ regionally?	• Please use CPE factsheet on SV / GV / IZR					
Alignment with the needs and capacities of the beneficiaries and	Standard	To what extent are the intervention's objectives aligned with the development needs and capacities of the	• Also: consideration of stakeholders such as civil society and private sector in the design of the measure	The inerventions objectives are geared to the core problems and needs of the direct and indirect target groups	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment	strong data quality	strong

stakeholders		beneficiaries and stakeholders involved (individuals, groups and organisations)?				(iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing partners, direct and indirect target groups		
	and Fragility	How were deescalating factors/ connectors[5] as well as escalating factors/ dividers[6] in the project context identified and considered for the project concept (please list the factors)?[7]	• e.g. see column I and II of the (Integrated) Peace and Conflict Assessment	The project concept considers escalating and deescalating factors as identified by the project and listed in the iPCA.	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing partners, direct and indirect target groups	strong data quality	strong
	and Fragility	To what extent were potential (security) risks for (GIZ) staff, partners, target groups/final beneficiaries identified and considered?		Potential (security) risks for (GIZ) staff, partners, target groups and final beneficaries are identified and considered in the project concept	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing partners, direct and indirect target groups	strong data quality	strong
	Standard	To what extent are the intervention's objectives geared to the needs and capacities of particularly disadvantaged and vulnerable beneficiaries and stakeholders (individuals, groups and organisations)? With respect to groups, a differentiation can be made by age, income, gender, ethnicity, etc. ?	• Reaching particularly disadvantaged groups (in terms of Leave No One Behind, LNOB) • Consideration of potential for human rights and gender aspects • Consideration of identified risks	The project concept is designed to reach particularly disadvantaged groups as foreseen in the Agenda 2030 (LNOB) and the identified risks and potentials for human rights and gender aspects are included into the project concept.	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing	strong data quality	strong

						partners, direct and indirect target groups		
Appropriateness of the design[3]	Standard	To what extent is the intervention's design appropriate and realistic (in terms of technical, organisational and financial aspects)?	• Realistic project goal from today's perspective and in view of the available resources (time, finances, partner capacities) • Consideration of potential changes in the framework conditions • Dealing with the complexity of framework conditions and strategic reference frameworks and with possible overloading • Strategic focusing	The interventions design is appropriate and realistic from todays perspective and the given resources (time, financial, partner capacities)	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing partners	good data quality	good
	Standard	To what extent is the intervention's design sufficiently precise and plausible (in terms of the verifiability und traceability of the system of objectives and the underlying assumptions)?	Assessment of the (current) results model and results hypotheses (Theory of Change, ToC) of the actual project logic: • Adequacy of activities, instruments and outputs in relation to the project objective to be achieved • Plausibility of the underlying results hypotheses • Clear definition and plausibility of the selected system boundary (sphere of responsibility) • Appropriate consideration of potential influences of other donors/ organisations outside the project's sphere of responsibility • completeness and plausibility of assumptions and risks for the project results • How well is co-financing (if any) integrated into the overall concept of the project and what added value could be generated for the ToC/project design?	The activities, instruments and outputs are adequately designed to achieve the project objective. The underlying results hypotheses of the project are plausible. The chosen system boundary (sphere of responsibility) of the project (including partners) is clearly defined and plausible. The potential influences of other donors,organisations outside of the project's sphere of responsibility are adequately considered. The assumptions and risks for the project are complete and plausible.	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing partners	good data quality	good

	Standard	To what extent is the intervention's design based on a holistic approach to sustainable development (interaction of the social, environmental and economic dimensions of sustainability)?	• Presentation of the interactions (synergies/trade-offs) of the intervention with other sectors in the project design - also with regard to the sustainability dimensions in terms of Agenda 2030 (economic, ecological and social development)	The relevant interactions of the project with other sectors are reflected in the project concept, also with regard to the sustainability dimension in terms of Agenda 2030.	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing partners	good data quality	good
Adaptability – response to change	Standard	To what extent has the intervention responded to changes in the environment over time (risks and potentials)?	• Reaction to changes during project including change offers (e.g. local, national, international, sectoral changes, including state-of-the-art sectoral know-how)	The strategic orientation of the project addresses changes in its framework conditions. The changes which occured during project implementation was documented. The project concept was adapted to changes.	document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Agenda 2030 Interviews with project, donor, implementing partners	good data quality	good

(1) The 'time of the intervention design' is the point in time when the offer/most recent modification offer was approved .

(2) In relation to the current standards, knowledge and framework conditions.

(3) The design of an intervention is usually assessed by evaluating its intervention logic. The intervention logic depicts the system of objectives used by an intervention. It maps out the systematic relationships between the individual results levels. At the time an intervention is designed, the intervention logic, in the form of a logical model, is described in the offer for the intervention both as a narrative and generally also on the basis of a results framework. The model is reviewed at the start of an evaluation and adjusted to reflect current knowledge. Comprehensive (re)constructed intervention logics are also known as "theories of change". In GIZ the 'project design' encompasses project objective (outcome) and the respective theory of change (ToC) with outputs, activities, TC-instruments and especially the results hypotheses as well as the implementation strategy (e.g. methodological approach, Capacity Development (CD) strategy). In GIZ the Theory of Change is described by the GIZ results model as graphic illustration and the narrative results hypotheses.

(4) In the GIZ Safeguards and Gender 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 seperate checks.

(5) Deescalating factors/ connectors: e.g. peace-promoting actors and institutions, structural changes, peace-promoting norms and behavior. For more details on 'connectors' see: GIZ (2007): 'Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen', p. 55/135.

(6) Escalating factors/ dividers: e.g. destructive institutions, structures, norms and behavior. For more details on 'dividers' see: GIZ (2007): 'Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen', p. 135.

(7) All projects in fragile contexts, projects with FS1 or FS2 markers and all transitional aid projects have to weaken escalating factors/dividers and have to mitigate risks in the context of conflict, fragility and violence. Projects with FS1 or FS2 markers should also consider how to strengthen deescalating factors/ connectors and how to address peace needs in its project objective/sub-objective.

OECD-DAC Criterion Coherence - How well does the intervention fit? (max. 100 points)
This criterion refers to the intervention's compatibility with other interventions in a country, sector or institution as well as with international norms and standards. **Internal coherence** addresses the synergies and division of tasks between the intervention and other interventions of German development cooperation and also the intervention's consistency with the relevant international norms and standards to which German development cooperation adheres. **External coherence** considers the intervention's complementarity, harmonisation and coordination with the interventions of other partners, donors and international organisations. The "coherence" criterion relates both to the intervention's design as well as to the results it achieves.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Internal coherence	Standard	Within German development cooperation, to what extent is the intervention designed and implemented (in a sector, country, region or globally) in a complementary manner, based on the division of tasks?	• Also analysis of whether the project takes the necessary steps to fully realize synergies within German development cooperation	Within German development cooperation, the intervention is designed and implemented in South Sudan in a complementary manner, based on the division of tasks	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners	good data quality	good
	Standard	To what extent are the instruments of German development cooperation (Technical and Financial Cooperation) meaningfully interlinked within the intervention (in terms of both design and implementation)? Are synergies leveraged?	• if applicable, also take into account projects of different German ressorts/ministries	Instruments are meaningfully interlinked within the intervention	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners	good data quality	good
	Standard	To what extent is the intervention consistent with international and national norms and standards to which German		Consistency with international and national norms and standards (esp. Human rights)	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment	good data quality	good

		development cooperation is committed (e.g. human rights)?				(iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners		
External coherence	Standard	To what extent does the intervention complement and support the partner's own efforts (principle of subsidiarity)?		Subsidiarity was achieved	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners	good data quality	good
	Standard	To what extent has the intervention's design and implementation been coordinated with other donors' activities?	• Also: To what extent could synergies be achieved through co-financing (where available) with other bilateral and multilateral donors and organizations and how did co-financing contribute to improved donor coordination?	Coordination with other donor's activities was successful	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners	good data quality	good
	Standard	To what extent has the intervention's design been designed to use existing systems and structures (of partners/other donors/international organisations) for implementing its activities? To what extent are these systems and structures used?	• Also analysis of whether the project is taking the necessary steps to fully realize synergies with interventions of other donors at the impact level	Existing systems and structures have been used for implementation	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map,	moderate data quality	moderate

						Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners		
	Standard	To what extent are common systems (together with partners/other donors/international organisations) used for M&E, learning and accountability?		Common systems are used for M&E, learning and accountability	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix , Results model, Results-based monitoring system (WoM), Stakeholder Map, Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners	moderate data quality	moderate

OECD-DAC Criterion Effectiveness - Is the intervention achieving its objectives? (max. 100 points)
'Effectiveness' refers to the extent to which the intervention has achieved, or is expected to achieve, its objectives (at outcome level), including any differential results across beneficiary and stakeholder groups. It examines the achievement of objectives in terms of the direct, short-term and medium term results.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Achievement of the (intended)	Standard	To what extent has the intervention achieved, or is the intervention	• Assessment based on the project objective	The agreed project objective (conflict-affected and vulnerable internally displaced persons and host-communities have improved access to drinking water, sanitation and hygiene measures) wll be achieved until the end of the project (measured against the objective indicators)	Contribution-analysis analysis of assessments	Results-based monitoring system	good data quality	good

objectives[1]		expected to achieve, the (intended) objectives as originally planned (or as modified to cater for changes in the environment)?	indicators (agreed with BMZ) • Check whether more specific or additional indicators are needed to adequately reflect the project objective		and final reports, interviews	(WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries		
	and Fragility	For projects with FS1 or FS2 markers: To what extent was the project able to strengthen deescalating factors/ connectors?[2, 4]		The project (FS 1 marker) was able to strengthen deescalating factors, connectors	analysis of assessments and final reports, interviews	Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict	good data quality	good

							Assessment (iPCA), Gender Analysis, Results matrix, Results model Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries		
Contribution to achievement of objectives	Standard	*To what extent have the intervention's outputs been delivered as originally planned (or as modified to cater for changes in the environment)?*		All agreed outputs as of the last modification have been achieved (measured against the output indicators)	Contribution-analysis analysis of assessments and final reports, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Technical Assessments, Results matrix, Results model, Results-based monitoring system (WoM), Stakeholder Map, Assessments and evaluation reports by implementing partners Interviews with GIZ, project, donor, implementing partners,	good data quality	good

						direct and indirect beneficiaries		
	Standard	To what extent have the delivered outputs and increased capacities been used and equal access (e.g. in terms of physical, non-discriminatory and affordable access) guaranteed?		Delivered outputs and capacities are used, equal access was guaranteed.	Contribution-analysis analysis of assessments and final reports, interviews	Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good data quality	good
	Standard	To what extent has the intervention contributed to the achievement of objectives?	• Assessment based on the activities, TC-instruments and outputs of the project (contribution-analysis as focus of this assessment dimension and minimum standard, see annotatted	Activities, TC-instruments and outputs of the project contributed to the objectives (measured against output and objective indicators). Without the project the results would not have been achieved.	Contribution-analysis analysis of assessments and final reports, interviews qualitative reflection	Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified	good data quality	good

			reports) • What would have happened without the project? (usually qualitative reflection)			versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries		
	Standard	To what extent has the intervention contributed to the achievement of objectives at the level of the intended beneficiaries?		The intervention contributed to the improvement of living conditions of the beneficiaries	Contribution-analysis analysis of assessments and final reports, interviews	Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model Interviews with GIZ,	good data quality	good

						project, donor, implementing partners, direct and indirect beneficiaries		
	Standard	To what extent has the intervention contributed to the achievement of objectives at the level of particularly disadvantaged or vulnerable groups of beneficiaries and stakeholders? (These may be broken down by age, income, gender, ethnicity, etc.)?		The intervention contributed to the improvement of living conditions of the beneficiaries who belong to vulnerable groups (women, youth, refugees, IDPs)	Contribution-analysis analysis of assessments and final reports, interviews	Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model	good data quality	good
	Standard	*Which internal factors (technical, organisational or financial) were decisive for achievement/non-achievement of the intervention's intended objectives?*	• Internal factors = within the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ	Technical and organisational factors were decisive for the interventions intended objectives	Contribution-analysis analysis of assessments and final reports, interviews	Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners,	good data quality	good

			and the official partner(s).			Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries		
	Standard	*Which external factors were decisive for achievement/non-achievement of the intervention's intended objectives (taking into account the anticipated risks)?*	• External factors = outside the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ and the official partner(s).	External factors and obstacles to project implementations are identified	Contribution-analysis analysis of assessments and final reports, interviews	Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified versions of project proposal, annual progress reports to	good data quality	good

						BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model		
Quality of implementation	Standard	What assessment can be made of the quality of steering and implementation of the intervention in terms of the achievement of objectives? What assessment can be made of the quality of steering and implementation of, and participation in, the intervention by the partner/executing agency?	Capacity Works considerations: - **Results-oriented monitoring (RoM / WoM)** is established and used, e.g. for evidence-based decisions, risk management. Data are disaggregated by gender and marginalized groups. unintended positive and negative results are monitored. Conflict-sensitive monitoring and explicit risk-safety monitoring are particularly important for projects in fragile contexts. - A bindingly communicated **strategy** agreed with the partners is pursued - Involvement and **cooperation** of all relevant actors (including	The quality of steering and implementation made the achievement of the objectives possible (assessed on the bases of the projects ROM, communication strategy, cooperation behavior, steering strategy, quality of project-internal processes, existence of a learning culture)	The analysis follows the evaluation questions, no specific design was applied analysis of documents, interviews	Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Project proposal, modified versions of project proposal, annual progress reports to BMZ, Peace and Conflict Assessment (iPCA), Gender Analysis, Results matrix, Results model	good data quality	good

			partners, civil society, private sector) - **Steering**: decisions influencing the projects's results are made in time and evidence-informed. Decision processes are transparent. - **Processes**: Relevant change processes are anchored in the cooperation system; project-internal processes are established and regularly reflected and optimised. - **Learning and innovation**: There is a learning and innovation-friendly work culture that promotes the exchange of experience; learning processes are established; context-specific adjustments are possible					
Unintended results	Standard	To what extent can unintended positive/negative direct results (social, economic, environmental and among vulnerable beneficiary groups) be observed/anticipated	• The focus is on the outcome level, but for the analysis the unintended effects can also be included on the output	The unintended results were identified (positively or negatively) and considered in the project concept and future planning.				good

	?	level						
and Fragility	To what extent was the project able to ensure that escalating factors/ dividers[3] have not been strengthened (indirectly) by the project[4]? Has the project unintentionally (indirectly) supported violent or 'dividing' actors?		The project avoided to strengthen escalating factors	The analysis follows the evaluation questions, no specific design was applied analysis of documents, interviews	Peace and Conflict Assessment (iPCA), annual progress reports to BMZ, Gender Analysis, assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	good data quality	good
Standard	What potential benefits/risks arise from the positive/negative unintended results? What assessment can be made of them?	• also check whether the risks were already mentioned and monitored in the design phase	Risks within the context of conflict and fragility have been monitored frequently and systematically	The analysis follows the evaluation questions, no specific design was applied analysis of documents, interviews	Peace and Conflict Assessment (iPCA), annual progress reports to BMZ, Gender Analysis, assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	good data quality	good
and Fragility	To what extent have risks and unintended-negative results in the context of conflict, fragility and violence[5] been		Risks and assumptions as well as unintended negative results at the output and outcome level were correctly assessed in the monitoring system.	The analysis follows the evaluation questions, no specific design was	Peace and Conflict Assessment (iPCA), annual progress	good data quality	good

		monitored (context/conflict-sensitive monitoring) in a systematic way?			applied analysis of documents, interviews	reports to		
	Standard	How has the intervention responded to the potential benefits/risks of the positive/negative unintended results?	• Check if positive results at the outcome level have been monitored and set in value	The measures taken by the project to counteract the risks were adequate. Positive results at the outcome level have been set in value	The analysis follows the evaluation questions, no specific design was applied analysis of documents, interviews	Peace and Conflict Assessment (iPCA), annual progress reports to	good data quality	good

(1) The first and second assessment dimensions are interrelated: If the project's contribution to achieving the objective is small (2nd assessment dimension), this must also be taken into account when evaluating the first assessment dimension.

(2) Deescalating factors/ connectors: e.g. peace-promoting actors and institutions, structural changes, peace-promoting norms and behavior. For more details on 'connectors' see: GIZ (2007): 'Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen', p. 55/135.

(3) Escalating factors/ dividers: e.g. destructive institutions, structures, norms and behavior. For more details on 'dividers' see: GIZ (2007): 'Peace and Conflict Assessment (PCA). Ein methodischer Rahmen zur konflikt- und friedensbezogenen Ausrichtung von EZ-Maßnahmen', p. 135.

(4) All projects in fragile contexts, projects with FS1 or FS2 markers and all transitional aid projects have to weaken escalating factors/dividers and have to mitigate risks in the context of conflict, fragility and violence. Projects with FS1 or FS2 markers should also consider how to strengthen deescalating factors/ connectors and how to address peace needs in its project objective/sub-objective?

(5) Risks in the context of conflict, fragility and violence: e.g. contextual (e.g. political instability, violence, economic crises, migration/refugee flows, drought, etc.), institutional (e.g. weak partner capacity, fiduciary risks, corruption, staff turnover, investment risks) and personnel (murder, robbery, kidnapping, medical care, etc.). For more details see: GIZ (2014): 'Context- and conflict-sensitive results-based monitoring system (RBM). Supplement to: The 'Guidelines on designing and using a results-based monitoring system (RBM) system.', p.27 and 28.

OECD-DAC Criterion Impact (higher-level development results) - What difference does the intervention make? (max. 100 points)
Based on recognisable higher-level development changes (at impact level), the criterion of "higher level development results (at impact level)" relates to the extent to which the intervention has already produced significant positive or negative, intended or unintended results at the overarching level (contributions to the observed changes), or is expected to do so in the future. This includes any differential results across different stakeholders and beneficiaries. This criterion refers to the results of the development intervention.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Higher-level (intended) development changes[1]	Standard	To what extent can the higher-level development changes (social, economic and environmental dimensions and the interactions between them) to which the intervention will/is designed to contribute be identified/foreseen)? (Specify time frame where possible.)	• Consider module proposal for suggested impact and program objective indicators (program proposal), if it is not an individual measure • Potential basis for assessment: program obejctive indicators, identifiers, connection to the national strategy for implementing 2030 Agenda , connection to SDGs	It is plausible that the project objective measured against the objective indicators contributes to higher-level development changes. These intended results at the level of results can be observed or are plausible to be achieved as described in the project proposal and project objective indicators. Additional basis for assessment are the identifiers, connection to the national strategy for implementing 2030 Agenda and SDGs	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good data quality	good

	IZR	To what extent have the IZR criteria contributed to strengthening overarching development results?	• Please use CPE factsheet on SV / GV / IZR					
	Standard	To what extent can the higher-level development changes (social, economic, environmental dimensions and the interactions between them) be identified/foreseen at the level of the intended beneficiaries? (Specify time frame where possible.)		It is plausible that the project objective measured against the objective indicators contributes to higher-level development changes at the level of the intended beneficiaries. These intended results at the level of results can be observed or are plausible to be achieved as described in the project proposal and project objective indicators. Additional basis for assessment are the identifiers, connection to the national strategy for implementing 2030 Agenda and SDGs	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good data quality	good
	Standard	To what extent can higher-level development changes to which the intervention will/is designed to contribute be identified/foreseen at the level of particularly disadvantaged/vulnerable groups of beneficiaries and stakeholders? (These may be broken down by age, income, gender, ethnicity, etc.) (Specify time frame where possible.)		It is plausible that the project objective measured against the objective indicators contributes to higher-level development changes at the level of particulary vulnerable groups (women, youth, IDPs). These intended results at the level of results can be observed or are plausible to be achieved as described in the ToC/ results hypotheses on impect level. Additional basis for assessment are the identifiers, connection to the national strategy for implementing 2030 Agenda and SDGs	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good data quality	good
Contribution to higher-level (intended) development changes	**Standard**	To what extent has the intervention actually contributed to the identified and/or foreseeable higher level development changes (social, economic, environmental dimensions and their interactions, taking into account political stability) that it was designed to bring about?	• Contribution analysis (evaluation design) as minimum standard and focus of this assessment dimension, further approaches are possible and welcome, see also annotated reports • Evaluation of the project's contribution to impacts based on an analysis of the results hypotheses from outcome to impact level	The project has contributed to the identified higher level development changes (The risk of infections caused by drinking water is reduced, The living conditions of urban poor and internally displaced people are improved, Equal access for all to resources and services strengthens the conflict-free coexistence of the various population groups, The involvement of women in water and hygiene issues strengthens their position in society and contributes to increased gender equity, SDGs 3, 5, 6) taking into account the fragile situation. The project's contribution to impacts are based on an analysis of the results hypotheses from outcome to impact level.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	To what extent has the intervention achieved its intended (original and, where applicable, revised) development objectives?	• This question can already be assessed in Dimension 1 Question 1, the contribution to impact is assessed in Dimension 2, Question 1	see above			good to moderate data quality	moderate

	Standard	To what extent has the intervention achieved its (original and, where applicable, revised) development objectives at the level of the intended beneficiaries?		The project has contributed to the identified higher level development changes (reduction of water-borne diseases, strengthened conflict-free co-existence of population groups, SDGs 5, 6, 16) on the level of teh intended beneficiaries. The project's contribution to impacts are based on an analysis of the results hypotheses from outcome to impact level.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	To what extent has the intervention contributed to higher-level development changes/changes in the lives of particularly disadvantaged or vulnerable groups of beneficiaries and stakeholders that it was designed to bring about? (These may be broken down by age, income, gender, ethnicity, etc.).		The project has contributed to the identified higher level development changes (The risk of infections caused by drinking water is reduced, The living conditions of urban poor and internally displaced people are improved, Equal access for all to resources and services strengthens the conflict-free coexistence of the various population groups, The involvement of women in water and hygiene issues strengthens their position in society and contributes to increased gender equity, SDGs 3, 5, 6) taking into account the fragile situation. in the lives of particularly vulnerable groups (women, youth, IDPs, poor households). The project's contribution to impacts are based on an analysis of the results hypotheses from outcome to impact level.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	Which internal factors (technical, organisational or financial) were decisive for achievement/non-achievement of the intervention's intended development objectives?	• Internal factors = within the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ and the official partner(s)	Internal factors which were decisive for achievement or non-achievement of the projects intended development objectives are identified.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	Which external factors were decisive for the achievement/non-achievement of the intervention's intended development objectives?	• External factors = outside the project's sphere of responsibility / system boundary. The project is implemented jointly by GIZ and the official partner(s). • Take into account the activities of other actors or other policies, framework conditions, other policy areas, strategies or interests (German ministries, bilateral and multilateral development partners)	External factors which were decisive for achievement or non-achievement of the projects intended development objectives are identified.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate

	Standard	To what extent has the intervention achieved structural or institutional changes (e.g. for organisations, systems and regulations)?		The project achieved institutional changes in the local water suppliers organisations.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	To what extent did the intervention serve as a model and/or achieve broad-based impact?	• Scaling-up is a consciously designed process to anchor changes in organisations and cooperation systems (e.g. concepts, approaches, methods) to generate broad impact • There is vertical scaling-up, horizontal scaling-up, functional scaling-up or a combination of these2 • also analyse possible potential and reasons for not exploiting it	The project served as a model for improving household water hygiene and sanitation facilities in schools.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	IZR	To what extent has the project made an innovative contribution (or a contribution to innovation)? Which innovations have been tested in different regional contexts? How are the innovations evaluated by which partners?	• Please use CPE factsheet on SV / GV / IZR	The project made an innovatibe contribution to implementing a new latrine concept for schools.	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	How would the situation have developed without the intervention?	• usually qualitative refelction, quantitative approaches welcome	Without the project changes in regard to improved water and sanitation hygiene would not have taken place. Qualitative reflection is used	Qualitative reflection, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
Contribution to higher-level (unintended) development changes	**Standard**	To what extent can higher-level, unintended development changes (social, economic and environmental dimensions and their interactions, taking into account political stability) be identified/foreseen? (Specify time frame where possible.)		Positive or negative unintended results at impact level were observed, documented and adequately responded to Appropriate measures to avoid and counteract the risks of negative results and trade-offs were applied by the project. The project responded appropriately to framework conditions which played a role with regard to negative results. Potential unintended positive results and potential synergies between the	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate

				ecological, economic and social dimensions were monitored and exploited by the project				
	and Fragility	To what extent did the project have (unintended) negative or escalating effects on the conflict or the context of fragility (e.g. conflict dynamics, violence, legitimacy of state and non-state actors/institutions)? To what extent did the project have positive or deescalating effects on the conflict or the context of fragility (e.g. conflict dynamics, violence, legitimacy of state and non-state actors/institutions)?		Negative unintended results at impact level were observed, documented and adequately responded to. Positive and de-escalating effects at impact level were observed, documented and included in lessons learnt for future measures	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	To what extent has the intervention brought about foreseeable/identifiable unintended (positive and/or negative) higher-level development results?	• Analyse whether the risks were already known in the design phase • Check how the assessment of risks in connection with (unintended) negative or (not formally agreed) positive results at the impact level in the monitoring system has been carried out (e.g. use of 'compass') • measures taken to avoid or counteract the risks/ negative effects/ trade-offs3 • Determine relevant framework conditions for negative results and the project's reaction to them • Examine to what extent potential (not formally agreed) positive results and synergies between the ecological, economic and social development dimensions have been monitored and exploited	Risks regarding unintended positive or negative results at the impact level were correctly assessed in the monitoring system	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate
	Standard	To what extent has the intervention contributed to foreseeable/identifiable unintended (positive and/or negative) higher-level development results at the level of particularly disadvantaged or vulnerable groups of beneficiaries and stakeholders? (These may be broken down by age, income, gender, ethnicity, etc.)		Positive and negative unintended results at he level of particularly disadvantaged and vulnerable groups (women, youth, IDPs, poor households) were observed, documented and adequately responded to. Positive and de-escalating effects at impact level were observed, documented and included in lessons learnt for future measures	Contribution analysis document analysis, interviews	Project proposal, modified versions of project proposal, annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners, Peace and Conflict Assessment (iPCA), Gender Analysis Interviews with GIZ, project, donor, implementing partners, direct and indirect beneficiaries	good to moderate data quality	moderate

(1) The first and second assessment dimensions are interrelated: If the project's contribution to achieving the objective is small (2nd assessment dimension), this must also be taken into account when evaluating the first assessment dimension.

(2) See GIZ 2016 'Guidelines on scaling-up for programme managers (AV) and planning officers'

(3) Risks, negative effects and trade-offs are separate aspects that should be discussed individually at this point.

OECD-DAC Criterion Efficiency - How well are resources being used? (max. 100 points)
This criterion describes the extent to which the intervention delivers results in an economic and timely way (relationship between input and output, outcome and impact level). The evaluation dimension "**production efficiency**" refers to the appropriateness of the relationship between inputs and outputs. The evaluation dimension "**allocation efficiency**" refers to the appropriateness of the relationship between the inputs and the results achieved (project/development objective; outcome/impact level) by the intervention. The "efficiency" criterion relates both to the intervention's design and implementation and to the results it achieves.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)
Production efficiency	Standard	*How are the intervention's inputs (financial, human and material resources) distributed (e.g. by instruments, sectors, sub-interventions, taking into account the cost contributions of partners/executing agencies/other beneficiaries and stakeholders etc.)?*	• Description of the data: Costs per output, type of costs, agreed and provided partner contributions • Description of the deviations between original planned costs and actual costs (with comprehensible justification, changes are certainly desirable for increased efficiency)	The distribution of the interventions inputs is clarified	Follow-the-Money Approach Use of the efficiency tool finance documents analysis, interviews	Kosten-Obligo-Bericht, Personalkosten, interview with commissioner responsible for the project	good data quality	good
	Standard	To what extent have the intervention's inputs (financial, human and material resources) been used economically in relation to the outputs delivered (products, investment goods and services)? If possible, refer to data from other evaluations in a region or sector, for instance.	• Use of 'Efficiency tool' including instructions and use of the follow-the-money approach as evaluation design (may be combined with other high-quality approaches) • Output level: Analysis of approaches and activities as well as TC instruments (personnel instruments, financing, materials and equipment)[1] compared to possible alternatives with a focus on the minimum principle (use of comparative data if available) • The project is oriented on internal or external benchmarks in order to achieve its effects economically • Regular reflection of the	The inputs have been used economically in relation to the 3 outputs delivered.	Follow-the-Money Approach Use of the efficiency tool finance documents analysis, interviews	Kosten-Obligo-Bericht, Personalkosten, interview with commissioner responsible for the project	good data quality	good

			resources used by the project with focus on economically use of ressources and cost risks • The overarching costs of the project are in an appropriate proportion to the costs of the outputs					
	Standard	To what extent could the intervention's outputs (products, investment goods and services) have been increased through the alternative use of inputs (financial, human and material resources)? If possible, refer to data from other evaluations of a region or sector, for instance. (If applicable, this question adds a complementary perspective*) * This case is always applicable in the technical cooperation (TC), please answer the question bindingly	• Use of 'Efficiency tool' including instructions and use of the follow-the-money approach as evaluation design (may be combined with other high-quality approaches) • Output level: Analysis of approaches and activities as well as TC instruments (personnel instruments, financing, materials and equipment)[1] compared to possible alternatives with focus on output maximization (use of comparative data if available) • Analysis of alternative options for allocating resources and shifts between outputs for output maximisation • saved resources can and should be used to maximise outputs • Reflection of the resources during the design phase and regularly during the implementation of the project with focus on output maximisation (with comprehensible justification, changes are certainly desirable for increased efficiency) • 'imaximising outputs' means with the same	The extent to which the intervention's outputs could have been increased through the alternative use of inputs is identified	Follow-the-Money Approach Use of the efficiency tool finance documents analysis, interviews	Kosten-Obligo-Bericht, Personalkosten, interview with commissioner responsible for the project	good data quality	good

			resources, under the same conditions and with the same or better quality					
	Standard	Were the outputs (products, investment goods and services) produced on time and within the planned time frame?		The projects 3 outputs were produced on time and within the planned time frame	Follow-the-Money Approach Use of the efficiency tool finance documents analysis, interviews	Kosten-Obligo-Bericht, Personalkosten, interview with commissioner responsible for the project	good data quality	
Allocation efficiency	Standard	*By what other means and at what cost could the results achieved (higher-level project objective) have been attained?*		Alternatives of achieving the results are identified	Follow-the-Money Approach finance documents analysis, interviews	Project proposal, modified versions of project proposal, interviews with GIZ, project, implementing partners	good data quality	good
	Standard	To what extent – compared with alternative designs for the intervention – could the results have been attained more cost-effectively?	• Outcome level: Analysis of approaches and activities as well as TC-instruments in comparison to possible alternatives with focus on minimum principle (use of comparative data if available) • Regular reflection in the project of the input-outcome relation and alternatives as well as cost risks • The partner contributions are proportionate to the costs for the outcome of the project	More cost-effective alternative designs are assessed	Follow-the-Money Approach finance documents analysis, interviews	Project proposal, modified versions of project proposal, interviews with GIZ, project, implementing partners	good data quality	good

	Standard	To what extent – compared with alternative designs for the intervention – could the positive results have been increased using the existing resources? (If applicable, this question adds a complementary perspective*) * This case is always applicable in the technical cooperation (TC), please answer the question bindingly	• Outcome level: Analysis of applied approaches and activities as well as TC-instruments compared to possible alternatives with focus on maximizing the outcome (real comparison if available) • The project manages its resources between the outputs in such a way that the maximum effects in terms of the module objective are achieved • Regular reflection in the project of the input-outcome relation and alternatives • Reflection and realization of possibilities for scaling-up • If additional funds (e.g. co-financing) have been raised: Effects on input-outcome ratio (e.g. via economies of scale) and the ratio of administrative costs to total costs • Losses in efficiency due to insufficient coordination and complementarity within German DC are sufficiently avoided	The extent of increasing positive results using the existing resources has been assessed	Follow-the-Money Approach finance documents analysis, interviews	Project proposal, modified versions of project proposal, interviews with GIZ, project, implementing partners	good data quality	good

(1) see GIZ 2015: 'Integration of TC Instruments – Key Elements', based on BMZ 2014: Handbuch der bilateralen TZ Verfahrensinformation Nr. VI0362014 'Eckpunkte zur Instrumentenintegration'

OECD-DAC Criterion Sustainability - Will the benefits last? (max. 100 points)
The 'sustainability' criterion relates to continued long-term benefits (at the outcome and impact level) or the probability of continued long-term benefits – taking into account observed or foreseeable risks – over time, particularly after assistance has ended.

Assessment dimensions	**Filter - Project Type**	**Evaluation questions**	**Clarifications**	**Basis for Assessment / Evaluation indicators** *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	**Evaluation Design and empirical methods** (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	**Data sources** (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	**Data Quality and limitations** (Description of limitations, assessment of data quality: poor, moderate, good, strong)	**Data Quality Assessment** (weak, moderate, good, strong)

	Capacities of the beneficiaries and stakeholders	Standard	To what extent do the beneficiaries and stakeholders (individuals, groups and organisations, partners and executing agencies) have the institutional, human and financial resources as well as the willingness (ownership) required to sustain the positive results of the intervention over time (once assistance has drawn to a close)?	• Transitional Development Assistance (TDA) projects primarily address final beneficiaries, whose resilience to crises and recurring shocks is to be strengthened. The focus for TDA projects is thus often on the resilience of final beneficiaries and/or at least the continuity of the measure (see explanation in dimension 3) (clarification in the inception phase of the evaluation).	The project took appropriate measures to ensure that the results can be sustained in the medium to long term by the beneficiaries themselves with special consideration of a vague formal partner structure and the current fragile and volatile situation	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	good data quality	good
		Standard	To what extent do the beneficiaries and stakeholders (individuals, groups and organisations, partners and executing agencies) have the resilience to overcome future risks that could jeopardise the intervention's results?		Resilience of beneficiaries and stakeholders is strengthend by the intervention to overcome future risks to sustainability	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	good data quality	**good**
	Contribution to supporting sustainable capacities	Standard	To what extent has the intervention contributed to the beneficiaries and stakeholders (individuals, groups and organisations, partners and executing agencies) having the institutional, human and financial resources as well as the willingness (ownership) required to sustain the intervention's positive results over time and to limit the impact of any negative results?	• Analysis of the preparation and documentation of learning experiences • Description of the anchoring of contents, approaches, methods and concepts in the partner system • Reference to exit strategy of the project • If there is a follow-on project, check to what extent the results of the evaluated project are taken up; the anchoring of the effects in the partner's organisation should be pursued independently of a follow-on project, since sustainability should be achieved even without donor funds • Transitional Development Assistance (TDA) projects	The advisory contents, approaches, methods and concepts of the project are to a certain degree anchored in the partner and civil society structures with special consideration of a vague formal partner structure and the current fragile and volatile situation	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	good data quality	good

			primarily address final beneficiaries, whose resilience to crises and recurring shocks is to be strengthened. The focus for TDA projects is thus often on the resilience of final beneficiaries and/or at least the continuity of the measure (see explanation in dimension 3) (clarification in the inception phase of the evaluation).					
	Standard	To what extent has the intervention contributed to strengthening the resilience of the beneficiaries and stakeholders (individuals, groups and organisations, partners and executing agencies)?		The procect contributed to strengthening the resilience of the beneficiaries	Contribution analysis	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	moderate data quality	moderate
	Standard	To what extent has the intervention contributed to strengthening the resilience of particularly disadvantaged groups? (These may be broken down by age, income, gender, ethnicity, etc.)		The procect contributed to strengthening the resilience of vulnerable groups (women, youth, refugees, IDPs)	Contribution analysis	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	moderate data quality	moderate
Durability of results over time	Standard	*How stable is the context in which the intervention operates?*		The current fragile and volatile situation in South Sudan has been taken into account in the context of sustainability of the measures	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results	good data quality	good

						matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries		
	Standard	*To what extent is the durability of the intervention's positive results influenced by the context?*	• Consideration of risks and potentials for the long-term stability of the results and description of the reaction of the project to these	The current fragile and volatile situationand risks have been taken into account in the context of sustainability of the measures	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	good data quality	good
	Standard	To what extent can the positive (and any negative) results of the intervention be deemed durable?	• Consideration of the extent to which continued use of the results by partners and beneficiaries can be foreseen • Reference to conditions and their influence on the durability, longevity and resilience of the effects (outcome and impact) • In the case of projects in the field of Transitional Development Assistance (TDA), at least the continuity of the measure must be examined: To what extent will services or results be continued in future projects (of GIZ or other donors/organizations) or their sustainability ensured? (Clarification in the inception phase)	Partners will continue to use the results of the project. A follow-on measure ensures continuation. Risks and potentials with regard to sustainability are identiifed, analysed and documented and the project took adequate mitigation measures to reduce risks as far as possible under these special circumstances	The analysis follows the evaluation questions, no specific design was applied document analysis, interviews	Project proposal, modified versions of project proposal, project proposal REBASE (follow-up measure), annual progress reports to BMZ, Results matrix, Results model, Results-based monitoring system (WoM), Assessments and evaluation reports by implementing partners Interviews with GIZ, project, implementing partners, direct and indirect beneficiaries	good data quality	good

Predecessor project, follow-on project and further evalutation questions

Assessment dimensions	Evaluation questions	Basis for Assessment / Evaluation indicators *(e.g. module objective/programme indicators, selected hypotheses, or more generally a definition of the aspects to be used for evaluation)*	Evaluation Design and empirical methods (Design: e.g. Contribution analysis, Follow-the-Money Approach) (Methods: e.g. interviews, focus group discussions, document analysis, project/partner monitoring system, workshop, online survey, etc.)	Data sources (e.g. list of relevant documents, interviews with stakeholder category XY, specific data, specific monitoring data, specific workshop(s), etc.)	Data Quality and limitations (Description of limitations, assessment of data quality: poor, moderate, good, strong)	Data Quality Assessment (weak, moderate, good, strong)
Impact of the predecessor project (if predeseccor project exists)	*Which results were envisaged at the impact level of the predecessor project and which were achieved?*	*The intended impact of the predecessor project is still visible*	The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm "Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan" (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	Which results of the predecessor are still visible today at impact level?	Results of the predecessor project are stable and resilient under the given conditions and the fragile and volatile context	The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm "Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan" (2014 and 2018 Interviews with GIZ project	moderate data quality	moderate
	Which results of the predecessor are only visible today at impact level?		The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm "Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan" (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	How were changes in the framework conditions handled over time (including transition between different projects)? Which decisions in previous projects influence the impact of the predecessor as well as the current project until today? How?		The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm "Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan" (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	What were factors for success / failure for the impact of the predecessor?		The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm "Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan" (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	…					
Sustainability of the predecessor project (if predeseccor project exists)	*Which results were envisaged at the outcome level of the predecessor project and which were achieved?*	*Improved access to water and sanitation facilities was envisaged and achieved to a certain degree.*	The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm "Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan" (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	Which results at outcome level (and important outputs) are still present or have been further developed by the partners? (without external funding vs. with external funding)	Achieved results on output and outcome level can be observed	The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm "Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan" (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate

	How were the results of the predecessor anchored in the partner structure?	Results could be anchored in a partner system	The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm “Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan” (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	How were changes in the framework conditions handled over time (including transition between different projects)? Which decisions in previous projects influence the sustainability of the predecessor and the current project until today? How?	The current project builds on the predecessor and interegrates results in the current project	The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm “Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan” (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	What were factors for success / failure for the sustainability of the predecessor?	The predecessor responded appropriately to changes and adjusted strategic decisions accordingly.	The analysis follows the evaluation questions, no specific design was applied documentation analysis, interviews	GIZ/KfW Berichterstattung zum EZ- und TZ-Programm “Entwicklung des städtischen Wasser- und Sanitärsektors im Südsudan” (2014 and 2018) Interviews with GIZ project	moderate data quality	moderate
	…					
Follow-on project: Analysis of the design and recommendations for implementation (if a follow-on project exists)	Evaluability and design of the successor: Are the results model for the follow-on project including the results hypotheses, the results-oriented monitoring system (WoM) and the project objective indicators plausible (and in line with current standards)? Are there - also based on the evaluation of the current project - recommendations for improvements in the further course of the follow-on project?	The results model including results hypotheses, the results-oriented monitoring system (WoM), and project indicators of the follow-on project are plausible and in line with current standards				
	Based on the results of the evaluation of the current project: Which recommendations can be derived for the implementation of the follow-on project?					
	…					
Please add further knowledge interests /evaluation questions that cannot be assigned to any other assessment dimensions...						

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Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn

Friedrich-Ebert-Allee 32 + 36
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 6196 79-0
F: +49 6196 79-11 15

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