KfW Development Bank

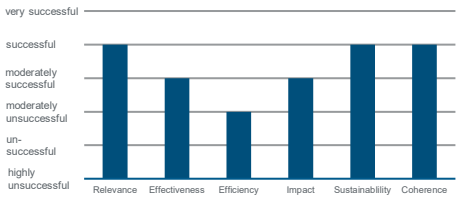
Ex post evaluation
Water supply/sanitation III, Philippines

Title	Provincial Towns Water Supply and Sanitation III		
Sector and CRS code	14030 Drinking water, sanitation, wastewater and basic supply		
Project number	BMZ-Nr. 2006 65 240		
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)		
Recipient/Project-executing agency	Local Water Utilities Administration (LWUA), Philippines		
Project volume/ Financing instrument	*EUR 3.9 million, loan under Financial Cooperation*		
Project duration	*June 2009 – October 2019*		
Year of report	2022	**Year of random sample**	2022

Objectives and project outline

At outcome level, the objective was to "sustainably expand the water supply for the population living in densely populated urban areas and the more rural extension areas in up to seven provincial towns". At impact level, the objective was to contribute to reducing the health risks that unsafe drinking water poses to the population in the programme area. In addition to expansion investments, rehabilitation measures were also carried out in the supply systems.

Overall rating:
moderately successful



Key findings

By expanding and rehabilitating water supply systems in eight water districts, the project had a developmental impact with effectiveness and sustainability deemed as good but poor efficiency during project implementation. The project is rated as moderately successful.

- With the project approach of expanding the water infrastructure, the core problem was correctly identified and addressed with suitable measures, even though wastewater disposal was not taken into account.
- The programme was designed to ensure internal coherence between the project and other measures financed by the BMZ.
- Owing to the partial fulfilment of the three target indicators of connection rates, unaccounted for water and cost coverage, effectiveness is considered to be moderately successful.
- In terms of efficiency, considerable deductions have had to be made as project implementation was delayed by around a decade. These delays were largely institution-related but were also caused by competing funding approaches.
- The project has had positive impacts on citizens' general living conditions, albeit not specifically on their health situation as originally intended in terms of the overall objective.
- The financed infrastructure is operated and maintained with a high degree of ownership and commitment and is in an impressive condition.

Conclusions

- The low demand for the loan under Financial Cooperation was due to unforeseen competition from another government loan offer.
- Since the aim was to improve the health situation, it would have been sensible to collect baseline data at the start of the project, partly in order to focus the measures accordingly.
- The combination of a national executing agency and the implementing local districts achieved complementarity but also led to efficiency losses.
- The choice of location should take place as close to the time of implementation as possible (potential change in requirements, alternative financing options)

Ex post evaluation – rating according to OECD DAC criteria

General conditions and classification of the project

At the time of project appraisal, the Philippines already had a population of around 80 million (2005), with an annual growth rate of around 2.4% and a share of the urban population amounting to around 60%[1]. Ensuring a reliable water supply was and continues to be part of the Philippines' development priorities. The intention here is to improve the standard of living for the majority of the population, especially the vulnerable groups of the population.

The Philippines is one of the few countries in Asia to have sufficient freshwater reserves. However, water availability varies greatly among the Philippine islands due to varying patterns in rainfall and differences in the quality of water storage. The population's water supply is characterised by inequality and there is a marked difference between the urban zones and the rural areas of the country, which are generally poorly supplied. It is supplied through household connections or even by means of public standpipes. Parts of the population continue to rely on water of dubious quality. Since the project appraisal, the water supply in the Philippines has been considerably expanded and improved in terms of quality. This programme has also made a contribution to this – at least in the eight participating water districts.

Brief description of the project

The Provincial Towns Water Supply and Sanitation Programme III to be evaluated continued the completed Water Supply in Provincial Towns I & II project (Federal Ministry for Economic Cooperation and Development (BMZ) no. 1994 66 525). The module objective was to sustainably expand the water supply for the citizens living in densely populated urban areas and the extended, more rural areas of smaller provincial towns.

The target group for the improved water supply comprised all the consumer groups in the supply area of the programme locations; poor members of the population were to be given particular attention.

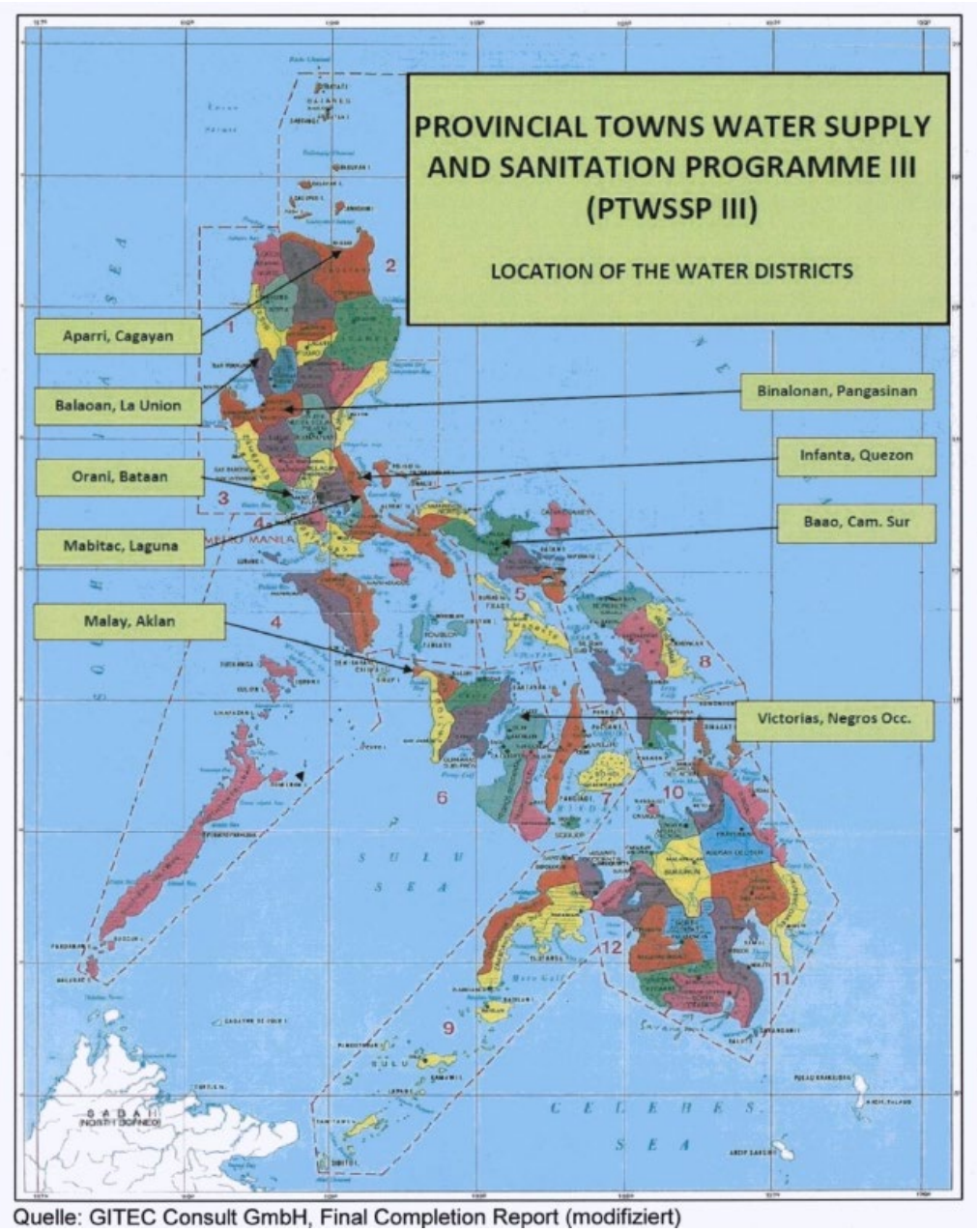
Existing water supply systems have been rehabilitated, expanded and optimised in a total of eight provincial towns and water districts (WD). Drinking water reservoirs, deep wells, pumping stations, water distribution pipelines and house connections were financed in particular.

The Local Water Utilities Administration (LWUA) based in Manila was the executing agency. It transferred the Financial Cooperation (FC) loan funds to the water districts as a loan with a markup. The measures were jointly planned and implemented by LWUA and the water districts.

Map/satellite image of the project country including project areas/locations

The following map identifies the locations of the nine water districts that received a loan commitment from the project-executing agency. The loan in Malay fell through because of project delays caused by the institutions.

[1] Source: Project proposal (2006)



Quelle: GITEC Consult GmbH, Final Completion Report (modifiziert)

Breakdown of total costs

The total costs of the measures implemented under the programme amounted to EUR 4.81 million. This corresponds to only 35.3% of the originally anticipated total costs of EUR 13.6 million due to lack of demand from the water districts. The costs were partly covered by LWUA's and the water districts' own contributions totalling EUR 0.9 million and partly through debt financing of EUR 3.9 million. The latter consists of EUR 3,794,765 from the loan under Financial Cooperation and EUR 86,572 in residual FC funds from the preliminary phase (BMZ No. 1994 66 525).

		Inv. (planned)	Inv. (actual)
Investment costs (total)	**EUR million**	**13.6**	**4.8**
Counterpart contribution	EUR million	3.4	0.9
Debt financing	EUR million	10.2	3.9
of which BMZ funds	*EUR million*	*10.2*	*3.9*

Rating according to OECD DAC criteria

Relevance

Policy and priority focus

The Philippine government attached immense importance to urban water supply at the time of the project appraisal. The issue has been and is being prioritised in the national development plan as part of the provision of infrastructure and is regulated centrally in the national master plan, the Water Supply Road Map. The BMZ's water strategy treats access to the water supply as the first objective, with a focus on poor and marginalised groups.

Institutional responsibility for the water sector in the Philippines is highly fragmented (30 different institutions). To achieve its objectives, the project rightly relied on the national authority, LWUA, and the local water districts that appear most suitable in terms of applying for and implementing loan projects.

Focus on needs and capacities of participants and stakeholders

The core problems of the Philippine water sector are the inadequate water supply for the population, limited investment funds and the high degree of institutional fragmentation. The supply bottlenecks and operating deficits indicated during the appraisal were identified correctly.

For programme executing agency LWUA, the programme was of the utmost relevance, as it enabled the financing of infrastructure in additional water districts where there had been a lack of sufficient funds available at the time of implementation. The project was most relevant for the participating water districts, as it allowed them to set up a centralised water system for the first time or to further expand their existing system and therefore improve the quantity and quality of the water supply.

The project was geared towards the needs of the target group: the inadequate water supply in terms of quality and quantity has had and still has a serious impact on the quality of life of the Philippine population, especially outside large cities such as Manila. Consequently, the core problem was correctly identified.

Above all, particularly disadvantaged or vulnerable people should benefit from the improvement to the water supply. These people usually live in poorer urban peripheral areas and shanty towns located far from the city centre, where they have hardly any access to the central water supply. In essence, the intended water supply and beneficial health effects should benefit both women and men equally.

Nevertheless, added value was particularly expected for women, who in the Philippines are still traditionally tasked with domestic duties, including obtaining drinking water,.

Given the active and intensive role of women in agriculture, the project could have been supplemented with measures to improve the irrigation infrastructure. A complementary measure to strengthen institutional capacities – particularly in the water districts where there should be a specific focus on financial monitoring – would have completed the project.

Appropriateness of design

At outcome level, the programme objective was to sustainably expand the water supply for the population living in densely populated urban areas and extended, more rural areas in up to seven provincial towns. It was precise regarding geographical limitations and the number of potential partner districts. At impact level, the overarching development objective of the project was to contribute to reducing the health risks that unsafe drinking water poses to the population in the programme area. However, the waterborne diseases against which this should be measured were not specified in detail. Moreover, there had been no collection of baseline data for either the originally planned or the actually supported water districts that, from today's perspective, would enable conclusions to be drawn about the health situation prior to the project.

All the consumer groups (private households, particularly the poorer sections of the population, trade and industry, public administration) in the supply area of the programme locations were defined as the target group. The number of households to be reached was estimated at around 2,000 households per water district, making a total of around 190,000 households.

In terms of the measures, the project included improving and expanding or building new water supply facilities in up to seven provincial towns. The planned measures of projects included the construction of deep wells, pumping stations with chlorine dosing systems, water reservoirs, feeder and distribution pipelines and house connections. The respective water districts were involved in developing the measures, which entailed the use of satellite images and Geographic Information Systems. The programme design and the measures were adapted to the circumstances of the towns involved in the programme as well as the interests and operational requirements of the water districts. The design generally appears to be appropriate.

The project approach of expanding the water supply (overarching development objective) to help reduce the health risks that unsafe drinking water posed to the population seems logical. The expansion of the water infrastructure improves the quantity and quality of the water supply for households. By installing house connections, residents no longer have to use potentially unclean rainwater, surface water or water from shallow wells, which also saves considerable time in some cases. According to the water districts, the common, decentralised standpipes also pose health risks. This contrasts with the fact that the number of cases of water-related illnesses was very low before the project. Although no concrete baseline was defined, the project appraisal report states in relation to urban areas: "The incidence of diarrhoeal diseases is very low". During the evaluation, this view was confirmed across all water districts, which, prior to the project, had considered the health hazard posed by contaminated drinking water to be irrelevant. Ultimately, the project had greater potential to improve the general living conditions of the population – and less to improve their health situation.

The project's focus on urban water supply was appropriate in view of the Philippines' high degree of urbanisation, the high rates of poverty in urban areas and the great need for investment in urban infrastructure. However, the measures to improve the water supply within the scope of the project were not accompanied by improvements in waste water disposal. The poor quality of the freshwater resources, especially in the urban zones, is mainly due to a lack of sewage treatment and solid waste disposal. At the time of the appraisal, only 3% of the sewage generated[2] was collected and treated. According to the project appraisal report, the limited available funds and financial resources of the local government units (LGUs) meant that it was not possible to implement meaningful investment measures for waste water disposal. According to LWUA, the water districts prioritised the financing of

[2] Source: Project proposal (2006)

water supply systems. The protection of drinking water against harmful substances was secondary and has only gained importance in recent years with the progress in the drinking water infrastructure. From today's perspective, however, relevant questions concerning waste water disposal should also be taken into account in the programme appraisal.

At the time the FC loan was provided, alternative sources of funds were made available to the interested water districts under terms that were misrepresented. This reduced their interest in the German loan and made it necessary to change water districts. This had significant consequences for the original time schedule. From today's perspective, it is no longer possible to ascertain how much was already known about the Philippine government's plans to provide the water districts with loan funds with particularly attractive terms at the time the project was designed.

Response to changes/adaptability

By selecting LWUA as the executing agency, the project's design proved to be adaptable to the changing framework conditions. Due to significant delays in the project, six of the seven water districts originally planned had found other financing or had withdrawn from the programme for other reasons by the start of the implementation. In the end, eight water districts, six of which were located on Luzon, the largest and most populous island in the Philippines, plus two water districts on neighbouring islands participated in the programme. Of the latter, one water district dropped out for political reasons. Ultimately, eight water districts were taken into account. LWUA's close ties with the water districts and its long-standing knowledge of the challenges of financing water infrastructure at local level enabled rapid adjustment to the changing framework conditions in the project, even though LWUA itself contributed to the delays through cumbersome processes.

Summary of the rating:

The project was highly relevant. Firstly, it was based on the development policies and sector priorities of the Philippines and the German development cooperation (DC) and secondly, the needs of the population – including vulnerable households– as well as the needs of LWUA and the water districts were adequately taken into account. In addition, the design proved to be sufficiently adaptable to changing framework conditions.

Relevance: successful

Coherence

Internal coherence

The project was implemented as a bilateral project and a continuation of the Water Supply in Provincial Towns I & II programme (BMZ no. 1994 66 525). At the end of this third phase, the German-Philippine focus area on water came to an end, as the Philippines are no longer a partner country of the German DC. The last Technical Cooperation (TC) project for the focus area had already been completed in 2010.

The TC measures focused on water management, improving the institutional framework conditions and developing suitable technical and institutional solutions, while the FC measures aimed to build and expand water infrastructure. As a result, both instruments worked together in a meaningful way in terms of concept, but there was actually no overlap at the project locations.

The project is in line with the international Sustainable Development Goals (SDGs), which provide the framework for Germany's DC activities. In this way, the project contributes directly to achieving the sustainability goals of "clean water and sanitation" (SDG 6) and in the Philippines, it also contributes to "good health and well-being" (SDG 3).

External coherence

LWUA, the executing agency, is a solidly functioning institution in the Philippine water sector. It does not carry out any measures itself but supports projects by providing engineering expertise during their implementation and completion. This role was supported and used in the evaluated project. The water districts are financially and administratively independent public enterprises operating according to commercial and full cost-covering principles. They own their localities, infrastructure and land, the latter forming part of their own respective contributions to the project.

Various multilateral donors and a range of funds were and still are active in the water sector in the Philippines; these especially include the Asian Development Bank (ADB) and the World Bank. At the time of project preparation, Germany, the USA and Japan were the largest bilateral donors. France and Denmark have also already worked with LWUA. There was a donor coordination phase during which KfW participated on behalf of Germany. However, this was mainly used for the exchange of information and joint programmes have remained a rarity.

LWUA passed the loan on to local water districts, which then pay for the organisation of the water supply and the operation of the financed infrastructure. The individually financed water networks are independent units and are operated independently by the respective water districts. Nevertheless, there is an intensive exchange of information among all the water districts by means of the association of local water districts.

The parallel or competing offer of government loans for similar purposes had a negative effect. This reduced demand for FC financing funds.

Summary of the rating:

Internal coherence between the project and the other BMZ-financed measures was ensured by the design of the programme; however, synergies with other donors could have been better used for external coherence.

Coherence: successful

Effectiveness

Achieving (intended) targets and contribution to achieving targets

At outcome level, the programme objective was to sustainably expand the water supply for the population living in densely populated urban areas and extended, more rural areas. The achievement of this objective at outcome level and according to the defined indicators can be summarised as follows:

Indicator	Status during PA	Target value acc. to PA/EPE	Actual value at EPE
The connection rate, including for poor households[3], has gradually increased in accordance with the programme of work	13–58% (see below)	Gradual increase	17–90% (see below), achieved
Unaccounted for water, especially in systems with values above 30%, has been reduced by at least 10% two years after completion of the work	n/a	10% reduction	Partially achieved
The revenues of the water districts cover the expenditure for the operation, maintenance and debt service	n/a	100% covering of the costs	Partially achieved

The figures specified in the tables in this chapter and relating to the water supply situation at the time of the evaluation refer to different years, depending on the data availability in the districts. Nevertheless, they all reflect the situation after the project was completed. The water districts submitted their latest available figures for the evaluation, but in some cases no data were available (marked as not available/n.a. in the tables). The lack of data was particularly evident in the key financial data. Although all districts collect technical and financial figures on a monthly basis and send them electronically to LWUA, it was difficult for them to prepare the data for the evaluation and provide the requested key data. The validation of the data received, for example by comparing the figures with one another (e.g. degree of connected population vs. degree of connected households) or by comparison with the information from the final inspection, sometimes revealed contradictions. A solid, logical correlation cannot always be identified, to say the least. The figures were also validated verbally during the discussions with the water districts. The representatives of LWUA engaged by offering their technical and financial expert opinion. The different institutional capacities and the role of LWUA as a consultant to the water districts became clear here.

Connection rate:

As a result of the project, around 15,200 households or 45,000 people have additionally been supplied with water. This has led to an increase in connection rates (proportion of the population) in all districts. In some cases, the connection rate has doubled or tripled (Binalonan, Mabitac) (see the following table). This means that the indicator has been achieved overall. In the case of the Aparri district, the connection rate (measured by the connected houses) decreased. Due to the increasing amount of unaccounted for water (see paragraph below), the pipeline pressure had no longer reached the level required to supply households located further away so a number of these households terminated their water connections.

	Orani	Mabitac	Infanta	Binalonan	Balaoan	Aparri	Victorias
Proportion of population connected – prior to project[4]	58%	13%	35%	32%	16%	56%	32%

[3] There was no separate record of the poor households that had been taken into account, but these were connected in a non-discriminatory manner.

Proportion of population connected – at evaluation	90%	46%	50%	65%	27%	66%	44%
Change	55%	250%	42%	100%	69%	18%	38%
House connection rate prior to project	42%	17%	n/a	n/a	n/a	10%	n/a
House connection rate at evaluation	65%	47%	59%	n/a	n/a	8%	n/a
Change	55%	176%	-	n/a	n/a	-20%	-

Source: key data submitted by the water districts at the time of the FC evaluation

Unaccounted for water:

According to the indicator, unaccounted for water (non-revenue water) was supposed to decrease by at least 10%, especially in water districts with more than 30% total losses. This was only the case in three out of eight districts. As a result, the indicator was only partially achieved. However, these three are the districts for which the indicator was particularly important. In addition, the target was not only achieved there but was significantly exceeded. The remaining four districts indicated the opposite trend. Unaccounted for water rose considerably in Binalonan and Aparri. The main reason for this was cracks in the water pipes, some of which were still outdated. They had not been able to withstand the increased pressure in the extended water network. The districts, LWUA and KfW were aware of this high risk before the loan and project were implemented. However, since large sections of the population had not yet been connected, the priority was to lay more pipelines rather than renew existing ones. The water districts had promised LWUA/KfW they would renew the old lines at a later date using funds to be subsequently acquired. Indeed, in the years following the project's completion, they did seek additional grants or loan funds. However, only Aparri achieved this recently with the help of LWUA. Both the water district administration and LWUA anticipate a reduction in unaccounted for water to almost zero following this new investment.

In Binalonan, there have been reports of political pressure to tolerate unlawful connections despite persistently high levels of unaccounted for water. In the Balaoan water district, the losses can be partly attributed to accidental damage during routine road works. In Victorias, a water loss reduction programme is being implemented, despite or precisely because of the lack of cost recovery (see paragraph below).

	Target achieved			Target not achieved			
	Mabitac	Orani	Infanta	Binalonan	Balaoan	Aparri	Victorias
Unaccounted for water prior to project	20%	46%	34%	24%	17%	19%	20%
Unaccounted for water during evaluation	11%	25%	22%	47%	22%	40%	27%
Change	-45%	-45%	-35%	+96%	+29%	+110%	+35%

Unaccounted for water in the water districts before and after the project (source: water districts)

Covering of the costs:

At the time of the final inspection, the districts involved achieved full cost coverage. The adherence of LWUA and the water districts to this principle was assessed as a positive feature in a sectoral and regional context in the final report. The situation now appears to be more complex. In Balaoan, the COVID-19 pandemic had an impact on household solvency, collection rate and cost coverage. In Aparri, income fell as a result of the drastic levels of unaccounted for water (see above). In Mabitac, long-awaited salary increases for administrative staff had a negative impact on the cost coverage.

	Target achieved				Target not achieved		
	Orani	Infanta	Binalonan	Victorias	Mabitac	Balaoan	Aparri
Covering of the costs prior to project	100%	n/a	n/a	121%	n/a	n/a	n/a
Covering of the costs after project	100%	119%	114%	123%	39%	94%	68%
Change	0%	-	+1.6%	-	-	-	-

Unaccounted for water in the water districts before and after the project

The target group for the improved water supply comprised all consumer groups (private households particularly the poorer sections of the population, trade and industry, public administration) in the supply area of the programme locations. In the past, the pressure in the pipelines had usually only reached as far as the central districts of the towns. Peripheral neighbourhoods only received enough water at night when demand fell in the centre. Thanks to the expansion of the networks, the situation has improved considerably for the affected households.

The originally planned outputs had to be adapted to the needs of the new participating districts after the envisaged water districts withdrew, although the needs continued to involve the same sectors to a large extent: the building of deep wells, pumping stations, water reservoirs, laying feeder and distribution pipelines and house connections. Households, businesses, administration, etc. benefit accordingly from the improved water supply.

The outputs provided and the capacities created are being used, as the site visits during the evaluation showed, and all the water districts surveyed and visited were very grateful. The infrastructure created is operated by the water districts or the companies commissioned by them. The water is provided to the residents by the public system. For technical reasons, the water pressure and consequently the quality of supply can vary depending on the district, decreasing as the distance from the water reservoirs/pumping stations becomes greater. However, vulnerable settlements can also be located at a short distance from the central infrastructure, as asserted by the water districts and confirmed during the site visits. Even though it could not be confirmed during the evaluation that when the project was designed, it focused on the particularly vulnerable sections of the population, it was clear that they had benefited from the improved supply. This was confirmed by all the water districts and was assessed using spot checks during the evaluation mission.

Quality of implementation

The interaction between the project-executing agency LWUA, participating water districts, the international implementation consultant and local construction companies formed a coherent strategy that led to the overwhelming achievement of the project objectives, albeit with severe delays. The alternative sources of funds mentioned in the section on “Relevance” and offered by the Philippine government concurrently with the FC loan and billed as being particularly attractive had significant consequences for the original time schedule, as many water districts migrated and had to be replaced.

LWUA competently and reliably supported the water districts in the preparation of design and tendering services, the invitation to tender for services as well as during the supervision of works and acceptance of the infrastructure. As far as possible, it has supported the water districts in their tasks as operators and in the acquisition of additional funds. The support is tailored to the needs of the water districts and is particularly intensive in the smaller water districts, some of which do not have their own engineering capacities. The involvement of LWUA therefore ensured the quality of the implementation to a considerable extent, even if its lengthy procedures led to severe delays in some cases.

Unintended consequences (positive or negative)

After the project was completed, the Orani water district decided to enter into a Public Private Partnership (PPP) with a private water operator on the basis of the expanded network. At the time of the evaluation, the water district and LWUA gave a positive assessment. The key advantages for the water district administration were the fixed price to be paid for drinking water, the private operator’s management capacities and the outsourcing of customer service. However, this model also entailed disadvantages for the district administration. Superfluous staff were dismissed and the administration lost some of its autonomy. Due to a lack of transparency on the part of the operator, the water district administration was unable to provide up-to-date information on the covering of the costs for the evaluation. ***Summary of the rating:***

Realisation of the objective at outcome level, i.e. the sustained expansion of the water supply, was achieved. This has also been demonstrated by the complete or partial achievement of the three target indicators. In particular, the most important indicator for target achievement (connection rate for the population) was clearly achieved. The connection rates in the water districts have generally risen continuously, and unaccounted for water in the public networks is steadily being reduced. Apart from some temporary exceptions, the costs are fully covered by tariff income.

Effectiveness: moderately successful

Efficiency

Production efficiency

The total costs of the implemented measures accounted for 35% of the initially anticipated total costs. The construction of the infrastructure accounted for 78% of the costs (1/3 of which went to the Orani water district), while the implementation consultant accounted for 22%.

The per capita costs of the project were relatively high owing to the fact that several water districts were involved and as a result of the small-scale measures. This fragmentation can be attributed to LWUA’s desire to also include small water districts with low financial support requirements and is therefore understandable.

The entire implementation phase was marked by significant delays. According to the programme appraisal report, the project was scheduled to run for three years from mid-2007 to mid-2010. In fact, the loan agreement was not signed until June 2009 and the implementation consultant was not commissioned until 2011. The project ended in 2019, i.e. after a term of ten rather than three years.

Lengthy bureaucratic approval processes, state-subsidised loans that seemed more attractive to the water districts and the water districts' dwindling interest in the delayed financing by LWUA partly led to the stagnation of the project. Demand from the water districts for the loan under Financial Cooperation was unexpectedly sluggish. The main reason given by LWUA and the water districts visited during the evaluation was a local loan offered concurrently. The terms of this loan appeared to be more attractive to the water districts than those of the FC loan – even if this impression later proved to be untenable. Further delays arose due to (a) selecting new water districts and new projects to replace the water districts that had dropped out in the meantime, (b) the need to revise some feasibility studies, (c) the longer time for detailed engineering and (d) the fact that many of the invitations to tender for supply and service contracts had to be repeated. Various contracts could only be awarded after the third invitation to tender. In 2015, at the request of KfW, the project was restricted to the remaining water districts that had already been selected by that time in order to avoid further delays even though not all loan funds had been exhausted.

The management costs of the implementation consultant were within the usual range. However, in this special case, the additional costs of the project-executing agency LWUA must be taken into account.

Allocation efficiency

Unlike in the previous phase, the project was not supplemented by a complementary measure, which, however, could have further improved the results. Training courses, particularly in accounting and controlling, would have offered a good and much-needed supplement to the financed infrastructure. Two LWUA engineers reported on instructive training on the water sector that they had completed years ago as part of an exchange programme in Germany.With regard to the protracted approval procedures involving LWUA and the water districts, the question arises as to whether awarding a loan to LWUA for it to be forwarded to the water districts was the most sensible procedure and whether direct cooperation with the water districts would have been more efficient. In addition, LWUA calculated a markup for the onward transfer of the loan funds. However, without LWUA, a significant success factor that lies in the technical support of the water districts and the monitoring of project implementation would have been lost.

Although a reduction in unaccounted for water can also be achieved through non-technical measures such as stringent measures against illegal house connections and awareness-raising measures for the population, the expansion of the supply infrastructure was the only alternative for the intended expansion of the supply.

Since project completion, there has been a decrease in cost recovery in some districts. A key reason for this is the fact that many water districts had difficulty in implementing long-needed tariff increases owing to political factors. The LGUs are weak overall and can only provide investment funds to the water districts in rare cases. They therefore occasionally try to influence the water districts' activities, for example by calling for tariff reductions during election campaigns or by influencing the choice of the next districts to be connected to the water network. This underlying political pressure prevented the water districts from making the overdue tariff adjustments to the improved supply. By strategically involving LWUA or other national stakeholders in the LGUs, some districts have been able to boost their revenues and cover the costs in the future. This will enable them to independently implement investment measures and use their own resources to expand the supply.

Summary of the rating:

Due to the mainly institutional delays of around a decade in terms of project implementation and the adverse impact of competing funding offers, considerable compromises have had to be made in terms of efficiency.

Efficiency: moderately unsuccessful

Overarching developmental impact

Overarching (intended) developmental changes

At impact level, the overarching development objective of the programme was to contribute to reducing the health risks that waterborne diseases pose to the population in the programme locations. However, even though the general water supply situation in the country is improving, this is offset by the escalating risk of waterborne diseases such as diarrhoea, ascaris and worm diseases as well as cholera owing to the increasing population, urbanisation and environmental pollution caused by waste water and solid waste, and the greater severity of the weather events.

The Philippines' Human Development Index has shown a positive, albeit slowly progressing trend over decades. However, the trend seems to have reversed, with a decline in the HDI since 2020.

Contribution to overarching (intended) developmental changes

No indicators were defined to measure the achievement of the impact objectives. Instead, it was pointed out that achievement of the outcome objective (sustainable expansion of the water supply) would automatically lead to the achievement of the impact objective. From the perspective of the evaluation, this hypothesis is only true under certain conditions so it must be checked (a) whether the improved water supply creates any risks due to increases in waste water. This is particularly relevant in view of the lack of investments in waste water disposal in the project areas.

In addition, (b) the actual health risk at the start of the project plays a role. Health impacts are plausible if the population is provided with a water supply that is adequate in terms of quality and quantity for the first time. As a result, these impacts theoretically occurred among those water district residents who had been connected to the water supply for the first time (usually the most vulnerable) or whose supply was switched from water kiosks to house connections. There will have been less of an impact for those who were already connected and who had merely been supplied with drinking water for a longer period as a result of the project, although it is possible that even these households have to obtain their supply through alternative means at times. Moreover, there is greater potential for impact if there are substantial waterborne health risks in the project region. However, statistics from surveyed doctors and subjective assessments by users during the preliminary phases indicated that cases of waterborne diseases were rare (or had rarely been reported) before the project was implemented. Representatives of the water districts visited and a community health care centre confirmed this during the evaluation of this phase.

Consequently, the measure probably achieved its intended developmental objective to a lesser extent, as it is likely that the health risk had already been low before the project (if the assertions by the water districts can be trusted as they are based on the assumption that, in the case of typical diarrhoeal diseases, those affected seek medical advice in spite of the anticipated costs, and the physicians report the cases to the competent health authorities and the authorities are accordingly notified).

The water districts emphasised that particularly vulnerable population groups in their catchment areas benefited from the built/rehabilitated infrastructure as planned when the projects were designed. The evaluation team made an unannounced visit to a fishing village and surveyed a group of women and children they encountered. The women reported they were totally satisfied with the extended water supply. In addition, a stop was made in a recognisably poor neighbourhood where the residents evidently continued to use decentralised standpipes. One interviewed woman and her neighbour affirmed that they were connected to the public water supply but would continue to use the water from the standpipes for cleaning and for watering the vegetables they grew.

The following particularly contributed to the achievement of the intended development policy objectives: the proximity of the water districts to the target group, the fact that the project was directly aimed at this target group, and the choice of simple measures adapted to local capacities and providing the essential resource required by the target group – clean drinking water.

Increased awareness among the residents in the water districts and the water districts' management of the precious water and appreciation of the water infrastructure may have also contributed to achieving the intended development policy objectives.

As part of the project, standard infrastructure measures to expand the water supply in residential areas were carried out. These were not innovative in character, but were designed to be simple and low-maintenance. The intensive exchange between the water districts and LWUA during the course of the project implementation led to a sustainable transfer of expertise and positive effects to strengthen the capacity of local structures.

For the target group, it is more likely that the project resulted in generally reducing the cost of the water supply in terms of both time and money and improving the quality of the service rather than changing the health situation in a specific way.

Contribution to overarching (unintended) developmental changes

The Philippines is one of the countries most affected by the effects of climate change in the world. The increase in climate events means that climate change adaptation measures have become more urgent. Sustainable water management and securing the water supply are essential components here.

The expansion of the water supply has had beneficial effects, especially for disadvantaged groups. In the context of the project, it seems plausible that small and microenterprises, including those managed by women, can more easily carry out their commercial activities and enhance their income opportunities. For those households that had previously met their drinking water needs by purchasing relatively expensive packaged water, connection to the water districts' supply network has had the effect of reducing poverty. In addition, there are potentially positive side effects for hygiene as a result of the greater availability of water in households.

In the programme locations, the prevailing division of labour between the sexes means that women hold responsibility for the household even when they are engaged in outside employment. Therefore, the improvement in water supply theoretically has a positive effect on women's quality of life. In addition, there are indirect, positive changes to the gender relations and social position of women due to the reduction in their workload and the resulting possibility of taking up alternative activities. Furthermore, the position of women is strengthened by involving them in decision-making processes through women representatives during implementation: in the water districts' supervisory bodies, women's groups are represented by one member in accordance with the statutes.

Summary of the rating:

The project had positive effects at impact level. However, the improved water supply contributed in particular to the general living conditions, but not necessarily to an improved health situation.

Overarching developmental impact: moderately successful

Sustainability

Capacities of participants and stakeholders

LWUA is currently a solidly functioning system that adapts to the individual needs of the water districts: the water districts with sufficient financial and staff resources enjoy great scope for action while weak water districts receive extensive support from LWUA. In the past, the participating water districts steadily expanded their networks, often using their own resources. Various water districts run marketing campaigns to acquire new customers. The employees appear well-trained and highly motivated. In addition, the covering of the costs and the socio-economic affordability of the tariffs for the target group are good.

Contribution to supporting sustainable capacities

The systems financed by the programme are largely of good quality and in impressive operating condition a good three years after completion. The plants visited as part of the evaluation (water reservoirs, pumping stations) are operated and maintained with a high degree of ownership and commitment. In isolated cases, minor defects such as signs of external corrosion on pipe sections could be detected, but these did not endanger operation as a whole.

Significant risks that could compromise the impacts of the project are the discharges of solid waste and waste water, which could jeopardise the quality of the water provided, and the usual weather events that could destroy part of the water infrastructure built. The households themselves cannot adequately protect themselves in this regard. However, the project has increased institutional resilience particularly because water districts, which are generating profits thanks to the improved water supply, have the financial capacities required to maintain the quality of their water supply and to respond independently to disruptions in the supply (one water district reported damage to the infrastructure during road construction work, which, however, could be quickly repaired by its own staff using its own machinery and its own vehicles).

Thanks to the difficult-to-measure but credible (not explicitly intended) secondary economic effects for the vulnerable residents of the water districts, they are better able to respond to any health impacts caused by contaminated water (bridge the gap caused by loss of earning, financing of medicines or treatment costs).

Durability of impacts over time

Despite the unaccounted for water recorded in some water districts and the associated financial losses, it can be assumed that the water districts' performance is more or less stable, especially since the affected water districts are working with the support of LWUA to solve the problem and LWUA acts as a buffer in the case of weak water districts. However, the increasingly extreme weather events in the Philippines and the associated risk of damage to the water infrastructure (particularly electromechanical systems such as pumping stations) pose a risk to stability in the context of the project.

Assuming there is no change to the involvement of the water districts and the maintenance budget remains more or less stable, it can be assumed that the project will have lasting positive effects, especially since the gains from the improved supply situation in most water districts will enable new investments in infrastructure and even greater long-term impacts on the population.

The infrastructure provided is simple and robust at all locations. A lot of Philippine plant components were used, which makes it easier to procure spare parts. The operating water districts are able to ensure adequate operation. The technical and financial risks that there will be insufficient use of the infrastructure are low.

Summary of the rating:

The financed infrastructure is operated and maintained with a high degree of ownership and commitment and is in an impressive condition. Its sustainability is rated as good.

Sustainability: Successful

Overall rating:

In the overall assessment, the project is rated as moderately successful. Due to the considerable delays during project implementation, efficiency is rated as moderately unsuccessful. In addition, the objectives have only partially been achieved in terms of quantity as well as quality, given the greatly reduced scope of the project. This also applies to the presumably low contribution of the project at impact level, especially the contribution to improving the health situation. On the other hand, the

sustainability of the project is good and supported by the generally stable economic situation of the water districts.

Contributions to the 2030 Agenda

The project is in line with the international Sustainable Development Goals (SDGs), which provide the framework for Germany's DC activities. In theory, the project contributes directly to achieving the sustainability objective of "clean water and sanitation" in the Philippines, as well as indirectly to other SDGs such as the conditions involving income and nutrition (Millennium Development Goal (MDG) 1), gender equality for women (MDG 3), health (MDGs 4, 5 and 6), sustainable use of natural resources (MDG 7) and the creation of development partnerships (MDG 8).

The project experienced and benefited from the interaction between the national specialised authority LWUA and administrative units in the form of the water districts, which are active locally and in close proximity to the citizens, whereby LWUA not only provided the loans but, like the German FC, also transferred technical expertise and ensured follow-up. However, the preparation of the project does not appear to have been largely based on the donor landscape. It can be assumed that the project has had impacts at different levels, albeit to a very limited extent in some cases. These include protecting natural resources, ensuring uninterrupted access to clean drinking water, supporting and securing employment, alleviating poverty and strengthening women's role in society by reducing factors that hinder their development. The general living conditions of the poorer population appear to have improved. At least, this is what the contact persons in the water districts emphasised, stating poorer households had better access to basic services and employment opportunities and were recognised as a section of the local population that had benefited from the project impacts in a non-discriminatory manner.

The improvement in the water supply had a direct impact on the quality of life, particularly for the poorer population who had not yet been connected to the public water supply or whose pipes had been subject to irregular water flow until then. Newly gained access to clean drinking water can potentially help to tap into new employment opportunities.

With the expansion of the water supply, larger groups of vulnerable citizens were reached and their quality of life and resilience improved as a result.

Project-specific strengths and weaknesses as well as cross-project conclusions and lessons learned

The project had the following strengths and weaknesses in particular:

Strengths:

- The sustainable use of the financed water infrastructure by the water districts participating in the project is rated particularly positively. Three and a half years after completion of the last sub-project, the infrastructure (water reservoirs and pumping stations) inspected as part of the evaluation in five of the eight participating water districts is in an impressive condition. Water district employees, including the staff responsible for the operation and maintenance of the systems, are well-trained and highly motivated. Even though, largely for political reasons, not all the water districts increased water tariffs after expanding the infrastructure, most of them cover operating costs, if not full costs. The expansion of the infrastructure has enabled an increase in the house connection rate and income and therefore generated savings. Several water districts used these savings to finance their own administrative buildings and/or the further expansion of the infrastructure. All the inspected water districts were grateful for Germany's financing and considered it to be a game changer.

- The project-executing agency LWUA keeps an eye on the technical and financial output of all the water districts and intervenes in a supportive manner, especially in the case of water

districts in receipt of a loan if there are risks for loan repayment. This has had a positive secondary effect on the further technical and financial development of the water districts participating in this project. They continue to have LWUA at their side, including in the mobilisation of further local or foreign funds.

Weaknesses:

- The poor efficiency in the project and resource implementation seems particularly critical. The loan agreement was not signed until June 2009 after a two-year delay and the entire implementation phase of the project was marked by significant delays. The programme design envisaged that seven water districts, which had been selected in a previous feasibility study, would initially be taken into account on a first come, first served basis and that further water districts could be included in the programme if necessary. However, six of the original seven water districts had already left the programme by the time the contract was signed. The main reason for this was that, at the time, LWUA had offered the water districts another loan financed by the Philippine government. This loan had more favourable terms and many water districts preferred it to the German loan. As a result, new water districts had to be selected and feasibility studies revised. During implementation, there were further delays due to extended times for detailed engineering and necessary repetitions of invitations to tender for supply and service contracts. Construction work did not start until the beginning of 2014. The originally offered loan amounting to EUR 10.2 million was far from exhausted.

Conclusions and lessons learned:

- Creating a list of locations at the time of the project appraisal and including it in the financing agreement does not guarantee quick and efficient implementation of the project. As an alternative, it is advisable to select the locations during the inception phase. This reduces the risks that a lot of time will pass before implementation, that needs will change, or that alternative sources of financing will be found.

- The provision of water infrastructure does not necessarily lead to the adjustment of the tariff structure, which is, however, necessary to achieve the objective of full cost coverage. Water projects could be made conditional on a socially acceptable, graduated increase in tariff. Specific advisory services in conjunction with the project implementation are suitable in this respect. Here, it is essential that the advisory services are practical and that the focus remains on the project in question and includes an actual increase in tariff at the end of it.

- Highlighting vulnerable population groups when defining the objectives should be accompanied by identifying, naming and locating the individual groups and supported by sound procedures for subsequently measuring the actual beneficiaries (baseline) and differentiating the project target indicators, where applicable.

Evaluation approach and methods

Methodology of the ex post evaluation

The ex post evaluation follows the methodology of a rapid appraisal, which is a data-supported qualitative contribution analysis and constitutes an expert judgement. This approach ascribes impacts to the project through plausibility considerations which are based on a careful analysis of documents, data, facts and impressions. This also includes – when possible – the use of digital data sources and the use of modern technologies (e.g. satellite data, online surveys, geocoding). The reasons for any contradicting information are investigated and attempts are made to clarify such issues and base the evaluation on statements that can be confirmed by several sources of information wherever possible (triangulation).

Documents:

Project appraisal report, final project report, evaluation of preliminary phases, the water districts' completed questionnaires, report by a consultant from LWUA, the project-executing agency.

Data sources and analysis tools:

Project documents from KfW's internal archive, questionnaires specifically created for evaluation and sent to water districts, consultant report received from LWUA; in-person interviews with water districts, LWUA, its consultant and a World Bank employee within LWUA; discussions held at KfW with former project managers and Technical Experts as well as with the Financial Cooperation Evaluation Department PM

Interview partners:

Managerial and operational employees working for LWUA, the project-executing agency, in Manila and at seven out of eight local water districts, on-site interviews with selected members of vulnerable groups (including from the fishing community); project manager of the Asian Development Bank seconded to the LWUA.

The analysis of impacts is based on assumed causal relationships, documented in the results matrix developed during the project appraisal and, if necessary, updated during the ex post evaluation. The evaluation report sets out arguments as to why the influencing factors in question were identified for the experienced effects and why the project under investigation was likely to make the contribution that it did (contribution analysis). The context of the development measure and its influence on results is taken into account. The conclusions are reported in relation to the availability and quality of the data. An evaluation concept is the frame of reference for the evaluation.

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

The following aspects limit the evaluation:

Time constraints, large distances between the project locations (which is why not all eight could be visited), LWUA staff turnover, limited availability of solid financial figures at water district level and data on the situation at impact level.

Methods used to evaluate project success

A six-point scale is used to evaluate the project according to OECD DAC criteria. The scale is as follows:

Level 1 very successful: result clearly exceeds expectations

Level 2 successful: result is fully in line with expectations and has no significant shortcomings

Level 3 moderately successful: falls short of expectations but the positive results dominate

Level 4 moderately unsuccessful: significantly below expectations, with negative results dominating despite discernible positive results

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

Level 6 highly unsuccessful: the project has no impact or the situation has actually worsened

The overall rating on the six-point scale is compiled from a weighting of all six individual criteria as appropriate to the project in question. Rating levels 1–3 of the overall rating denote a “successful” project while rating levels 4–6 denote an “unsuccessful” project. It should be noted that a project can generally be considered developmentally “successful” only if the achievement of the project objective (“effectiveness”), the impact on the overall objective (“impact”) and the sustainability are rated at least “moderately successful” (level 3).

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Annex 1: Target system and indicators

Project objective at outcome level		Rating of appropriateness (former and current view)			
During project appraisal:		to sustainably expand the water supply for the population living in densely populated urban areas and, as an extension, more rural areas in up to seven provincial towns.			
During EPE (if target modified)					
Indicator	**Rating of appropriateness** (for example, regarding impact level, accuracy of fit, target level, smart criteria)	**PA target level** **Optional: EPE target level**	**PA status (year)**	**Status at final inspection (year)**	**Optional: EPE status (year)**
The residents in the supply area are continuously and sustainably supplied with 120 l/cd by the water districts in accordance with Philippine and LWUA drinking water standards (comparable to EU or WHO standards)	This indicator does not only depend on the results of the project, as the built infrastructure alone does not guarantee a supply of 120 l/d	120 l/cd	n/a	n/a	See main section
The connection rate, including for poor households, has gradually increased in accordance with the programme of work	The project did not plan to provide any connections, so this indicator is not directly linked to the project	Gradual increase	Different, 15–60%	Different, 27-75%	See main section
Unaccounted for water, especially in systems with values above 30%, has been reduced by at least 10% two years after completion of the work	Differentiating the contribution of the measures is only possible if no further investments were made up to the time of the final inspection or the FC evaluation.	-10%	Different, sometimes over 30%	Unaccounted for water in three out of seven water districts	See main section
The revenues of the water districts cover the expenditure for the operation, maintenance and debt service	Here too, the contribution of the measures can only be differentiated if no further investments were made up to the time of the final inspection or the FC evaluation, in particular no *technical assistance* in the area of cost/financial management. In addition, full cost coverage was already determined in the appraisal report. NB: Interestingly, however, it deteriorated in some districts after the project was completed.	≥100%	Full cost coverage	Full cost coverage in four of seven water districts	See main section

Project objective at impact level	Rating of appropriateness (former and current view)
During project appraisal:	The overarching development objective of the project was to contribute to reducing the health risks that unsafe drinking water poses to the population in the programme area. Remarks: Due to the complex interdependencies between impacts, the appraisal report did not indicate achievement of a development objective indicator.
During EPE (if target modified):	

Indicator	Rating of appropriateness (for example, regarding impact level, accuracy of fit, target level, smart criteria)	Target level PA / EPE (new)	PA status (year)	Status at final inspection (year)	Status EPE (year)
Indicator 1 (PA)					
Indicator 2 (PA)					
NEW: Indicator 3					
NEW: Indicator 4					

Annex 2: Risk analysis

Risk	Relevant OECD-DAC criterion
Deviation from implementation schedule (moderate). This risk has been confirmed very clearly.	Efficiency
Cost variance (moderate). This risk materialised because the delays resulted in higher construction costs.	Efficiency
Restructuring of LWUA influences programme implementation (moderate). The restructuring delayed the start of project implementation, but was then completed and not the reason for the further delays.	Effectiveness, efficiency
LWUA does not provide the required resources (low). This risk assessment has been confirmed. LWUA's reporting and documentation was insufficient due to too many demands on the staff. In particular, evidence of the use of funds for the disposition fund was submitted late. On the other hand, the close cooperation between LWUA and the water districts as well as the technical and in-house consulting of the water districts by LWUA was positive.	Effectiveness, efficiency
Legal problems of the water districts (high): However, this risk has not materialised.	Effectiveness, efficiency
Water district cannot make their own contribution (moderate). Has not materialised.	Effectiveness, efficiency
Soil salinity due to increased groundwater extraction in programme cities close to the coast (moderate): no soil salinity occurred at the time of the final inspection; the quality of untreated water continues to be monitored continuously (according to water districts, also at the time of the evaluation).	Sustainability
No reduction in unaccounted for water: This risk assessment has been confirmed for several water districts.	Effectiveness

Annex 3: Project measures and their results

During the appraisal, measures were planned for the drinking water supply systems of the chosen water districts. A Programme Management Office (PMO) within LWUA implemented the programme. It was supported by a consulting consortium selected in international competitive bidding.
The programme design included the following measures:

Nr.	Standort (Provinz)	Durchgeführte Maßnahmen
1	Aparri (Cagayan Provinz)	• 300 m³ Trinkwasserreservoir • Chlordosierungsanlage • 3 Druckerhöhungspumpstationen • etwa 6 km Wasserverteilungsleitungen • etwa 600 Hausanschlüsse
2	Baao (Camarines Sur Provinz)	• 2 Tiefbrunnen • 2 Pumpstationen • Chlordosierungsanlage • Erweiterung der Stromversorgung • etwa 355 Hausanschlüsse
3	Balaoan (La Union Provinz)	• Pumpstation • etwa 16 km Wasserverteilungsleitungen • etwa 625 Hausanschlüsse
4	Infanta (Quezon Provinz)	• 2 Tiefbrunnen • 250 m³ Trinkwasserreservoir • 3 Pumpstationen • mobiler Notstromgenerator • Erweiterung der Stromversorgung • etwa 34 km Wasserverteilungsleitungen • etwa 1.870 Hausanschlüsse

5	Mabitac (Laguna Provinz)	• 1 Tiefbrunnen • 1 Pumpstation • Chlordosierungsanlage • etwa 5 km Wasserverteilungsleitungen • etwa 630 Hausanschlüsse
6	Orani (Bataan Provinz)	• 2 Tiefbrunnen • 1.000 m³ Trinkwasserreservoir • 60 m³ Trinkwasserreservoir • Umbau eines Reservoirs in einen Ausgleichstank • 2 Pumpstationen • Chlordosierungsanlagen • Leckagesuchgeräte • etwa 11,6 km Wasserverteilungsleitungen • etwa 630 Hausanschlüsse
7	Victorias (Negros Occidental Provinz)	• Rehabilitierung von 3 Brunnen • Rehabilitierung eines 200 m³ Trinkwasserreservoirs • etwa 14,8 km Wasserverteilungsleitungen • etwa 1.057 Hausanschlüsse
8	Binalonan (Pangasinan Provinz)	• 1 Tiefbrunnen • 1 Pumpstation • Chlordosierungsanlage • Erweiterung der Stromversorgung • etwa 20,3 km Wasserverteilungsleitungen • etwa 780 Hausanschlüsse

Annex 4: Recommendations for operation

In principle, the water supply facilities implemented were in proper operation both during the local final inspection in 2018 and during the site visits as part of the evaluation mission in May 2022. The financed infrastructure appears to be adequately maintained. During the final inspection, recommendations were only made for operation with regard to cooling and cleaning of the electrical equipment as well as corrosion protection, which were presumably implemented from the perspective of the evaluation. Even during the evaluation, there were only complaints about the lack of order on one pumping station's property; this site was partly used by the water district as a warehouse for old equipment.

Annex 5: Evaluation questions in line with OECD-DAC criteria / ex post evaluation matrix

Relevance

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)
Evaluation dimension: Policy and priority focus		
Are the objectives of the programme aligned with the (global, regional and country-specific) policies and priorities, in particular those of the (development policy) partners involved and affected and the BMZ?	Does the project fit within the context in which it took place, namely the development strategy and the Philippine Water Supply Sector Roadmap as well as the Federal Ministry for Economic Cooperation and Development's (BMZ) focus on water supply and disposal (even if it then ended)?	PP, PCR
Do the objectives of the programme take into account the relevant political and institutional framework conditions (e.g. legislation, administrative capacity, actual power structures (including those related to ethnicity, gender, etc.))?	Are there any specific factors to apply in this regard? Why were the LGUs not involved?	PP, PCR, further research
Evaluation dimension: Focus on needs and capacities of participants and stakeholders		
Are the programme objectives focused on the developmental needs and capacities of the target group? Was the core problem identified correctly?	Was the lack of access to financing a decisive bottleneck for expanding the water infrastructure in the water districts (some of them were able to finance themselves)?	PP, sector studies, evaluation of previous phases, country development studies
Were the needs and capacities of particularly disadvantaged or vulnerable parts of the target group taken into account (possible differentiation according to age, income, gender, ethnicity, etc.)? How was the target group selected?	How was action taken to ensure that poor people in particular benefit from the measures?	PP, further research
Would the programme (from an ex post perspective) have had other significant gender impact potentials if the concept had been designed differently? (FC-E-specific question)	Will women play a specific role in the water supply in the Philippines, and could the project have acted on this specifically?	PP, on-site discussions
Evaluation dimension: Appropriateness of design		
Was the design of the programme appropriate and realistic (technically, organisationally and	Was limiting the project to water without including waste water appropriate? Were interrelationships ignored?	PP, project-executing agency questionnaire

financially) and in principle suitable for contributing to solving the core problem?	Was granting a loan to LWUA with forwarding to the regional water districts the right choice? Would direct cooperation with the water districts have been possible?	
Is the programme design sufficiently precise and plausible (transparency and verifiability of the target system and the underlying impact assumptions)?	Is the impact matrix plausible? Is the project design sufficiently concrete?	PP, PCR
Please describe the results chain, incl. complementary measures, if necessary in the form of a graphical representation. Is this plausible? As well as specifying the original and, if necessary, adjusted target system, taking into account the impact levels (outcome and impact). The (adjusted) target system can also be displayed graphically. (FC-E-specific question)	According to the overarching development objective, the intent was to minimise health hazards posed by unsafe drinking water. This does not necessarily result in the programme objective “Expansion of the drinking water supply”. As, in order to reduce unsafe drinking water, measures can only be taken to improve quality, not quantity (chlorination, etc., instead of reservoir and well expansion).	PP (the project completion report only addresses the programme objective)
To what extent is the design of the programme based on a holistic approach to sustainable development (interplay of the social, environmental and economic dimensions of sustainability)?	Were all three dimensions of sustainability taken into account in the design? E.g. economic sectors of the water districts dependent on water?	On-site discussions
For projects within the scope of DC programmes: is the programme, based on its design, suitable for achieving the objectives of the DC programme? To what extent is the impact level of the FC module meaningfully linked to the DC programme (e.g. outcome impact or output outcome)? (FC-E-specific question)	-	-
Evaluation dimension: Response to changes/adaptability		
Has the programme been adapted in the course of its implementation due to changed framework conditions (risks and potential)?	Was reducing the number of water districts and the budget the correct response to the delayed project implementation?	PP vs PCR
Has the programme been adapted in the course of its implementation due to changed framework conditions (risks and potential)?		

Coherence

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Internal coherence (division of tasks and synergies within German development cooperation):			2	o	
To what extent is the programme designed in a complementary and collaborative manner within the German development cooperation (e.g. integration into DC programme, country/sector strategy)?	To what extent does the project build on previous phases I and II? How did the project benefit from the water projects under the Federal Ministry for Economic Cooperation and Development (BMZ) priority area (before it expired)?	PP, PCR			
Do the instruments of the German development cooperation dovetail in a conceptually meaningful way, and are synergies put to use?	How were the project partners (LWUA and the participating water districts) able to benefit from German TC in the water sector?	PP, PCR, GIZ			
Is the programme consistent with international norms and standards to which the German development cooperation is committed (e.g. human rights, Paris Climate Agreement, etc.)?	Are there any special aspects to consider here? E.g. discrimination against the migrants named in the PP?	PP, PCR			
Evaluation dimension: External coherence (complementarity and coordination with actors external to German DC):			3	0	.
To what extent does the programme complement and support the partner's own efforts (subsidiarity principle)?	Did the project build on what they themselves financed? Did the partners make their own contribution?				

Is the design of the programme and its implementation coordinated with the activities of other donors?	Was the project coordinated with the numerous donors ADB, JICA, World Bank, etc. and if so, how?	On-site discussions, questionnaire			
Was the programme designed to use the existing systems and structures (of partners/other donors/international organisations) for the implementation of its activities and to what extent are these used?	Have other donors in the participating water districts already financed water infrastructure? If yes, was this taken into account in the design of the individual investments? Did the project set any requirements for LWUA / water districts in this regard?	On-site discussions, questionnaire			
Are common systems (of partners/other donors/international organisations) used for monitoring/evaluation, learning and accountability?	(are such systems even available?)	On-site discussions, questionnaire			
Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Policy and priority focus					
Are the objectives of the programme aligned with the (global, regional and country-specific) policies and priorities, in particular those of the (development policy) partners involved and affected and the BMZ?		Project documentation, on-site discussions			
Do the objectives of the programme take into account the relevant political and institutional framework conditions (e.g. legislation, administrative capacity, actual power structures (including those related to ethnicity, gender, etc.))?		Project documentation, on-site discussions			

Evaluation dimension: Focus on needs and capacities of participants and stakeholders					
Are the programme objectives focused on the developmental needs and capacities of the target group? Was the core problem identified correctly?		Project documentation, on-site discussions			
Were the needs and capacities of particularly disadvantaged or vulnerable parts of the target group taken into account (possible differentiation according to age, income, gender, ethnicity, etc.)? How was the target group selected?		Project documentation, on-site discussions			
Would the programme (from an ex post perspective) have had other significant gender impact potentials if the concept had been designed differently? (FC-E-specific question)		Project documentation, on-site discussions			
Evaluation dimension: Appropriateness of design					
Was the design of the programme appropriate and realistic (technically, organisationally and financially) and in principle suitable for contributing to solving the core problem?		Project documentation, on-site discussions			
Is the programme design sufficiently precise and plausible (transparency and verifiability of the		Project documentation, on-site discussions			

target system and the underlying impact assumptions)?					
Please describe the results chain, incl. complementary measures, if necessary in the form of a graphical representation. Is this plausible? As well as specifying the original and, if necessary, adjusted target system, taking into account the impact levels (outcome and impact). The (adjusted) target system can also be displayed graphically. (FC-E-specific question)		Project documentation, on-site discussions			
To what extent is the design of the programme based on a holistic approach to sustainable development (interplay of the social, environmental and economic dimensions of sustainability)?		Project documentation, on-site discussions			
For projects within the scope of DC programmes: is the programme, based on its design, suitable for achieving the objectives of the DC programme? To what extent is the impact level of the FC module meaningfully linked to the DC programme (e.g. outcome impact or output outcome)? (FC-E-specific question)		Project documentation, on-site discussions			
Other evaluation question 1					
Other evaluation question 2					
Evaluation dimension: Response to changes/adaptability					

Has the programme been adapted in the course of its implementation due to changed framework conditions (risks and potential)?		Project documentation, on-site discussions

Coherence

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Internal coherence (division of tasks and synergies within German development cooperation):			2	o	
To what extent is the programme designed in a complementary and collaborative manner within the German development cooperation (e.g. integration into DC programme, country/sector strategy)?	To what extent does the project build on previous phases I and II? How did the project benefit from the water projects under the Federal Ministry for Economic Cooperation and Development (BMZ) priority area (before it expired)?	PP, PCR			
Do the instruments of the German development cooperation dovetail in a conceptually meaningful way, and are synergies put to use?	How were the project partners (LWUA and the participating water districts) able to benefit from German TC in the water sector?	PP, PCR, GIZ			
Is the programme consistent with international norms and standards to which the German development cooperation is committed (e.g. human rights, Paris Climate Agreement, etc.)?	Are there any special aspects to consider here? E.g. discrimination against the migrants named in the PP?	PP, PCR			
Evaluation dimension: External coherence (complementarity and			3	0	.

coordination with actors external to German DC):					
To what extent does the programme complement and support the partner's own efforts (subsidiarity principle)?	Did the project build on what they themselves financed? Did the partners make their own contribution?				
Is the design of the programme and its implementation coordinated with the activities of other donors?	Was the project coordinated with the numerous donors ADB, JICA, World Bank, etc. and if so, how?	On-site discussions, questionnaire			
Was the programme designed to use the existing systems and structures (of partners/other donors/international organisations) for the implementation of its activities and to what extent are these used?	Have other donors in the participating water districts already financed water infrastructure? If yes, was this taken into account in the design of the individual investments? Did the project set any requirements for LWUA / water districts in this regard?	On-site discussions, questionnaire			
Are common systems (of partners/other donors/international organisations) used for monitoring/evaluation, learning and accountability?	(are such systems even available?)				

Effectiveness

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Achievement of (intended) targets			3	0	Level of target achievement / outcomes

Were the (if necessary, adjusted) objectives of the programme (incl. capacity development measures) achieved? Table of indicators: Comparison of actual/target	--				
Evaluation dimension: Contribution to achieving objectives:			3	+	Level of target achievement at infrastructure level
To what extent were the outputs of the programme delivered as planned (or adapted to new developments)? *(Learning/help question)*	-	PP, PCR			
Are the outputs provided and the capacities created used?	Is the water infrastructure that was built used for the water supply in all water districts?	PCR, discussions with operators			
To what extent is equal access to the outputs provided and the capacities created guaranteed (e.g. non-discriminatory, physically accessible, financially affordable, qualitatively, socially and culturally acceptable)?	Discrimination against migrants, from the poorest, remote neighbourhoods, etc.?	PCR, on-site discussions			
To what extent did the programme contribute to achieving the objectives?	Did the project lead to an improvement in the water supply?	PCR, on-site discussions with project manager and TE			
To what extent did the programme contribute to achieving the objectives at the level of the intended beneficiaries?	Has the water availability for households (especially the poor) increased? Have the beneficiaries ever been interviewed?	PCR, discussions with beneficiaries, studies on the water districts			

Did the programme contribute to the achievement of objectives at the level of the particularly disadvantaged or vulnerable groups involved and affected (potential differentiation according to age, income, gender, ethnicity, etc.)?	How high is the proportion of poor households in the participating water districts, and are poorer households connected in a non-discriminatory manner? Or are there prohibitive connection fees or similar conditions?	PCR, on-site discussions			
Were there measures that specifically addressed gender impact potential (e.g. through the involvement of women in project committees, water committees, use of social workers for women, etc.)? (FC-E-specific question)	Not relevant				
Which project-internal factors (technical, organisational or financial) were decisive for the achievement or non-achievement of the intended objectives of the programme? *(Learning/help question)*	What aspects of project design allowed the objectives to be achieved despite the significant delays? Did the close follow-up from KfW play a role?	PCR, meetings with project manager and TE			
Which external factors were decisive for the achievement or non-achievement of the intended objectives of the programme (also taking into account the risks anticipated beforehand)? *(Learning/help question)*					
Evaluation dimension: Quality of implementation			2	0	Quality is crucial for sustainability
How is the quality of the management and implementation of the programme (e.g. project-executing agency, consultant, taking into account ethnicity and gender in	Did LWUA's management/support and the independence of the water districts pay off? Did all water districts contribute to the design of their investments? Were the support costs for LWUA high?	PCR, on-site discussions			

decision-making committees) evaluated with regard to the achievement of objectives?					
How is the quality of the management, implementation and participation in the programme by the partners/sponsors evaluated?	(Covered by previous question)				
Were gender results and relevant risks in/through the project (gender-based violence, e.g. in the context of infrastructure or empowerment projects) regularly monitored or otherwise taken into account during implementation? Have corresponding measures (e.g. as part of a CM) been implemented in a timely manner? (FC-E-specific question)	Not relevant				
Evaluation dimension: Unintended consequences (positive or negative)			2		
Can unintended positive/negative direct impacts (social, economic, ecological and, where applicable, those affecting vulnerable groups) be seen (or are they foreseeable)?	Which ones have occurred? For example: Women's situation further developed thanks to improved water situation; hygiene situation in schools improved?	On-site discussions, questionnaire			
What potential/risks arise from the positive/negative unintended effects and how should they be evaluated?	(depending on whether such unintended effects have occurred)				
How did the programme respond to the potential/risks of the positive/negative unintended effects?	(depending on whether such unintended effects have occurred)				

Efficiency

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Production efficiency			4	0	
How are the inputs (financial and material resources) of the programme distributed (e.g. by instruments, sectors, sub-measures, also taking into account the cost contributions of the partners/executing agency/other participants and affected parties, etc.)? (Learning and help question)	Did the structure of LWUA as the project-executing agency and the water districts as additional borrowers cause greater costs, higher management costs, etc.? What consequences did the small-scale nature of the loans/measures have?	PCR, on-site discussions			
To what extent were the inputs of the programme used sparingly in relation to the outputs produced (products, capital goods and services) (if possible in a comparison with data from other evaluations of a region, sector, etc.)? For example, comparison of specific costs.	(Would alternative measures have been conceivable at all or was the procedure “without alternatives”?)				
If necessary, as a complementary perspective: To what extent could the outputs of the programme have been increased by an alternative use of inputs (if possible in a comparison with data from other evaluations of a region, sector, etc.)?	Not relevant				
Were the outputs produced on time and within the planned period?	What were the reasons for the significant delay in implementation?				

Were the coordination and management costs reasonable (e.g. implementation consultant's cost component)? (FC-E-specific question)					
Evaluation dimension: Allocation efficiency			3	0	
In what other ways and at what costs could the effects achieved (outcome/impact) have been attained? *(Learning/help question)*	Was co-financing with other donors available as an option?	On-site discussions			
To what extent could the effects achieved have been attained in a more cost-effective manner, compared with an alternatively designed programme?	Not relevant				
If necessary, as a complementary perspective: To what extent could the positive effects have been increased with the resources available, compared to an alternatively designed programme?	Did the delay cause higher specific costs (e.g. due to feasibility studies, etc. having to be repeated/updated after a long time)?	PCR			

Impact

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Overarching developmental changes (intended)			3	0	
Is it possible to identify overarching developmental changes to which the programme should contribute?	Has the target group's health risk from unsafe drinking water decreased (overarching development objective)?	Impact studies, if available, other water district or LWUA studies, on-site discussions			

(Or if foreseeable, please be as specific as possible in terms of time.)					
Is it possible to identify overarching developmental changes (social, economic, environmental and their interactions) at the level of the intended beneficiaries? (Or if foreseeable, please be as specific as possible in terms of time).	Has the health situation of the beneficiaries improved/deteriorated?	Impact studies, if available, other water district or LWUA studies, on-site discussions			
To what extent can overarching developmental changes be identified at the level of particularly disadvantaged or vulnerable parts of the target group to which the programme should contribute? (Or, if foreseeable, please be as specific as possible in terms of time).	Has the health situation of households in general and the poorest households in particular improved?	Impact studies, if available, other water district or LWUA studies, on-site discussions			
Evaluation dimension: Contribution to overarching developmental changes (intended)			3	0	
To what extent did the programme actually contribute to the identified or foreseeable overarching developmental changes (also taking into account the political stability) to which the programme should contribute?	Can the project's contribution be demonstrated/quantified in terms of (potential) improvement in the health situation?	Impact studies, if available, other water district or LWUA studies, on-site discussions			
To what extent did the programme achieve its intended (possibly adjusted) developmental objectives? In other words, are the project impacts sufficiently tangible not only at outcome level, but also at impact	Has the health situation of the 260,000 people who benefit actually improved? Were they achieved in all water districts or did they depend on the investment (e.g. rehabilitation vs new construction)	PCR, on-site discussions, questionnaire, possibly impact studies			

level? (e.g. drinking water supply/health effects)		
Did the programme contribute to achieving its (possibly adjusted) developmental objectives at the level of the intended beneficiaries?	Has an improvement in the health situation of the households been determined, or can it be, as a result of the project?	PCR, on-site discussions, questionnaire, possibly impact studies
Has the programme contributed to overarching developmental changes or changes in life situations at the level of particularly disadvantaged or vulnerable parts of the target group (potential differentiation according to age, income, gender, ethnicity, etc.) to which the programme was intended to contribute?	Has an improvement in the health situation of the people in the poorest households been determined, or can it be, as a result of the project?	PCR, on-site discussions, questionnaire, possibly impact studies
Which project-internal factors (technical, organisational or financial) were decisive for the achievement or non-achievement of the intended developmental objectives of the programme? *(Learning/help question)*	What effects did the delays and the resulting reductions in funds have on target achievement?	PCR, on-site discussions
Which external factors were decisive for the achievement or non-achievement of the intended developmental objectives of the programme? *(Learning/help question)*		
Does the project have a broad-based impact? - To what extent has the programme led to structural or institutional changes (e.g.in organisations, systems and	Did the project have a particularly broad impact due to the inclusion of eight water districts?	PCR, on-site discussions

regulations)? (Structure formation) - Was the programme exemplary and/or broadly effective and is it reproducible? (Model character)	Were there imitator projects that used knowledge/structures from the evaluated project?				
How would the development have gone without the programme? (Learning and help question)	Would people have had other ways of accessing clean water? Would the problem have been quantity or quality or both?	On-site discussions			
Evaluation dimension: Contribution to (unintended) overarching developmental changes			3	0	
To what extent can unintended overarching developmental changes (also taking into account political stability) be identified (or, if foreseeable, please be as specific as possible in terms of time)?	Not relevant				
Did the programme noticeably or foreseeably contribute to unintended (positive and/or negative) overarching developmental impacts?	Was waste water disposal more in the background because the focus is always on water?	On-site discussions			
Did the programme noticeably (or foreseeably) contribute to unintended (positive or negative) overarching developmental changes at the level of particularly disadvantaged or vulnerable groups (within or outside the target group) (do no harm, e.g. no strengthening of inequality (gender/ethnicity))?	To what extent did unintended effects occur at all?				

Sustainability

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Capacities of participants and stakeholders			2	0	
Are the target group, executing agencies and partners institutionally, personally and financially able and willing (ownership) to maintain the positive effects of the programme over time (after the end of the promotion)?	Did sustainability play a role in the selection of the water districts, or was every candidate accepted? Are all water districts still covering costs? Have their capacities/know-how developed further? Is preventive and systematic maintenance of the infrastructure carried out by the operators? Does the target group handle the infrastructure with care, if relevant? Does the target group handle water as a resource in a responsible manner?	PCR, on-site discussions, questionnaire, operating books, maintenance plans			
To what extent do the target group, executing agencies and partners demonstrate resilience to future risks that could jeopardise the impact of the programme?	Are LWUA and the water districts aware of possible risks? What do they (preventively) do about it?	On-site discussions, questionnaire			
Evaluation dimension: Contribution to supporting sustainable capacities:			2	0	
Did the programme contribute to the target group, executing agencies and partners being institutionally, personally and financially able and willing (ownership) to maintain the positive effects of the programme over time and, where necessary, to curb negative effects?	How did the management and support provided by LWUA affect the water districts' capacity building (accompanying conception, design, award of contracts, etc.)? What added value did KfW have?	PCR, on-site discussions, questionnaire			

Did the programme contribute to strengthening the resilience of the target group, executing agencies and partners to risks that could jeopardise the effects of the programme?	Was clarification carried out with regard to the risks, or was KfW's role limited to financing? Was clarification carried out by LWUA? (The creation/rehabilitation of the infrastructure itself can already make a significant contribution to resilience)	On-site discussions, questionnaire			
Did the programme contribute to strengthening the resilience of particularly disadvantaged groups to risks that could jeopardise the effects of the programme?	Have special social tariffs been introduced for low-income households, if applicable?				
Evaluation dimension: Durability of impacts over time			2	0	
How stable is the context of the programme (e.g. social justice, economic performance, political stability, environmental balance)? (*Learning/help question*)	Are there any risks in this regard? Has the security situation in selected water districts deteriorated (theft, terrorist militia as in the south, but also heavy rain events, etc.)?	On-site discussions, questionnaire, studies about the country			
To what extent is the durability of the positive effects of the programme influenced by the context? *(Learning/help question)*	Can/should the water infrastructure be protected against possible risks as a precaution?	On-site discussions			
To what extent are the positive and, where applicable, the negative effects of the programme likely to be long-lasting?	Are there any signs of negative developments?	On-site discussions			