

### FINAL REPORT OF EVALUATION

# EVALUATION OF TWO BILATERAL PROJECTS IN THE WATER-SANITATION SECTOR IN CAMBODIA

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Boston a construction of implementation)	Puriosi la cationa.		
Partner country (country of implementation):	Project locations:		
Cambodia	Kampong Chhnang, Svay Rieng, Siem Reap a Tboung Khmum, Kampong Tralach, Svay Rieng, Siem Reap a Tboung Khmum		
Title of evaluated intervention in Czech and English:	Specialization:		
Zlepšení sektoru WASH v provincii Kampong Chhang	Sustainable management of natural resources - water and sanitation		
B2B – Implementace přírodě blízkých technologií čistění odpadních vod a jejich následného využití v zemědělských oblastech Kambodži, Kampong Tralach			
Improving the WASH sector in Kampong Chhang Province			
B2B - Implementation of nature-based wastewater treatment and reuse technologies in agricultural areas of Cambodia, Kampong Tralach			
Coordinator:	Implementer:		
Czech Development Agency	Diakonie ČCE – Středisko humanitární a rozvojové spolupráce (Diaconia of the Evangelical Church of Czech Brethren – Centre for Humanitarian and Development Cooperation) DEKONTA, a.s.		
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## **Management Summary**

#### Introduction and purpose

The Ministry of Foreign Affairs of the Czech Republic (MFA) initiated an evaluation of two key projects under the Czech development cooperation (CzDC) with Cambodia for the 2018-2023 period. These projects aim to improve water sanitation, hygiene, and wastewater treatment technologies, directly impacting Cambodia's rural population and promoting sustainable development in line with the 2030 Agenda.

The first project, Improving the WASH Sector in Kampong Chhnang Province, targets water, sanitation, and hygiene (WASH) improvements. Implemented by a consortium of Czech and Cambodian organizations, it primarily aimed to reduce waterborne diseases by improving access to clean water and sanitation. Financial CzDC support over four years totaled CZK 19,5 mil.

The second project, B2B: Implementation of Nature-based Wastewater Treatment and Reuse Technologies, sought to introduce sustainable wastewater treatment methods in agricultural areas. The project focused on creating a feasibility study for an artificial wetland-based wastewater management system. CzDC support totaled CZK 201.824.

#### **Evaluation team**

The evaluation team of Naviga Advisory and Evaluation s.r.o. was composed of experienced professionals from various fields, including a project manager with extensive evaluation experience, a senior expert in regional development, and a technical expert specializing in water and sanitation. The involvement of local experts was critical, particularly for facilitating interviews and focus groups, as well as coordinating the questionnaire survey in the target communities.

#### **Conclusions**

#### Implementation of support and its limits

The support from the B2B programme has produced good practice in nature-based wastewater treatment measures that are appropriate and effective in the circumstances and replicable across a range of public institutions. However, the visibility of these benefits is too low - the treatment plant was only developed as a feasibility study, which, in addition, contrary to the original plan, was not even presented to representatives of public institutions - the planned seminar could not take place due to the COVID-19 pandemic. Further replication of the solution is therefore highly unlikely at this moment.

Support provided to improving WASH sector in Kampong Chhnang Province has significantly underperformed in achieving the planned objectives, most importantly, it constructed only one out of foreseen minimum 5 water treatment and distribution facilities. There were multitude of reasons for this underperformance that coalesced the impact of COVID-19 pandemics and resulting considerable increase of the costs of construction materials and services.

Outcomes and impacts on target groups regarding improving access to drinking water and on hygiene habits and access to sanitary facilities in supported communities and schools

A significant number of households (HHs) were connected to the newly constructed water system, however, their number dropped by ca. 40 % in the following months. Key reason for the drop was that a significant portion of local population is not fully convinced of the advantages of having access to safe drinking water and prefer the older water sources due to economic reasons. This development needs to be, at least partly, attributed to the early exit of project implementer after the water treatment facility was made operational — there was insufficient time to work with the community once they have access to water. As a result, only ca. 50 % of households in target communities are connected to the water system. Overall satisfaction with

constructed water system is high with users appreciating primarily having access to safe drinking water. However, more than half of users combine the consumption with other water sources, mainly to save costs.

Project has contributed also to connecting households in Peam and Chheau Laeung communes to existing water sources – mainly focusing on vulnerable (poor) households. The efficiency of this support is to some extent limited by complicated structure of private licenses and disputes between operators. Also two target schools in Chrak Tnoat were connected to the private water system, however, water from these connection is rarely or not at all consumed at the schools – due to financial reasons.

Support from CzDC has contributed to an improvement in hygiene behaviour and sanitary standards in supported schools and HHs. It contributed to the Peam commune reaching the ODF (Open Defecation Free) status. Significant positive impacts on the health of pupils as well as on their attendance and studying results were recorded. CzDC is in this effort one of larger number of other stakeholders, observed impacts therefore cannot be attributed solely to CzDC support. On the other hand, sufficient coordination between these stakeholders especially when it comes to "soft" activities has increased the efficiency and effectiveness of the support overall and enabled to broaden the territorial as well as thematic scope of the interventions.

#### Impact on local capacities and skills of local structures

Support did not sufficiently create capacities for smooth operation and maintenance of the constructed facility, mainly due to delayed installation. In effect, local structure responsible for the operation and maintenance (WSUG – Water Sanitation User Group) does not have sufficient skills, knowledge and overall capacity to ensure longer-term sustainability of the system. Moreover, organizational model of the WSUG does not respond well to the operational needs. In effect, the local water system now works well and is even expanding, however, any request for repairs or more complex maintenance constitutes very high risk to the continuing of operation. Despite successfully collecting payments for water consumption from local HHs, WSUG is not able to accumulate capital for future re-investments. Therefore, the operations and functionality of the water station become unclear after its lifespan or when spare parts are needed.

#### **Good practices**

Several good practices have been identified:

- Technical solution is a best practice and can serve as a "showcase" of adequate approach as well as appropriate technology:
- Bottom-up approach clearly enables development of solution that is well placed (territorially) and responds to individual context (natural conditions as well as socio-economical). It creates high ownership by local communities, which is a precondition for long-term sustainability.
- Cooperation with other stakeholders brought about high efficiency of activities in sanitary and hygiene outreach.
   Good knowledge of and being rooted in the community of local stakeholders is indispensable in this regard;
- Targeted focus on increasing the access to water and sanitation specifically by the poor/vulnerable households had significant impacts of these vulnerable target groups and is considered as good practice.

#### Coherence and coordination of support with national strategies and approaches

Approach of the implementer and his partner(s) was fully in line with national / regional strategies in WASH sector and contributed to fulfilment of national objectives relevant for WASH in some areas (e.g. Peam commune). However, due to changing approach to the WASH sector by national government as well as key development donors, this approach to ensuring access to safe water in rural areas is being discontinued. Therefore, it is not advisable to implement similar projects in the future. The main reason for phasing out of support to community owned infrastructure is problematic experience with sustainability of these structures due to lacking capacities and capital. This model usually fails as soon as need for larger scale reinvestments (major repair, replacement of a part of technology, etc.) occurs.

Negative trends with regard to organisational structure, high inefficiency of operation due to responsibilities not being clearly assigned as well as due to insufficient capacities and lack of technical knowledge have been observed also in the case of the WSUG that was created by support of CzDC.

In future, the support to increasing the access to potable water in rural areas will pivot on private operators. Significant efforts will be put on consolidation of the fragmented market by putting pressure on compliance with regulatory / licence requirements and quality standards on the one hand as well as system of support of investments based on achievable loans and leveraging of private investors on the other hand. "Green field" areas – localities not covered by any license due to the excessive investment costs will be supported by clustering and public procurement which will include subsidies for investment costs.

## Gaps in new approach to increasing the access to WASH infrastructure in rural areas and resulting opportunities for CzDC

Capacity of institutions of district and province levels is the crucial condition for the successful rollout of this approach. These capacities are often very weak or even non-existent. Moreover, significant efforts will have to be made to increase demand for stable supply of clean and safe water in local communities. CzDC has clear added value in strong presence in selected districts of Kampong Chnang province and existing channels to the community level – bottom-up approach has been one of the key good practices. Therefore, support to capacity building at local institutions, including systematic raising awareness of hygiene and sanitary standards and safe behaviour, further inducing demand on access to clean water would ideally complement the larger-scale approach to increasing access to WASH infrastructure in selected pilot regions.

There is a potential for replication of the technologies installed in Tang Krous Keut village as this water treatment facility is widely seen as a model facility. Focusing on wider-scale presentation of this good practice and, in general, appropriate approach of Czech supplier to local needs, in cooperation with the Provincial Department of Rural Development (PDRD) that considers this facility as the most advanced one in the province, may stimulate new business opportunities. However, external resources need to be mobilized – local institutions or most of private operators are not capable to make such investment on their own.

#### Conclusions with regard to evaluation criteria

**Relevance** of the support is **high**. Projects are fully aligned with the national strategies of the target country and with the CzDC Bilateral Programme. Implementation was coordinated with appropriate regional authorities and the project approach constitutes good practice. However, in the future, the community-centred approach will no longer be the preferred, the implementation / organisational model thus should not be replicated in future projects. Equally, the B2B project brought highly relevant and cost-effective solution.

**Effectiveness** of the support is **low**. Key objectives were significantly downscaled and the overall goals were not met. Instead of originally planned at least 5 new water systems only one was built. Most of other objectives were not met either. The only significant exception is the number of latrines provided to (poor) households – planned figure of 200 was exceeded by 8 more latrines designed specifically for disabled members of the households (which was not a part of the original plan).

**Efficiency** of the support is **rather low**. Although the "value for money" of the installed technology was assessed as rather efficient by the expert member of project team (though in multiple of originally projected costs), there are still significant issues that decreased the efficiency. Firstly, the involvement of oversees supplier clearly increased the costs. Moreover, in case that the local operator (WSUG) is not capable to maintain the treatment technology, the efficiency of supplying the rather advanced technological solution is also questionable.

**Impacts** of the support are **high.** Target groups as well as local and regional institutions all recognise profound impacts of all project activities on health (frequency and seriousness of illnesses) as well as on school attendance of children and their school results.

**Sustainability** of the support is **rather low**. In current status quo the long-term operation of the water treatment station is not sustainable as the local structure lacks sufficient skills. Key reason for this is the late implementation of the key activity, namely construction of the water treatment facility, which was opened only ca. 2 months before the end of the project. However, this lack of capacity and skills is, to some extent, offset by high ownership and motivation of local community. Therefore, if sufficient support is provided in timely manner (trainings, consultancy, operational manuals, etc.), and/or the operation model is appropriately transformed, the operation can be made sustainable. Support provided to schools is equally rather unsustainable – the schools lack sufficient funds for even small repairs of hand washing facilities or latrines.

#### Recommendations

(Level of seriousness: 1 – most serious, 3 – least serious)

Recommendation: Project recommendations		Primary addressee
Support ways how to immediately increase the capacities of the WSUG in Tang Krous Keut / Tang Krous Lech by additional trainings, mentoring and ad-hoc consultancy – technical skills as well as financial management and operation processes. Connect the local structure with technical experts they may turn to in case of emergency. Analyse the suitability of small grants provided directly by the Embassy for this purpose.	1	CzDA/ Implemen- ters Embassy
Support the transformation of WSUG into more formalized structure that would not be dependent on voluntary work. Involve district and province authorities – Ministry of Industry, Science, Technology and Innovation (MISTI) and Rural Development (RD) departments in developing a reliable and sustainable structure with clearly assigned responsibilities and accountability and professional conduct; secure a license for the new structure by MISTI to operate in the target region (incl. possible expansion). Alternatively, assist the local structure in designing the public procurement and its implementation for a private operator that would rent the infrastructure and ensure allocation of resources for reinvestment as well as provide income for the community.	2	CzDA/ Implemen- ters Embassy
Continue with long-term support of awareness raising, training and capacities building in good hygiene practices, sanitation and healthy behaviour in targeted region, facilitating the demand on access to clean potable water in accordance with quality standards.	2	Implementer / partner

Recommendation: Programme / sector recommendations	Level of seriousnes	Primary addressee
Within interventions aimed at institutional capacity building and good governance focus, in coordination with development partners and national structures, on building local capacities, most in areas with strong CzDC / local partner presence with regard to the organisational and regulatory framework of local water system operators "ecosystem" – provide capacity building as well as technical assistance. Focus on pilot regions and put emphasis on dissemination of good practice.	1	CzDA Embassy
Explore synergies with other partners regarding support to areas in Kampong Chhnang not covered by any licenses; take advantage of existing water system in promotion of good practice, including facilitation of opportunities for long-term commercial cooperation with Czech suppliers.	2	CzDA Embassy
Capitalize on existing cooperation with NGOs and other stakeholders in Kampong Chhnang province as well as on existing good relations with RD departments at provincial and district levels and push for deeper cooperation in supporting awareness and appropriate capacities regarding safe hygiene practices in rural areas.		CzDA Implementer
Analyse the locally available expertise related to the operation of water treatment systems and, if relevant, identify project in Technical and Vocational Education and Training (TVET) sector aimed at building such technical capacities in WASH sector, taking into account more advanced technologies potentially provided by Czech providers.	3	CzDA / MFA

Recommendation: System or procedure recommendations	Level of seriousnes	Primary addressee
Take part in formal and informal cooperation structures in the WASH sector in Cambodia. Complement support of larger donors provided to water system operators in pilot regions with bottom-up support to capacity building and empowering of communities.	2	MFA / Embassy
Ensure that support to infrastructure projects is formulated after an in-depth analysis of key local parameters has been performed.		CzDA
Make sure that appropriate technical skills and capacity is available in core project teams of future support to WASH infrastructure; rather avoid implementation of support for investment projects in WASH by grant modality in favour of public procurement or direct budget support.		CzDA Implementer

## 1. Introduction

#### 1.1. Evaluation context

The Ministry of Foreign Affairs of the Czech Republic decided to evaluate projects implemented within the Programme of the Czech Republic's development cooperation (CzDC) with Cambodia for the period 2018-2023. The subject of the public contract is to carry out an independent evaluation of two projects: The first project is a bilateral project entitled 'Improving the WASH Sector in Kampong Chhnang Province, Cambodia', which aims to improve infrastructure and services in the areas of water, sanitation and hygiene. The second project is a development-economic partnership (B2B) entitled "Implementation of Nature-based Wastewater Treatment and Reuse Technologies in Agricultural Areas of Cambodia". This project focuses on the implementation of wastewater treatment technologies that respect natural processes and subsequent use in agricultural areas with an emphasis on sustainability and environmental protection.

The evaluation of the projects takes place from April to November 2024 and includes an analysis of the situation in the Czech Republic as well as in Cambodia, with an emphasis on an expert and comprehensive analysis and assessment of the results achieved by the projects. The findings and recommendations will be crucial for the future direction and financing of Czech development cooperation in Cambodia and the sector.

#### 1.2. Purpose of evaluation

The main objective of the evaluation is to map and formulate opportunities for bilateral and possibly delegated involvement of the Czech Republic in the sector based on the implementation so far. In addition, specifically:

- to obtain independent, objectively based and consistent findings, conclusions and
  recommendations for use in decision-making by the MFA in cooperation with the CzDC and other
  actors on the future focus and the way of CzDC implementation while taking into account the Agenda
  2030 for Sustainable Development within the assessed sector Sustainable management of natural
  resources water and sanitation (SDG 6)
- Obtain recommendations for possible replication of the type of project or sub-activities evaluated in other developing countries or locations, including verification of the results, impacts and sustainability of the intervention.
- obtain broader recommendations on the **involvement** and added value of different types of implementers (company, university) in the sector.

The evaluation was performed by the internationally recognized OECD-DAC criteria, 1 i.e., relevance, coherence (incl. coordination and integrated approach), efficiency, effectiveness, impact, and sustainability (and replication). The main focus was on sustainability of effectiveness and sustainability and on the identification of good practices that can be used for the further direction of development cooperation between the Czech Republic and Cambodia in the sector, with an emphasis on the follow-up of commercial opportunities.

The findings and recommendations should be used for the future direction and financing of foreign development cooperation in Cambodia and the sector.

<sup>&</sup>lt;sup>1</sup> For more info on the OECD-DAC criteria see <a href="www.oecd.org/development/evaluation">www.oecd.org/development/evaluation</a>

#### 1.3. Information on the evaluators

Naviga Advisory and Evaluation s.r.o. has long been at the forefront of the market in the field of evaluation and consulting for ministries, state administration, and self-government authorities in the Czech Republic. It is a dynamic consulting organization with more than twenty years of tradition in the Czech market. Since its establishment, the company has focused on consulting and expert advisory in the field of implementation of public expenditure programs and projects. In this field, analytical and evaluation projects, strategic and project consulting projects, development of project plans, processing of analyses, and specific inputs for EU structural funds projects have been delivered by the company.

All the members of the evaluation team have extensive work experience with evaluations of various projects, programs, and development cooperation (incl. previous evaluation experience in target country).

## 2. Information on the evaluated intervention

#### 2.1 Wider context of the evaluation

The programme of bilateral development cooperation between the Czech Republic and Cambodia is based on the objectives set out in the Czech Republic's Foreign Development Cooperation Strategy for the period 2018-2030, which reflects the ambitions of sustainable development according to the 2030 Agenda and the principles of global partnership for effective development cooperation.

Cambodia ranks among the poorest and least developed countries in Southeast Asia, despite experiencing significant economic growth over the past decade. The development cooperation programme aims to support the implementation of Cambodia's "Quadrilateral Strategy - Phase III" and the "National Strategic Development Plan 2014-2018", with a focus on poverty reduction, social exclusion and sustainable management of natural resources, particularly in the water and sanitation (WASH) sector. Subsequent "Pentagonal Strategy – Phase 1 for Growth, Employment, Equity, Efficiency, and Sustainability" (launched in 2023) adopts five key priorities, namely People, Road, Water, Electricity, and Technology. Pentagon 1 "Human Capital Development" includes, among others, the technical skills training or improvements of people's health and wellbeing. Pentagon 2 "Economic Diversification and Competitiveness Anhancement" then focus, e.g., on enhancement of connectivity and efficiency in transport and logistics, energy, water supply and digital sectors. he remaining priorities – Pentagon 3 "Development of Private Sector and Employment", Pentagon 4 "Resilient, Sustainable and Inclusive Development", and Pentagon 5 "Development of Digital Economy and Society" are also relevant to the continuing development cooperation between the Czech Republic and Cambodia.

One of the main objectives of the Czech Bilateral Programme is to support poor people's access to self-support through education, increasing their competitiveness in the labour market and strengthening their skills and abilities to generate their income. In addition, the programme focuses on improving the status and quality of health care, particularly in rural areas, emphasizing maternal and childcare and reducing maternal and infant mortality and developing obstetric and post-natal care. Such activities are intended to further reduce Cambodia's dependence on development aid, reduce poverty and hunger and promote sustainable development. The programme is part of the Czech Republic's overall cooperation with Cambodia. It should strengthen bilateral political, economic and cultural relations and intensify cooperation across different sectors and actors.

#### 2.2 Brief information on the Evaluated projects

The priority development sector focuses on the sustainable management of natural resources, particularly water and sanitation, and fostering partnerships with the private sector. This represents a comprehensive strategy aimed at the sustainable utilization of water resources and the enhancement of the private sector's involvement in waste management. The successful implementation of this strategy is crucial for achieving long-term development and improving the quality of life for the Cambodian population.

#### Improving the WASH sector in Kampong Chhang Province

Project "WASH Sector Improvement in Kampong Chhnang Province, Cambodia", implemented by a consortium of Diaconia of the Evangelical Church of Czech Brethren – Center for Humanitarian and Development Cooperation (DECCB), Life with Dignity (LWD), G-servis Ltd, Water Resources Ekomonitor spol. s r.o. and Czech University of Life Sciences, was implemented over a timeframe of four years, starting in May 2020 and finalizing in December 2023. The overall objective of the project was to reduce the prevalence of waterborne diseases and improve sanitation practices in eight selected communes in Sameakki Mean Chey and Tuek Phos districts. To achieve this goal, a set of activities was implemented focusing on three key areas: (1) drinking water consumption and distribution; (2) sanitation and good hygiene practices; and (3) WASH capacity development.

Initially the project planned installation of **5-10 water treatment and distribution systems**. However, due to the complexity of the project development, only **1 system was completed and constructed in 2023**, see below for more details regarding this reduction. Related to this activity, a local structure was founded and capacitated in order to ensure capacities for operation and maintenance of the community – owned technology. Furthermore, a multitude of activities were implemented to improve the behaviour of local population in hygiene and sanitation – implemented at the level of households as well as schools. These included investments into sanitary facilities (latrines, hand washing stations, related water accumulation infrastructure) as well as non-investment measures, such as trainings, awareness campaigns, information activities, etc.

The financial resources allocated to this project total CZK 20 037 131. This amount was divided into the following years of the project: in 2020 it was CZK 4 000 000, in 2021 CZK 5 537 131, in 2022 CZK 4 500 000 and 2023 CZK 6 000 000. This distribution of funds reflects the planned activities of the project and its gradual development over time.

## B2B - Implementation of nature-based wastewater treatment and reuse technologies in agricultural areas of Cambodia

The project "B2B - Implementation of nature-friendly technologies for wastewater treatment and subsequent use in agricultural areas of Cambodia" implemented by DEKONTA, a.s. in cooperation with the Global Green Growth Institute, the Ministry of Environment and other partners, focused on the identification of suitable locations for the implementation of efficient wastewater management systems. The timeframe for project implementation was from January 2021 to November 2021.

The project aimed to improve the environment and minimize health risks in Cambodia by supporting **wastewater treatment systems**. The main objectives included the identification of suitable sites for construction of a wetland wastewater management systems and the development of a feasibility study for one site that would propose a low-cost, nature-friendly and long-term sustainable solution for wastewater treatment, known as an "artificial wetland".

Moreover, activities aimed at presentation of this solution to public stakeholders at national, province and district level as an appropriate and economic solution to wastewater treatment of public buildings (in specific conditions) were planned, however, these could not have been implemented due to COVID-19 restrictions. In effect, the feasibility study is the only output of the project.

Financial CzDC support totaled CZK 201 824.

#### 2.3 Intervention logic

The intervention logic of the project "Improving the WASH sector in Kampong Chhang Province" (implemented by DECCB) clearly confirms that the project-level outcomes are in line with the Bilateral

Programme objectives. The project aims at enhancing the usage and access (1.) to safe drinking water as well as (2.) to sanitation facilities. These objectives were supposed to be achieved by construction of potable water systems / installation of water filters as well as by construction of sanitation and hand-washing facilities. Moreover, the achievement of both objectives was to be supported by increasing the awareness of good WASH practices. Furthermore, sufficient local capacities were supposed to be built to ensure quality regular maintenance and appropriate operation of these facilities. Achievement of this goal was to be ensured not only by building of local capacities (establishing appropriate structures, trainings and capacity building activities, etc.), but also by sufficient involvement of relevant public institutions and other stakeholders (NGOs, private sector).

Assessing the intervention logic, it can be seen that the project is in line with the Bilateral Programme and outlines a comprehensive strategy that is not missing crucial components and it is reasonable to expect that if implemented properly (especially when it comes to activities aimed at awareness raising, building of local capacities and involvement of relevant stakeholders) it will contribute to fulfilling the goals of the Programme.

The project implemented by DEKONTA is following the objectives of the Bilateral Programme as well. However, as indicated earlier, the scope of the project is very limited – its aim is to introduce a solution to wastewater treatment that can be implemented in larger scale by elaboration of a detailed feasibility study for one specific case. The project did not have the capacity to implement the presented solution (i.e. build the wastewater treatment plant). In effect, the project was supposed to serve as a "showcase" – introducing a viable solution that is relevant for solving the problems related to wastewater. Thus, a crucial part of the project was the awareness raising and promotion of the solution to relevant stakeholders. For that reason, the relevant Activity no. 3 was included – the logic of the project has foreseen that through awareness raising an advocacy coalition of local stakeholders (relevant institutions, NGOs, etc.) would be created that will ensure not only the investment into the case presented by the feasibility study itself, but more importantly, it will spread the proposed solution to other suitable use-cases as an effective, efficient and sustainable approach to solving the problem of wastewater in appropriate conditions – most importantly in other schools and similar public entities. For that reason, the afore mentioned non-implementation of this activity due to COVID-19 restrictions presented a serious blow to the proposed intervention logic of the project.

#### 2.4 Assumptions and risks of the projects

The following assumptions and limits have been identified in the project implemented by DECCB:

- Occurrence of major drought and/or natural disasters would deplete or endanger water resources lacking resources is a fatal limit of the project.
- Target population will use new sources of drinking water (can afford it, trusts that change in their habits regarding water consumption will have a positive health impact) as well as sanitation infrastructure.
- Support of local and regional authorities and their cooperation in the project implementation.

Among the risks that were identified by the project team the following are seen as crucial and will be analysed within the evaluation:

- Low participation and mobilization of target groups, reluctance to adopt good practices in water usage and hydiene:
- Insufficient institutional stability of established Water Management Committees (WMCs) and high fluctuation of its members;
- Local population cannot afford the costs of connection to existing or new water infrastructure;
- Unstable operation of water system due to lacking water sources as well as poor maintenance;
- Continuous changes in water quality (due to extreme weather, agricultural activities, etc.) resulting in the water treatment technologies not being relevant or efficient;
- Lacking institutional stability in public administration will endanger the sustainability of the project.

As for the project by DEKONTA no significant assumptions or limits have been identified due to the limited scope of the project. However, the key limitation is the availability of financial resources for actual investment.

## 3. Evaluation methodology

#### 3.1 Summary of applied methods

#### 3.1.1 Desk research

The subject of desk research in this evaluation was mainly the project documentation, outputs of the supported projects (project documents, interim and final reports, etc.), programme documentation (into the bilateral programme and the B2B programme), documentation on calls for proposals, other relevant CzDC documents related to the implementation of both projects, relevant strategic and sectoral documents in the target country; strategic and programme documents of other donors, NGOs, international organizations, etc., operational documents and relevant projects of other donors and relevant actors (international organisations, NGOs, development banks), etc.

#### 3.1.2 Statistical analysis of secondary data

Statistical analysis was applied to the processing of project monitoring data as well as analysing the results of questionnaire survey.

#### 3.2.1 In-depth interviews (IDI)

Interviews played a key role in the evaluation design. The following respondents took part both in the Czech Republic as well as in Cambodia:

- Representatives of project implementers (in the Czech Republic and the local team), project partners and other entities directly involved in implementation, e.g. key subcontractors (in the Czech Republic and Cambodia);
- Representatives of the Contracting Authority and the Czech Development Agency (CzDA);
- Embassy in the country of destination;
- Ministry of Rural Development;
- Representatives of the administrative structure at the provincial level: mainly the Provincial Department of Rural Development and the Provincial Office of Education, Youth and Sports, etc.;
- Representatives of relevant institutions at the district level esp. District Office for Rural Development,
   District departments of the Ministry of Industry Sameakki Mean Chey, Tuek Phos and Kampong
   Tralach districts:
- Representatives of some of the schools supported in both projects;
- Representatives of 3 other donors.

For more information see attached agenda of field mission.

#### 3.2.2 Focus group discussion (FGD)

Focus groups have been implemented in supported schools and communities.

Focus groups were led by local expert in the local language based on pre-agreed scenario/questions, at the same time they were translated from the local language into English for the team leader.

Focus groups were implemented in the following contexts:

- Focus groups in communities where new water infrastructure has been built Tang Krous Keut, Tang Krous
- Focus groups in two additional communities that have been connected to existing water infrastructure (Chrank Tnoat, Takeo)
- o Focus groups in supported schools with teachers and School Support Committees (incl. parents)

See attachment for more information on the agenda of field data collection.

#### 3.2.3 Questionnaires

A questionnaire survey was be applied in order to collect data from the communities where households were connected to the new water supply system – i.e. in Tang Krous Keut and Tang Krous Lech villages. The original plan was to reach out to a sample of ca. 10 % of originally connected households, i.e. to representatives of 50 households. However, since there was a larger than expected number of HHs that were not connected to the water system, these were also included into the survey. In the end, 35 respondents were connected and another 15 were not.

Data was collected by a CAPI (Computer-Assisted Personal Interviews) method: trained 3 interviewers did personally visit the villages and collected responses. Sample was selected randomly, however, representative geographical distribution was observed. The data collection was coordinated with village chiefs / administrators in order to increase the willingness to provide data.

#### 3.2.4 Observation

Within evaluation mission visits to supported localities were organized. At Tang Krous Keut, a guided visit to the water treatment facility and water sources took place with the attendance of the WSUG members who were asked to explain details of the operation of the facility. At supported schools, a close inspection of the constructed latrines, hand washing stations, water tanks and other facilities was performed observing to what extent the facilities are operational and the level of maintenance. A small number of villagers who were connected to existing water system and/or were supported by construction of a latrine were also visited.

#### 3.2 Methodological and other obstacles

The evaluation team has identified the following methodological and other obstacles / risks of the planned evaluation and formulated appropriate mitigation strategies:

OBSTACLE / RISK	MITIGATION
Language barrier	Funds are set aside in the budget to cover the costs associated with interpretation and translation. These costs are carefully planned with sufficient reserves to ensure that in the event of unexpected circumstances or expanded needs, the applicant will have sufficient funds to cover these services.
Insufficient knowledge of the local context causing misapplication of evaluation methods (questions in individual/group interviews or questionnaire surveys that respondents do not understand or cannot answer).	For the purpose of the evaluation, the involvement of a local expert who has sufficient knowledge of the local context and has established informal networks at the local level has been employed. This expert provides valuable knowledge and support that is essential for the successful implementation of the evaluation in the region.

Lack of flexibility and responsiveness in communicating with local communities due to language barriers and low availability of ICT in rural areas.

Engagement of a local expert and sufficient time to conduct field research. A local expert is, in our experience, crucial for the successful implementation of an evaluation mission. The local coordinator is the intermediary for communication between the evaluation team and local communities and local stakeholders. In an earlier evaluation of CzDC (DRR programme), the local expert demonstrated the ability to independently implement evaluation methods - data can therefore be collected not only during the evaluation, but over a longer time horizon using the independent work of the local expert.

Specific and very professional focus of the contract

The involvement of accumulated experience in the field of regional development and evaluation of programmes and projects financed from public funds, including the evaluation of projects of CzDC, guarantees a deep professional know-how necessary for the effective implementation of evaluations.

The evaluator, moreover, has unique know-how in the evaluation methodology of several FDC projects, which represents a significant contribution in providing qualitative and detailed analyses of project results. This expertise and experience allow for quality assessment and evaluation of projects and programmes with an emphasis on the relevance of outputs and recommendations.

The team also includes a water and sanitation expert who has sufficient expertise to assess the technological solutions as well as the relevance and adequacy of non-investment activities such as training or information campaigns.

The predominantly qualitative nature of the assignment may result in ambiguous and vague answers to the evaluation tasks. Triangulation is a methodological approach of scientific research that consists in systematically verifying the obtained conclusions by combining several evaluation methods and data sources. This approach is often used to ensure greater reliability and validity of research results by collecting and analysing data from different perspectives or through different techniques.

The application of quantitative methods to the maximum extent possible, involves the use of questionnaire surveys, one of the most common methods of data collection in quantitative research.

Misinterpretation of evaluation findings into evaluation conclusions and follow-up recommendations due to imperfect knowledge of local/national context, communication gaps, etc.

Triangulation of evaluation methods and data sources - more than one evaluation method will be used to answer each evaluation question, their conclusions will be confronted with each other, emphasis on the combination of qualitative and quantitative methods in answering evaluation questions.

Additional verification of any uncertainties using the capacity of the local expert. Written comment procedure involving also project implementers and partners, involvement of the reference group in the comment procedure.

A very early evaluation after the end of the project implementation (within a few months) will not allow for a sufficient evaluation of the sustainability and impacts of the projects.

Adaptation of the evaluation design - in the case of sustainability, the evaluation focuses primarily on the key sustainability factors and their achievement by the final beneficiaries - thus the potential for sustainability will be evaluated.

Significant adjustments to project implementation, particularly in terms of the number and volume of water technologies installed, significantly affect the theory of change and expected aid outcomes.

The evaluation design reflects these realities, including the impacts of the COVID-19 pandemic, and the impacts of the limitations in the number of installed technologies (and their causes, or the validity of the reasons for the changes and the adequacy of the response) will be explicitly addressed in the evaluation.

The installation and commissioning of water management technologies, which represent one of the key outputs of the projects, implemented just before the end of the project implementation generates significant risks regarding the sustainability of these outputs and results (insufficient adoption of the technology, insufficiently tested procedural and institutional framework for sustainability, only "theoretical" definition of the economic model, etc.).

The impact of this on the results and especially the sustainability of activities aimed at increasing access to drinking water is given special attention in the evaluation design.

#### 3.3 Evaluation team

When putting together the implementation team, great emphasis was placed on the theoretical knowledge and practical experience of all the team members. The evaluation team of Naviga Advisory and Evaluation s.r.o. consisted of the following members:

- Lukáš Maláč, project manager and main evaluator with extensive experience in project
  management and practice in the field of evaluation of programs / projects financed from public funds,
  including evaluation of development cooperation projects of the Czech Republic in Cambodia. Lukas
  took part on the evaluation mission, provided methodological guidance and materials, carried out
  interviews in the Czech Republic as well as in Cambodia and is the main author of the final report.
- Radim Gill, senior expert and quality guarantor with extensive experience in regional development, local economic development and more generally policy consultancy for many institutions and partners in the Czech Republic and abroad, including projects in Moldova, Ukraine, Georgia, Ethiopia and a number of other developing countries. His tasks included methodological oversight, consultancy support regarding project management and, more generally, overall supervision of the activities of project team.
- Miroslav Čapka, independent expert specialized on implementation as well as evaluation / assessment of projects in the field of water and sanitation. His role was to provide technical consultancy regarding implemented solutions.
- Amry Ok, local expert with over 20 years of experience in evaluating development projects of foreign donors in the target country, unique knowledge of the local context and experience with projects focused on rural development and local agriculture development. Amry has taken part on dozens of evaluations in the position of local expert / field researcher for numerous international stakeholders; in the past he was also involved in evaluation of CzDC projects in Cambodia. Therefore, he has vast experience in conducting data collection in local context, including independent facilitation of interviews, focus groups, surveys, etc. Amry took part on the evaluation mission, was facilitating focus groups and interviews and coordinated questionnaire survey. Furthermore, he took care of the second phase of field data collection implemented after the evaluation mission.
- Marie Valinová, junior evaluator was supporting the evaluation team before and after the mission in
  the process of the initial data collection and analysis in the Czech Republic. Key tasks included
  technical and administrative support in creation of methodological tools, assessment and processing
  of collected primary data and involvement in drafting the final report.
- Other members of the evaluation teams worked as interpreters, interviewers, drivers, etc.

## 4. Evaluation findings

4.1 EQ1: Can good practice be identified within the interventions evaluated for further replication in bilateral cooperation or in delegated cooperation with the EU?

#### Effects of support in improving access to drinking water in target communities and schools

The key components of the support that aimed to improve access to drinking water in the target communities and schools were investments into water treatment facilities and clean water distribution infrastructure. According to the project documentation, at least 5 such water systems were planned for construction within the project.

However the project has significantly underperformed in achieving planned targets – after revisions of the original targets in 2021 and 2022 there was, in the end, only one new water system constructed in Tang Krous Keut village (Samaki Meanchey district, Krang Lvea commune).

A number of reasons for this decrease in delivery of the key project output has been put forward by the project documentation as well as stakeholders who were subject of in-depth interviews of this evaluation (representatives of project implementer, project partner – LWD, supplier of feasibility study – G-servis Prague Ltd. and representatives of the Embassy of the Czech Republic to Cambodia as well as the Czech Development Agency).

One of the key sources of the deviation from project plan was the outbreak of COVID-19 pandemic and its impact on global supplier chains. The pandemic led to delays and complications in executing project activities, as it disrupted supply chains, restricted movement, and limited the availability of essential resources and personnel necessary for the construction and operation of water treatment facilities. Consequently, the prices have increased dramatically.

However, this factor alone would not bring about such profound decrease in achieved outcomes of the project – a multitude of other factors have also played significant role.

Original targets were not set realistically mainly due to the fact that originally it was intended that infrastructures for treatment of surface water would be installed. However, this goal had to be revised based on the outcomes of the feasibility study – as the originally planned activities did not take sufficiently into account the regulatory framework and context of target localities:

Cambodia is characterised by a very fragmented structure of suppliers of (piped) potable water with hundreds of small-scale operators / owners of the infrastructure (which often operate only in a handful of villages). This cluttered scene of small-scale private operators is regulated by a system of licenses that are issued by the Ministry of Industry, Science, Technology and Innovation, resp. its district offices — only an operator that holds license for the village in question can connect local households to his own drinking water infrastructure. Due to inadequate monitoring as well as compliance requirements on the part of the District offices it is not rare that villages are not connected to a water system or a water system is installed but not operational, however, despite that, new water system cannot be constructed in areas that are covered by valid licenses.

In effect, there are only specific parts of the Kampong Chhnang province that are not covered by a valid license of private potable water operator. Namely, these are areas in which it is not economically profitable to invest into such infrastructure – the operation of such system would not return the investment (due to an upper limit on price of water that can be charged by private operators – 2500 KHR (ca. 0.6 USD) per 1 m<sup>3</sup> – however, even without this legislative limit the population would very likely not be willing to pay higher fees). These are, understandably, often areas where surface water cannot be treated and the water distribution system would have to rely on groundwater source, which requires significantly higher investment.

Therefore, the list of sites that have been designated as suitable for the investment of the project by the Feasibility Study results could include only those which are not covered by any license – thus sites requiring significantly higher investment costs.

Moreover, as it was highlighted by the authors of the Feasibility Study, the quality of groundwater also played a role in increasing the costs of the treatment facility – as it induced higher investment costs of filtering technologies than it was expected by the original plan.

Further increase in costs was, according to representatives of the implementer as well as the Embassy, caused by lacking data – most of the geological and hydrological data had to be collected by the project supplier in the course of the elaboration of the Feasibility Study, which further increased the costs of the project.

Last but not least, the requirement on the implementation of Czech technologies also contributed to a limitation of project activities – these technologies are of course more costly than local ones, moreover, technical and logistical difficulties related to procurement processes and transportation of equipment to the target region have contributed to delays in implementation. In the end, the one treatment facility was constructed and brought to operation very late in the project implementation (which has potential knock-on effects on the efficiency and sustainability of the project).

All these complications that arose on the top of setbacks caused by COVID-19 and its impacts, can be, to a large extent, attributed to:

- Insufficient / lacking inputs. Although the implementer and his partner are very well rooted in local communities and thus know the context of the target region well, the project was identified and formulated without having access to key technical inputs with regard to regulatory framework, geological and hydrological situation, market analysis, etc. In this context it must be highlighted that all these inputs were the subject of the Feasibility Study that was elaborated in the first phase of the project. The project outputs were, in effect, formulated without having access to key parameters that are decisive factors in designing an adequate solution for local context and thus prices of the water treatment facility.
- Lacking experience on the part of the implementer (DECCB) and local partner (LWD) of the WASH project in Kampong Chnang with designing and successfully implementing this type of project. Both these organizations are experienced in providing support to local communities (including WASH related activities, such as trainings, public outreach and campaigns, etc.), however, they lack technical expertise in the field of WASH infrastructure. Despite cooperating with an experience partner / subcontractor within the implementation of the project, the formulation of the project lacked sufficient technical capacities.
- The overall approach / modality of the support: the project was implemented as a grant, which required a consortium of NGOs with the experience of supporting local communities and highly specialised private company. Moreover, the call for proposals was published without providing the key parameters that would be necessary for calculation of appropriate price. In other words, it was expected that within the project a feasibility study as well as its implementation would be delivered (and all of that within only three years of implementation). However, correct formulation of appropriate solution is conditional on having access to inputs from a feasibility study. In effect, the proposed volume / budget (i.e. number of facilities that could be built by a given budget) had to be, to a large extent, estimated by an implementer that lacks appropriate technical expertise.

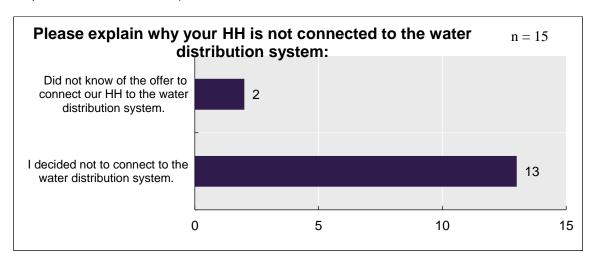
According to the Final Report of the project there were 574 households connected to this water system in two villages, namely Tang Krous Keut and Tang Krous Lech as of January 2024. However, as to the time of the field evaluation mission in September 2024, there were only 332 connected households in these two original villages, namely 194 in Tang Krous Keut (out of 346 total households, i.e. 56 %) and 138 in Tang Krous Lech (out of 287 total households, i.e. 48 %). According to the information provided by the members of the WSUG established for the operation of the water system in Tang Krous Keut, more than 550 households were originally connected to the water system, however, a number of these households decided to disconnect from the system, and another part of households was disconnected by the WSUG after not consuming any water for 2 months.

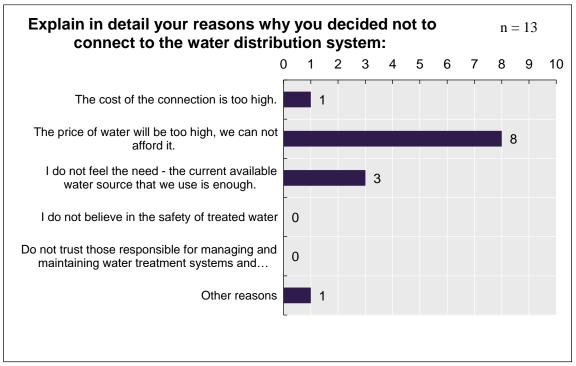
Following the drop in the number of connected households, the WSUG has decided to connect another village, Sambok Kreal (in the same commune) to the existing water system, which is ca. 5 km away from Tang Krous Lech. As many as 55 households from this village were connected to the water system (out of 128 households in total, i.e. 43 %) as of August 2024. The cost of connection was 50,000 KHR / household (ca. 12.5 USD).

On the top of the three villages, also the primary school in Tang Krous Keut was connected to the water system, providing clean water to the students, which is very beneficial for improving the hygiene and health of the students and, consequently, it increases attendance and learning outcomes (see below).

The key reason for not connecting to the water system at all or being later disconnected is financial. This was proved by the questionnaire in which 15 out of the 50 random respondents from Tang Krous Keut and Tnag Krous Lech households were not connected to the water system. Most of these respondents (13) decided not to connect (only 2 respondents did not have the information about the availability of system of

piped potable water in their village) and the prevising reasons were the high costs of consumption (8 respondents out of these 13).

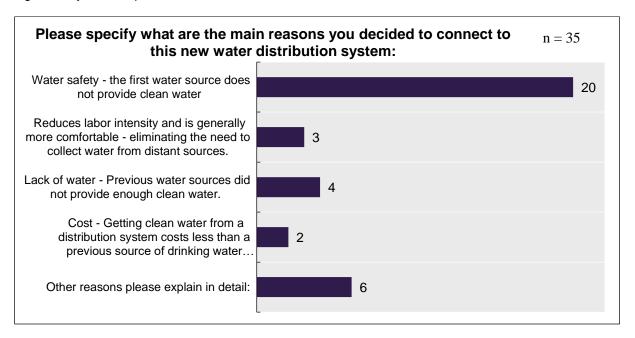




Surprisingly, only one respondent claimed that his/her household did not connect to the water system because of the high cost of connection. However, this is mainly due to the fact that the households that are designated as poor were offered to connect for free (whereas the standard connection fee was 50,000 KHR, ca. 12.5 USD).

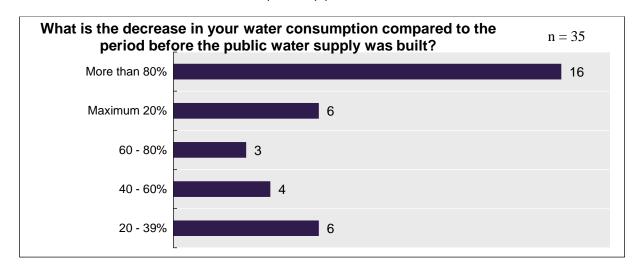
Similarly, high costs of consumption were cited as the most relevant reason for not connecting by the participants of the FGD in Tang Krous Keut. However, some of the participants claimed that they would connect in the future when the need for clean water in their HH is higher (typically their children are studying away from the village now and after they return the HH will connect). Similarly, most of the respondents of the questionnaire (11) who are not connected to the water system claim that they plan or consider to connect in the future. It has been, however, observed that in some cases even a lack of trust regarding the quality of piped water remains as a key obstacle – villagers claiming that the water smells, tastes or looks oddly and they do not trust the quality is better than their own water sources. Even among those HHs who are connected a practice of boiling the supplied water is occasionally maintained, even though the WSUG regularly tests the water quality.

Among those respondents who did connect to the water system (35 respondents, the sample thus represents more than 10 % of the connected HHs in the two original villages) the prevailing motivation for connecting to the water system and consuming piped water remains water safety (20 respondents, 57 %). Other reasons such as reducing labour intensity or insufficient capacity of the previous water source are significantly less frequent.



Among those who provided other reasons, common themes included ensuring a backup supply and convenience. Respondents mentioned wanting protection against well failures, ease of use, and trying out the quality of clean water.

Almost a half of the respondents (16 out of 35) use the new water system for more than 80 % of their overall water consumption, however this share is lower by the majority of the respondents, in 6 cases the consumption from the new water system constitutes less than 40 % of their overall consumption. Naturally, the consumption fluctuates throughout the year as many households are collecting rainwater during the rainy season – and thus decrease their consumption of piped water.



It is not surprising that the costs of consumption of piped clean water is the main reason for this behaviour. Significant part of the households therefore continue to rely on existing wells or rainwater harvesting in the rainy season. Also, similarly to results from the FGD, persistent doubts about the sensory quality (taste, smell) of piped water plays a role in limiting its consumption by some respondents.

Overall, respondents of the questionnaire as well as participants of the FGD are satisfied with the available clean water (only 3 of the 35 respondents expressed neutral opinions). The satisfaction is mainly connected to the convenience of using tap water and also the fact that HH do not need to worry about lack of water during dry season or in case their well is damaged. However, a significant number of respondents highlight the reduction of health risks due to reliable clean water, which contributed to a higher quality of life and reduced stress. The same was confirmed by the members of the FGD, who observe that especially children are getting less sick with illnesses related to water quality and lacking hygiene and the occurrence of serious cases has, according to the FGD participants, decreased significantly.

Furthermore, the project has contributed to an increase of access to clean water by providing financial support for connection to existing private water distribution system (Heng Water Supply) in two communes (Peam and Chheau Laeung). According to the project documentation, two villages were supported in their access to clean water system of Heng Water Supply, namely Chrak Tnoat and Takeo. This support was also confirmed by Mr. Heng, owner of the private water operator, who received support by LWD for expanding the connection of his water system. However, no connections to this system could be provided in the Chrak Tnoat village as there are unresolved disputes regarding the ownership of license for this village. This license is, according to the village and commune leaders, currently held by a different operator. This operator did, according to the commune chief as well as local inhabitants (information provided within FGD) collect fees for connection to the water system, however, the distributed volumes were extremely insufficient and lately no water at all is being distributed, mainly due to internal issues. The inhabitants are therefore to a large extent discouraged from relying on the distribution of piped water in the future. Heng Water Supply cannot, in effect, connect households to his water system in this village until the dispute is resolved – although new connection is currently being built through the village to connect neighbouring village.

Conversely, the project's contribution to connection of HHs to existing water supply system (Heng Water Supply) was confirmed in Takeo village by the village and commune (Peam) chiefs as well as by local inhabitants during FGD. Support from CzDC helped more than 20 mostly poor households to connect to existing water system by covering the bigger part of the connection cost (the HH did pay only 80 th. KHD, 20 USD instead of the normal fee of 280 th. KHD) and in effect, almost all HHs in the village are now connected to an adequate water supply system (108 out of 110 HHs, according to the village chief). Interestingly, FGD participants in Takeo confirmed that connecting to the water system had benefits not only with regard to health and convenience of supply, but also economic benefits: in the past the HHs had to buy water from a water tank seller and spent around 40 th. KHD per month on water on average. After being connected, they spend only about half of that amount (20 th. KHD) for consumption. The total payment decreases in the rain season when HHs harvest rainwater and do not need to consume piped water at all – in such case they are required to pay 1,000 KHD / month (0.25 USD).

In effect of the support from CzDC in this as well as other villages, 90 % of HHs in the whole Peam commune are connected to the potable water system and the commune achieved an ODF² status about a year ago indicating a major milestone in improving sanitation practices. The support from CzDC has not only facilitated access to clean water but has also played a crucial role in promoting better hygiene practices, ultimately leading to the commune's ODF status.

According to the Final Report of the project, 2 target schools in Chrak Tnoat (primary and secondary) were also connected to the private water supply system. This fact has been confirmed by the management of these schools, however, the water from this connection is rarely or not at all consumed – due to the costs of consumption. The school uses instead own manual pumps to fill elevated water reservoirs for hand washing stations (reservoirs as well as the hand washing stations were built with support from the evaluated project). Drinking water is provided to students by filtering the well water, filters and tank were provided by a different donor.

Effects on increasing skills, technical knowledge and capacities in WASH that ensure adequate resources for proper operation and maintenance of installed technologies

<sup>&</sup>lt;sup>2</sup> Open Defecation Free status – key milestone of the government of Cambodia strategy in WASH sector.

Activities aimed at increasing the technical capacity of relevant stakeholders in operation of potable water treatment and distribution infrastructure. In this regard, the primary addressee of the capacity building activities should be the members of WSUG in Tang Krous Keut / Tang Krous Lech which is responsible for the operation and maintenance of the newly built water system. According to project documentation as well as information provided by project implementer and other stakeholders involved in the implementation (subcontractor), members of WSUG as well as relevant public institutions (especially the village and commune chiefs – who are, however, members of the WSUG) have received trainings in operation and maintenance of the new facility.

However, results of data collection in the field suggest there are significant limits when it comes to the technical capacities of local structures. Following the individual and group interviews with the representatives of the commune and villages as well as FGD with members of the WSUG and evaluation visit to the constructed water treatment facility, it needs to be concluded that local structures do not have sufficient capacity to operate and maintain the infrastructure in the long term.

Local structures (members of WSUG) lack any technical knowledge with regard to the process of treatment of groundwater that takes place in the constructed facility. This part of the technology was supplied directly from the Czech supplier in a container and, from the perspective of the members of WSUG, this container represents a "black box" - they do not understand the processes of water treatment that take place within this facility and have insufficient knowledge regarding proper maintenance. Moreover, members of WSUG, according to their own statements, do not receive any support from the outside regarding proper maintenance and operation. They do not know who to contact in case anything goes wrong with the supplied technology. In effect, no maintenance has been done in the water treatment station (the "container") in the duration of 8-9 months of its operation, members of WSUG do not have the knowledge whether any maintenance is required at all and when. The status quo is somehow better when it comes to other parts of the technological solution, such as pumps or aggregate, as this equipment is not completely unfamiliar to the members of WSUG and, according to their own assessment, local capacities could be found in case these mechanical parts of the system would break down. Still the members of WSUG do not feel sufficient support from the (former) project implementer, partner or relevant administrative capacities at district or province level. One of the examples of this deficiency is the fact that there is a minor malfunction on the diesel aggregate that was delivered as a part of the technological solution. This aggregate should turn on automatically in case of power outage, however, that is not the case - member of WSUG must start the aggregate manually when the electrical power is cut. This situation has been unchanged for more than 2 months at the time of our visit - although the technology is clearly still within warranty period and fixing the problem should therefore be fairly straightforward.

Members of the WSUG did acquire sufficient knowledge with regard to the pipe connections. They have sufficient equipment as well as skills necessary to repair leaking pipes on their own as well as expand the network. A proof of this is the fact that a new village, which is about 5 km from the nearest point of existing infrastructure, was connected during the month of July and August 2024. Members of the WSUG were able to independently lay down the key pipeline and, subsequently, connect individual households, including the installation of the water consumption meters. However, based on the field visit it is concluded that even in this area the local structure would benefit from further training in proper technology of laying of the water pipes. It seems, that the key issue is pipes being laid down in too shallow excavation, thus laying less than 50 cm bellow the ground surface. This results in the infrastructure being frequently damaged, especially during agricultural works.

Furthermore, there seems to be a significant lack of proper organization and financial management capacities at the part of the WSUG. Although the WSUG is able to effectively collect consumption fees from connected HHs, it is economically struggling. In the first eight months of the operation of the water system, the WSUG was able to collect a total income of ca. 5,500 USD, it was not able to create any reserves for future maintenance and replacement of technologies. The key reason for this seems to be primarily excessive losses that occur in effect of damage to the pipe system. As the materials provided by the WSUG suggest, these losses between the pumps and HHs account to ca. one third of all water consumption. This constitutes an excessive financial burden on the operation of WSUG – the high consumption of electricity or fuel (in case of power outage) cannot be recovered by collection of fees on these losses.

The key reason for these losses seems to be inadequate organisation of labour related to the water treatment facility. Members of WSUG are involved as volunteers (although ad-hoc financial rewards are

being paid) and no clear division of responsibilities and accountability has been agreed on. In other words, the facility lacks permanent operator who would be employed by the WSUG and would be responsible for its proper operation. As a result, losses of water due to damaged pipes are often discovered with a delay (unless reported by the person who damaged the infrastructure immediately) and it can take hours or even days before these leakages are discovered and dealt with. The WSUG also clearly lacks capacities in proper financial management and planning and is not capable to create any reserves for future maintenance and investments.

These issues have clearly been caused mainly by the late implementation of the key investment activities in the project. The project had to deal with numerous objective hurdles to timely implementation. Some of them have been discussed above, including impacts of COVID-19 on the supplier chains as well as logistics and efficiency of public institutions – in effect the delivery of the container with the water treatment technology from Czech Republic to the final destination in Tang Krous Keut took considerably longer than previously expected. Another reason was the problematic design of the project as well as its implementation structure, which was discussed above. In effect, the public procurement for the supplier of technology had to be repeated as no private company was interested in fulfilling the requirements set out in the first public procurement due to high economic risks (available budget would not be sufficient to cover required supplies and works). Consequently, the major investment was done very late in the project and the water treatment and distribution plan was opened only less than 2 months before the end of the project. Therefore, although the local structures did receive some trainings before the delivery of the technology and was trained in operating the system at the handover, no subsequent support was provided when the water system was finally operational. It is clear that theoretical trainings are not sufficient in this context, an operator as inexperienced as the members of WSUG have to be receiving support in the process of actual operation. dealing with operational trouble and difficulties. Due to delays of the project, this was not possible and the members of WSUG are feeling left alone to cope with the on-going problems on their own.

## Effects of support on improving access to sanitation facilities and hygiene habits in target communities and schools

According to data presented in the Final Report, the total support provided in the field of sanitation was downscaled when compared to plans in the project documentation. Key activity in this regard was the installation of latrines and hand washing stations, along with water tanks (in most cases) to provide water. Originally the project planned the construction of 4 latrines and one hand washing station in each of the 16 schools that were supposed to be supported. Finally, eleven schools were supported with 20 units of latrines in 7 schools (i.e. 10 constructions – each latrine contains 2 units) along with 8 washing stations constructed also in 7 schools. 11 schools were supported in total.

The reason for this downscaling is not only budget saving (some activities had to be, according to the information provided by implementer, downscaled in order to allocate sufficient financial resources to the construction of the water treatment and distribution infrastructure in Tang Krous Keut), it also reflects actual needs of target schools. There is a number of other donors that support the construction of latrines and hand washing stations - at some of the visited schools there were 5 or more different latrines constructed by different donors. School directors have norms on the number of latrines / hand washing stations they need to provide based on the number of children attending the school and look for donors to construct the respective number of facilities. Therefore, a number of schools that were addressed did not require a construction of an additional latrine or hand washing station.

The results of the analysis therefore need to be understood in this context. Especially in the case of latrines, support from CzDC was in all cases that were analysed only one among other donors without bringing significant added value (on the top of simply increasing the capacity of sanitation facilities at these schools). On the other hand, hand washing stations constructed with the support of CzDC were in some cases the first facility of this kind in the supported school, where it replaced the previous practice of washing hands in buckets with water.

Following data gathered from the supported schools within individual interviews with directors (5 individual or group IDI in total) as well as multitude focus groups with teachers and/or members of School Support Committees (4 FGDs in 5 different schools in total – in Chhrak Tnoat a joint FGD for primary and secondary school was organized) clear impacts of support provided within the field of sanitation have been identified by all stakeholders:

- Children have acquired better hygienic habits, clear behavioural change has been noticed by all stakeholders in all of the visited schools.
- In effect, in all the schools it has been observed that children and their clothes are generally cleaner.
- Positive impacts of the support on health of children were observed by teachers as well as parents children are less sick due to strengthened hygiene habits (hand washing) as well as due to the fact that open defecation was eliminated in supported schools, along with outbreaks of related diseases.
- In some schools (especially secondary schools), a specific positive impact on the increase in school attendance of girls has been explicitly observed, due to increased awareness as well as better sanitary infrastructure related to women hygiene.

It must be reiterated that these positive impacts are not solely due to the support provided by CzDC. As it was mentioned, in all the visited schools there were other donors who provided similar support (construction of latrines, hand washing stations and/or access to safe drinking water). However, in some of these schools no hand washing stations were available before the support from CzDC. Moreover, school representatives and teachers highly appreciated "soft" activities provided by the project partner, LWD, (such as trainings, awareness campaigns, trainings of trainers at schools, etc.) in raising the awareness of sanitation and appropriate behaviour in personal hygiene. The direct access of LWD to the supported communities is an added value of project supported by CzDC.

At the same time, it should also be noted that the constructed infrastructure was in several visited schools in deteriorating technical condition, although still operational in all schools. Specifically, water taps (levers) were broken at some stations, latrine doors and seats damaged, some of the plumbing leaking, etc. The maintenance of the infrastructure is being neglected in some cases. This is, according to the statements of directors, mainly due to insufficient funds for infrastructure.

Within the activities aimed at sanitary infrastructure, the implementer / partner also constructed latrines at households, targeting specifically vulnerable and poor HHs. This is, in fact, the only investment activity of the project, which was not downscaled from the original plan, on the contrary, on the top of 280 originally planned latrines six more were constructed specifically for disabled family members. The feedback regarding this activity is thoroughly positive and it has significantly improved the sanitary standards in poor HHs, according to some FGD discussions as well as IDIs with village and commune chiefs. For instance, the support from CzDC has been instrumental in contributing to reaching ODF status in Peam commune, which is a government's priority on WASH sector.

#### Sustainability of achieved results

The long-term functioning of the investments into water treatment is highly questionable. It seems evident that the constructed water treatment plant in current status quo is not sustainable in the long term. The operator of this infrastructure, WSUG, is not able to accumulate any reserves and will lack capital to perform even operational maintenance (e.g. replacing filters), let alone financing major repairs or replacements of some pieces of the technology.

However, based on the expertise of local as well as Czech experts, it is evident that the operation of the water treatment facility can be made profitable and sustainable in the long term if sufficient support is provided to the local structure<sup>3</sup>. The system has sufficient number of paying customers and a prospect of expanding the pool of customers even further, which should be sufficient to establish a sustainable model if the way how the system is being operated is changed – providing that the most burdensome issue, namely the high volume of water losses from the system is dealt with. In general, there are two possible ways of a better organization of the system:

The WSUG clearly establishes structure, responsibilities and accountability. This would require employing a full-time operator accountable for proper operation, maintenance and cutting down the leakages (i.e. most importantly, discovering them in a timely manner). Furthermore, a part-time position should be created for the

<sup>3</sup> One of the high potentials for increasing the profitability of operation of the water system that is currently not at all taken advantage of is bottling of drinking water. As one of the experts clearly pointed out, the profit margin on selling bottled water to HHs that do not have access to other sources of safe drinking water is an order of magnitude higher than the profit margin on delivering piped water. Moreover, the technology that was delivered to Tang Krous Keut is prepared for water bottling – as the expert assessment of the technology clearly shows, the design was made with this option in mind. Still this is not taken advantage of and such option was not even mentioned by the members of WSUG during the evaluation visit.

- financial management for the water system. In this model, the community should formalize its structure, creating a community owned entity in which the WSUG members would be rather in position of a board than volunteer operators as it is the practice today.
- 2. Renting the facility to an existing private operator while setting up clear key indicators and responsibilities. The operator would then be responsible for the long-term functioning of the system, including reinvestments of a share of income into the infrastructure and would also be required to pay a monthly renting fee which could be used in the community to benefit the vulnerable population.

In each of these scenarios, a clear financial model of operation must be established which clearly states what percentage of income needs to be set aside for maintenance and repair and the percentage of income to be accumulated for future re-investment. Also clear capacity building plan needs to be formulated in case that the community-owned structure will take care of the operation.

As it was noted by the local expert, voluntary based community water systems almost always lead to failure once major repair or reinvestment is required. Therefore, this model needs to be changed in the case of the Tang Krous Keut / Lech WSUG if the long-term sustainability is to be reached.

As for the sustainability of the smaller investments into water tanks and sanitary facilities, the sustainability was discussed above and is, again, rather questionable. It has been recorded that damages to the facilities are not being repaired due to lacking funds of the schools in question. It should also be noted that the schools seem to be used to a system where numerous donors and NGOs are coming to invest into these facilities, which may constitute a perverse incentive – dilapidated older latrines are not being repaired and new ones are being constructed instead.

#### Identified good practice, factors of success and failure

Several examples of good practice have been highlighted by various stakeholders:

- Technical solution that was installed in the scope of the project is seen as an example of good practice by various stakeholders in the target country especially by the Kampong Chhnang province department of the Ministry of Rural Development (MRD) as well as independent water specialist of the Rural Water Sanitation Team (which is a social enterprise service provider for water system operators). These key informants rate the installed technology among the most advanced in the region (according to the province authority representative it is even the best technology that has been installed in the rural areas of Kampong Chhnang province). Especially it is highlighted that the technology has been tailored to the local context and designed with respect to the chemical and physical properties of the water source. Last but not least, the scalability of the technology is also seen as an example of good practice.
- Bottom-up approach of the project implementation that is rooted in strong and long-term presence of the project partner in the region. In effect, more relevant solutions could be designed. Project put a strong emphasis on identification phase in local communities and similarly in the implementation phase the presence of project partner in the target regions was strong. Due to the application of bottom-up approach, which at the same time involved relevant institutions at district and province levels, it has been observed that the project implementation has avoided some of the difficulties on the ground that similar projects are facing, e.g. ownership of land plots where the pipes are being laid down. Even more importantly, it has been observed that in effect of this bottom-up approach, the ownership of the project outcomes at the local community is especially high. The community takes pride in owning the (comparatively advanced) water system and is motivated to maintain it by their own capacities. This attitude has manifested in the extension of the water distribution system to another village ca. 5 km far away which was carried out by the local inhabitants, including connecting more than 50 new households to the water system.
- Another good practice is the cooperation with other NGOs, public institutions and other relevant stakeholders at the level of province while implementing "soft" activities in WASH, such as trainings, awareness campaigns, etc. See below in EQ2 for more details.
- Last but not least, the specific targeting of some project activities at vulnerable and poor HHs was also seen as good practice by numerous actors. Especially in areas where the penetration of access to water infrastructure is rather high due to presence of private operators it is important to implement interventions specifically targeted at the vulnerable segments of population, who can greatly benefit from having access to safe drinking water (even economic benefits), however, the unsurpassable bottleneck for them are the connection fees. As noted above, due to the activity of CzDC, the Peam Commune has reached the status of ODF. This good practice could have been implemented primarily due to the strong presence of the project partner in local communities.

On the other hand, as noted above, the design of the project call and chosen modality is rather not a good practice and is one of the factors of the failure in meeting project objectives (or rather setting unrealistic objectives). As noted by the employees of the Czech Embassy in Cambodia, the project setup led to a very

profound identification in communities, but insufficiently took into account technical and other aspects of the implementation.

Another crucial negative factor of the project was the very late delivery of the water treatment technology and opening of the treatment facility only 2 months before the project ended. As a result, the community was to a large extent left alone without sufficient technical as well as other skills necessary to operate the facility properly. Although there were trainings before the installation of the technology, many issues arose first within the day-to-day when the community already lacks any support. Late delivery had also impact on higher degree of HHs signing out of the system after several months.

#### Comparison of the approach with similar initiatives by other entities

One of the key differences from similar projects was the bottom-up approach, which provides potential for better sustainability than in similar cases in the past. However, same "downward spiral" factors are observed which experts have identified in past failed community owned initiatives – high rate of losses, structure without clear accountability, lacking technical skills (and not linked well to available technical skills), failure to create reserves, etc.

4.2 EQ2: What is the level of coordination and coherence in the WASH sector in Cambodia and the resulting opportunities for CzDC?

#### Coordination and coherence in WASH sector in Cambodia in general

Coordination of WASH sector in Cambodia is complicated by fragmenting the agenda across a number of ministries. This issue is mirrored from top down, thus being mirrored from the national to province and local levels. Private sector active in WASH is being coordinated by MISTI, which is responsible for issuing licenses (at the level of districts) to private operators. In the other hand, community-based water supply systems fall under the jurisdiction of the Ministry of Rural Development and its offices at the level of provinces and districts. The distinction between these two ministries is delimited as follows:

- Ministry of Rural Development is responsible for rural water supply and sanitation;
- Ministry of Industry, Science, Technology and Innovation is responsible for water supply to urban areas (provincial, district and small towns), regulation of the private sector involved in piped water systems, setting quality standards for drinking water and water quality in piped supplies<sup>4</sup>.

This heterogenous system of coordination is further complicated by the competencies of other ministries in the WASH agenda, most notably the Ministry of Water Resources and Meteorology (especially when it comes to quality of water sources) or Ministry of Environment (in case the water sources are in protected areas). Furthermore, implementation of projects aimed at sanitation and hygiene at schools is in the competence of the Ministry of Education, Youth and Sports.

This fragmented context in which the responsibility for coordination of WASH sector is distributed not only horizontally, but also vertically (involving public authorities at national, province and district levels) contribute to a rather low coordination within the WASH sector in general.

As it was mentioned above, Cambodia is specific by its very fragmented system of hundreds of low- to medium scale operators of water supply systems, which is governed by a system of licenses. Moreover, these private operators are in most cases also the owners of the infrastructure, which further complicates any efforts aimed at coordination of the supply of clean water – and is quite unique in international comparison. Public ownership of infrastructure is found only in larger cities, such as the Phnom Penh Water Supply Authority. The licenses are being issued and (in theory) monitored by district offices of the MISTI; the quality of coordination, monitoring and enforcing compliance with the licence conditions (including quality standards and sufficient capacity of distribution) is therefore to a large extent dependent on the capacity and quality of governance at these district level offices. This system is further complicated by existing community owned infrastructures which are in the competence of MRD at province level and is not governed by the

<sup>&</sup>lt;sup>4</sup> For details see National Strategy for Rural Water Supply, Sanitation and Hygiene 2011-2025.

system of licenses. Also, it should be noted that the "ecosystem" of private operators is a very dynamic one characterised by frequent acquisitions, merges of different operators or, conversely, breakup of local structures (as it was experienced by the evaluation team first hand in the case of Chrak Tnoat). Clearly, it is challenging to navigate through such complex and highly localised system and facilitate any kind of coordination of the sector.

The support from CzDC focused on construction of community owned water system, which should be coordinated by the MRD. In this efforts, the implementer's approach was in line with the requirements and practice in the target country when it comes to institutional setup and the involvement of appropriate institutions at province level – pursuant the provisions of the National Strategy for Rural Water Supply, Sanitation and Hygiene 2011–2025 and related bylaws and guidelines. Interview with a representative of the Kampong Chhnang Provincial Department of Rural Development (PDRD) confirmed sufficient degree of involvement of the provincial office into the process of identification of target localities, selection of final target community / village as well as consulted in the process of designing appropriate solution (technical as well as organisational setup). In this regard the support was coherent with national policies in the WASH sector.

#### Reform of WASH sector, future approach to coordination and coherence of WASH sector

A significant reform of the WASH sector in general and the national policy of water treatment and distribution in particular is being implemented recently in Cambodia in order to increase the coordination and coherence within the sector. These efforts are being implemented in cooperation between relevant government authorities (especially MRD and MISTI) and key international partners who are grouped in the Technical Working Group in WASH sector. These efforts are being rooted in the new National Strategic Development Plan for the 2024–2028 period (in which the sector of water and sanitation should be highlighted under priority 3) which is currently under development and feeds into the overall "Pentagonal Strategy" (Phase I) that sets up the development vision of Cambodia for 2050. Following that, new legislation on water and sanitation is being prepared for adoption in cooperation between state authorities and international partners<sup>5</sup>.

Following this new approach, the practice of community water supply system will be gradually phased out in favour of market-led solutions. As it was highlighted by a number of representatives of international donors and organizations, community owned systems are rarely successful and most often fail once the need of investments into the infrastructure occurs. Community owned systems usually lack skilled workforce, voluntary workers do not have proper training in maintenance and operation and the community is unable to accumulate sufficient financial capacity to sustain the system in a long-term horizon. For these reasons, none of the larger donors is lately providing support to community owned systems and, as mentioned above, there will be an increasing pressure on phasing out of these solutions and transforming them into more efficient formal structures. It needs to be highlighted that many of these trends that have been mentioned as key weaknesses (unskilled management, problem with water loss, inefficient financial management, lacking technical skills, etc.) were observed also on the part of the WSUG that was established for the water system in Tang Krous Keut and it was concluded that long-term sustainability of this system is conditional on a transformation of the management structure.

In another words: approach of the CzDC to increasing the access of target communities to safe drinking water is coherent with current national approaches, however, this model will likely not be supported in the future – coherence of similar solution with the WASH sector legal and strategic framework in Cambodia would therefore be questionable.

As noted, a Technical Working Group for WASH sector has been established in Cambodia. The TWG is headed by MRD and attended by key donors and international organisations in the WASH sector, such as the World Bank, UNICEF, Asian Development Bank, EU, etc. CzDC was represented at the meetings of the TWG by the employees of the Embassy, however, later phased out and at this moment it is not represented at any coordination mechanism at national level in the WASH sector. On the top of TWG, the local donors are organised in a (less formalized) thematic group focused on rural water supply and sanitation, which serves as a coordination platform as well as for discussions and coordination of actions regarding the reform

<sup>&</sup>lt;sup>5</sup> Among other, the new Law on Clean Water Management: <a href="https://data.opendevelopmentcambodia.net/laws-record/law-on-clean-water-management">https://data.opendevelopmentcambodia.net/laws-record/law-on-clean-water-management</a> (available only in Khmer language)

agenda in WASH sector (government is not represented at this meetings, which take place ca. 3 times a year, however, according to the representative of World Bank, the minutes of these meetings are shared with relevant ministries). CzDC is again not represented at this coordination platform.

New approach to the WASH sector in general and availability of access to clean water in particular, especially in rural areas, is being formulated currently at these coordination platforms in cooperation between major donors / international organizations and relevant ministries, most notably MISTI. This approach is being carried forward by different tools – new strategic approach in the revised national strategic documentation, adoption of new legislation as well as new programmes, funding facilities and pilot projects prepared by the donors. All these initiatives are being coordinated (according to the information provided by a number of representatives of donors / international organizations as well as government) and ready to be rolled out in the following months. This new approach will pivot to private operators in the rural areas – as more than 50 % of water connections in the country are provided by private operators and 70 % of population (outside major cities) live in areas covered by licenses by these private operators.

However, considerable efforts will be made to facilitate a consolidation of the market. This consolidation should be brought forward by a "carrots and stick" strategy. International donors will be providing support to the private operators be the means of favourable credit mechanisms (to ensure "viability gap financing") and leveraging private investors. On the other hand, a higher pressure on consolidation will also be exerted by the means of performance assessment and classification of private operators into three categories in order to filter out those who are economically weak and underperforming. These performance reviews should be means to enforce the regulatory requirements related to licenses – including revoking licenses of the operators who are not in compliance with their duties (such as, for example, the operator in Chhrak Tnoat, discussed above). These concentrated efforts by development partners / donors and public administration should lead to decreasing the fragmentation of the market of water operators and strengthen those operators who are running viable businesses.

#### Gaps in the new approach; potentials for coordinated action

It should be noted, though, that one of the key components of this approach are sufficient capacities at district offices of MISTI which should play a more pro-active and assertive role vis-à-vis private operators in their territory. Lacking capacities at this level is considered as one of the most critical bottlenecks of the new approach. As it was discussed above, district offices often do not have even a clear picture regarding the structure of valid licenses and status quo of private operators that are active in their territory; even less are the district offices in most cases capable to monitor compliance with qualitative standards within this "ecosystem" of local private operators. A lot of efforts need to be invested into increasing the capacities and expertise of district / local structures. Another gap that is recognised is related to the top-down character of this new approach. However, one of the key enabling factors of increasing the access to safe water in rural areas is sufficient demand from local communities. This demand side cannot be strengthened by such topdown approach, key are bottom-up local initiatives aimed at raising awareness of healthy hygiene and sanitary habits, consumption of safe drinking water, etc. In other words, local communities need to be engaged and motivated to demand better services, moreover, local population needs to generate high demand on water connection. As the experience with the implementation of the CzDC-supported initiative has shown, demand on stable access to safe drinking water does not emerge automatically, concentrated and long-term efforts at the level of communities need to be invested into raising the awareness, dissemination of good practices, etc. The experience has also shown, that if this work with community is not sustained in longer term (until local inhabitants adopt and internalize new habits and good practices regarding using and consumption of safe water), there will be a considerable share of population who drops out of the system of distribution of safe water and reverts to older practices (mainly due to financial reasons, however, it has been also evident that some members of the community do not understand the added value of access to safe water – do not see a significant difference between water provided by the distribution system and consuming water from own wells or other sources; also local "myths" of tap water having different smell, taste or visual characteristics plays role).

These gaps – increasing the capacity of local administration, bottom-up work with local communities on the demand side, etc. – cannot be efficiently covered by large donors / development partners by the application of a top-down approach (this has been admitted by representatives of some of these stakeholders themselves during IDIs). Therefore, there is an opportunity of other partners and donors to feed into this new approach and complement the top-down policies by coordinated bottom-up approach. In this context, the

high and long-term presence of CzDC / local implementers and partners can be a big added value on which future initiatives may capitalize and, at the same time, ensure high synergies with efforts of other development partners.

Naturally, development partners are aware that there are localities which will not be attractive for private operators to develop even with the support outlined above. Therefore, a coordinated approach to these "green field sites" (as these are referred to by the respondents) is currently being implemented. MISTI will be, very recently, recruiting a consultant (with the support from the World Bank) who will conduct assessment of the structure of licenses and existence of "green field sites" in two pilot regions. Following the results of these pilot studies, these green field sites will be clustered together, and feasibility studies will be conducted in order to identify a viable economic model of operation of water distribution system. On this basis, appropriate subsidies to private operators will be designed and, consequently, public procurement process will be started so that existing operators would be bidding for covering the whole cluster with pre-determined investment subsidy. According to the information by international partners, the WB will be responsible for managing the whole process while Australian ODA will ensure the subsidy scheme in selected pilot green field clusters and UNICEF will be responsible for leveraging private investors for the pilot regions. Due to the experience of CzDC with covering such area with community-based infrastructure (which is seen as a good practice example) there might be an opportunity to enter this system of support for green field sites in regions with strong presence of the partners of CzDC and previous financial support.

## Coordination of CzDC support with other stakeholders, taking advantage of possible synergies; examples of cooperation and its added value

No coordination of the support of CzDC with donors on national level has been recorded. The support relied in this regard on profound identification in local communities, these identification efforts were, however, not coordinated with other donors or international partners.

However, at the level of the project, coordination with other stakeholders did occur to some extent. When it comes to the key activity, namely the investment into the water treatment and distribution infrastructure, the implementation was sufficiently coordinated with the provincial representatives of MRD. This cooperation was beneficial in identification of target community / village where the investment was done. Furthermore, the province MRD was also largely involved in project implementation, most importantly in the training and capacity building activities. Also, it should be noted that the water treatment plant has been constructed on the premises of a local school in Tang Krous Keut, therefore, close cooperation with the Ministry of Education at province level was also vital. As a result, the province representatives are well aware of the constructed water system and may be providing technical support in the operation of the infrastructure (this is, however, not happening, so far).

Furthermore, the implementer / partner of the project did coordinate their activities in sanitary and hygiene field (both investment as well as non-investment activities) with other stakeholders active at provincial level. In this regard the implementer was a member of the group WATSAN which coordinated activities in WASH sector at province level. According to information provided by the implementer, there was a beneficial cooperation with other NGOs regarding trainings and awareness activities in good hygiene practices at schools and dissemination of materials on these topics. Local authorities responsible for hygiene and sanitation were also involved in this coordination – these were often networking with different NGOs and other stakeholders in order to increase efficiency of this "soft" support to schools and communities so that the resources could be well used. This coordination was happening regionally (coordinated which organizations are visiting which parts of the region so that the whole area is covered) as well as thematically. The representatives of the implementer also confirmed that they cooperated with other partners in the WATSAN group on the design of latrines. Last but not least, the implementer did cooperate in implementation with another water system operator in the region, who took part in the trainings of WSUG in operating the technology as well as organization of the structure. The aim of this cooperation was not only to provide actual local practice from the field, but also to establish cooperation between the WSUG and local water system operator so that WSUG could be receiving support from this party also after the project has finished. However, as it was noted above, this cooperation was not sustained - after the project ended there was no contact between the WSUG and local water system operator.

As mentioned above, delivery of sanitary infrastructure (latrines, hand washing stations and, in some cases, water tanks) in the schools was happening in an environment where many other donors and international

organizations are also active. It is not rare that latrines built by five or more different donors were located at the premises of one school. However, the level of coordination between donors on these activities was rather minimal – coordination was done by district representatives of the Ministry of Education and directors themselves – these had available information on the number of latrines and hand washing stations in each school and did direct the project implementer / partner to schools where the number of these facilities was not sufficient according to relevant norms.

In conclusion, some level of coordination was observed at province / district level among the project implementer/partner and relevant administration or other NGOs. This did contribute to more effective spending both in terms of regional distribution as well as thematic coverage in the case of trainings and awareness raising campaigns.

## 4.3 EQ3: To what extent/how have the evaluated interventions contributed to creating opportunities for long-term commercial cooperation?

No opportunities for long-term commercial cooperation were created in effect of the implemented projects. On the contrary, private companies that were implementing (B2B) or took part on implementation (Diaconia project) have effectively left Cambodia and do not, at the moment, plan to focus on this market in the future.

Key reason for this failure in both projects is, according to their representatives, a need for a longer-term presence on the market to develop viable commercial cooperations. Without longer engagement on more than one project, it is not economically viable for the companies to open local representation, which is essential for success on the market.

The failure of the projects to create opportunities for long-term collaboration was partly due to the COVID-19 pandemic, which significantly reduced project activities in both projects that would have been carried out in person. In the case of the B2B project implemented by DEKONTA, the activity aimed at presenting the proposed solution to local authorities and other stakeholders had to be cancelled. This was a key part of the project logic. It was intended to serve the purpose of developing and, above all, presenting a suitable solution for efficient and nature-friendly wastewater treatment in appropriate conditions in the context of public buildings. Without this activity, the project, which had to be carried out entirely remotely by DEKONTA's experts, was left with a feasibility study that can serve as a basis for a future solution to the wastewater management system in the secondary school, but only if an external source of funding is found neither the school itself nor its parent authority (the Ministry of Education) has its own resources to make this investment, which is not a top priority for the school.

Another reason why the support has not led to the development of business opportunities in the case of this company is, according to the observation of the representatives of the supported company, the fact that the Cambodian market is probably not yet mature enough to develop the presented solutions on a larger scale. In many cases, wastewater treatment is not yet a top priority (in the case of the WASH sector, this is mainly the treatment and distribution of drinking water) - so although legislation on wastewater management is being tightened, there are not yet enough projects focusing on local wastewater treatment to develop business opportunities on a larger scale.

In conclusion, the aim of the B2B project was to capitalize on a previous realization of a small wetland wastewater treatment solution in an orphanage in Siem Reap and scale this solution up for a larger public institution – so that a demonstration complex solution could be developed and presented to local, province as well as national public administration as an efficient and environmentally friendly approach to wastewater treatment. This has, however, failed even at the level of conceptual demonstration due to limitations related to COVID-19 pandemics. In effect, the private company has exited the Cambodian market as it concluded that there are not (yet) enough suitable opportunities to develop business cases on the market to justify considerable investments into a permanent representation / presence in the country.

The installation of water treatment plant in Tang Krous Keut is seen as an example of good practice. According to the province MRD authority as well as independent expert this is the most advanced water treatment plant that was constructed in the province and in effect, the quality parameters of treated water that is delivered to connected households are fully in compliance with regulatory requirements. The

installation can, therefore, serve as a "showcase" of technological solution suitable for local context, which is replicable in other areas.

However, despite this positive perception and active showcasing of the water treatment plant as a best practice, the project did not lead to new commercial opportunities for either of the private companies that were involved in implementation. Primary reason is, similarly to the case above, the fact that the investment carried out in the project did not create sufficient critical mass of business opportunities that would enable either of the Czech companies to establish permanent local presence — and thus take part in procurement opportunities for deliveries of technologies outside the context of CzDC support. Furthermore, lacking permanent representation (including service support and access to replacement parts) puts the Czech supplier at a disadvantage in open procurement competition for technologies in projects that do not explicitly support the installation of technologies produced by Czech companies. Therefore, even if the "showcase" of water treatment plant in Tang Krous Keut would convince other prospective investors about the superiority of Czech technology, lacking local representation might likely discourage such investor from selecting this solution.

No follow-up initiatives directly or indirectly linked to the supported projects were recorded. However, feeding future initiatives into the new approach to supporting the development of WASH infrastructure in Cambodia, i.e. complementing the top-down activities of development partners by focusing on institutional capacity building and bottom-up initiatives aimed at encouraging demand for clean water supply (along with raising awareness / knowledge regarding personal hygiene habits and sanitation standards) may present opportunities how to highlight good practice of technological solution implemented in Tang Krous Keut – and thus potentially scale up opportunities for new commercial cooperation with Czech businesses.

#### 4.4 Visibility

The visibility of CzDC is high in the area where the key investment was delivered, namely in the village of Tang Krous Keut and its surrounding. The information about CzDC support is well presented and well known among public. In the other target regions – schools or communes of Peam and Cheau Laeung where the support for connecting households to existing private water operators the visibility of CzDC is lower. The partner organisation of the project is well known within the region and representatives of public institutions at commune or district level as well as inhabitants of the villages or representatives of schools are well aware about the LWD contributions (usually known only as the "L organization"). However, only in smaller number of cases the respondents were also aware of the CzDC financial support to those interventions (with the exception of school directors). It should be mentioned that the information regarding CzDC support is well placed on all the facilities that were constructed or delivered, however, especially in the case of schools, this is often only one of a bigger number of donors whose logos are spread around the premisses.

#### 4.5 Cross-cutting criteria

The support did properly involve all relevant public institutions and have in this way contributed to the support of good governance. CzDC support has also considerably contributed to increasing of local engagement on decision making and participation of locals in community-based structures, which was created in one locality (the WSUG). However, as noted above, the support to building of sufficient capacities of this community structure was not sufficient primarily due to the late delivery of key technologies. Community structure is therefore not well organized and lacks skills in financial management, which seriously threatens the sustainability of the outcomes.

Support has partially contributed to the utilization of local resources in construction of water infrastructure and WASH facilities. However, the key impact of the support on environment is mainly its contribution to the elimination of open defecation in supported communities (and related diseases). Support has also brought potential for implementation of environmentally friendly and cost-effective wastewater treatment, which represents a huge environmental problem in the country. However, no such solution was actually implemented so far.

Support has significantly contributed to increasing the quality of life of the most disadvantaged groups of population in target region, i.e. the poorest households. Due to project activities a significant number of these

target groups have been able to obtain access to safe drinking water, and also more than 200 latrines were constructed in these vulnerable households.

Gender equality was not specifically targeted by project activities, however, specific positive impacts of the support on women were identified. The most significant of these is the construction of latrines in target schools and provision of specific trainings (resp. trainings of trainers) regarding women hygiene. It was observed by the teachers as well as parents across all the visited schools that this support did have positive impact on the school attendance of girls especially in secondary school as they do no longer miss classes during menstruation.

## 5. Conclusions

#### 5.1 Conclusions regarding evaluation questions

(1)<sup>6</sup> The support from the B2B programme has produced good practice in nature-based wastewater treatment measures that are appropriate and effective in the circumstances and replicable across a range of public institutions. However, the visibility of these benefits is too low - the treatment plant was only developed as a feasibility study, which, in addition, contrary to the original plan, was not even presented to representatives of public institutions - the planned seminar could not take place due to the COVID-19 pandemic. Further replication of the solution is therefore highly unlikely at this moment.

(2) Support provided to improving WASH sector in Kampong Chhnang Province has significantly underperformed in achieving the planned objectives, most importantly, it constructed only one out of previously planned minimum 5 water treatment and distribution facilities. There is a multitude of reasons for this underperformance that coalesced, including the impact of COVID-19 pandemics and resulting considerable increase of the costs of construction materials and services. (3) However, notable factors of this underachievement need to be attributed to the chosen design of implementation / modality. (4) Firstly, crucial (technical) parameters regarding local context which are key inputs for price calculation were not known when the project was formulated – as the Feasibility Study was produced first within the project implementation. (5) Secondly, although the implementer/partner had strong presence on the ground and were able to include local communities into the identification of project, they lacked sufficient technical skills/experience to formulate realistic technical solutions from the outset. (6) Last but not least, price estimates relied largely on experience of local operators which own technically inferior solutions that often do not meet all the qualitative criteria of drinking water, and it did not take into account that a technical solution of Czech supplier would be required.

(7) A significant number of households were connected to the newly constructed water system, however, their number dropped by ca. 40 % in the following months. (8) Key reasons for the drop were economic ones, however, it must be concluded that a (9) significant portion of local population is not fully convinced of the advantages of having access to safe drinking water and prefer the older water sources due to economic reasons. (10) This development needs to be, at least partly, attributed to the early exit of project implementer after the water treatment facility was made operational – there was insufficient time to work with the community once they have access to water. (11) As a result, only ca. 50 % of households in target communities are connected to the water system.

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<sup>&</sup>lt;sup>6</sup> Numbers in brackets are used for reference in justification of recommendations.

- (12) Overall satisfaction with constructed water system is high with users appreciating primarily having access to safe drinking water. However, more than half of users combine the consumption with other water sources, mainly to save costs.
- (13) Project has contributed also to connecting households in Peam and Chheau Laeung communes to existing water sources mainly focusing on vulnerable (poor) households. (14) The efficiency of this support is to some extent limited by complicated structure of private licenses and disputes between operators. A profound stakeholder analysis including performance review is thus essential before launching support in this field. (15) However, if support was provided, its impacts were highly beneficial, moreover, in local context the consumption of piped water is even a more cost-effective solution than previous practice for the HHs.
- (16) Also two target schools in Chrak Tnoat were connected to the private water system, however, water from these connection is rarely or not at all consumed at the schools due to financial reasons. Schools rely on own water and donated filters for source of drinking water.
- (17) Support from CzDC has significantly contributed to an improvement in hygiene behaviour and sanitary standards in supported schools and HHs. It contributed to the Peam commune reaching the ODF status. (18) Significant positive impacts on the health of pupils as well as their attendance and studying results were recorded. (19) However, it should also be highlighted that CzDC is in this effort one of larger number of NGOs and other stakeholders, thus these impacts cannot be attributed solely to the support from the programme. On the other hand, sufficient coordination between these stakeholders especially when it comes to "soft" activities (trainings, awareness raising, etc.) has increased the efficiency and effectiveness of the support overall and enabled to broaden the territorial as well as thematic scope of the interventions.
- (20) Support did not sufficiently create capacities for smooth operation and maintenance of the constructed facility, mainly due to delayed implementation of the installation of the water system. (21) In effect, local structure responsible for the operation and maintenance (WSUG) does not have sufficient skills, knowledge and overall capacity to ensure longer-term sustainability of the system. (22) Moreover, organizational model of the WSUG does not respond well to the operational needs of the infrastructure. In effect, the local water system now works well and is even expanding, however, (23) any request for repairs or more complex maintenance constitutes very high risk to the continuing of operation. Despite successfully collecting payments for water consumption from local HHs, WSUG is not able to accumulate capital for future reinvestments. (24) Therefore, the operations and functionality of the water station become unclear after its lifespan or when spare parts are needed. (25) This may be due to the inability to save income generated from water usage, or because of a lack of technical capacity to fix the station, which jeopardizes its sustainability.

#### A number of good practices has been identified:

- (26) Technical solution is a best practice and can serve as a "showcase" of adequate approach as well as appropriate technology;
- (27) Bottom-up approach clearly enables development of solution that is well placed (territorially) and responds to individual context (natural conditions as well as socio-economical). In effect, it creates high ownership on the part of local communities, which is a precondition for long-term sustainability. However, identification with local community is not sufficient for quality formulation deep understanding of technical, legal/regulatory as well as hydrogeological context of the target localities are equally important.
- (28) Cooperation with regional institutions (district, provincial Rural Development department) is an example of good practice and enabled successful implementation as well as potential for dissemination of outcomes and possible replication in the future.
- (29) Cooperation with other stakeholders as well as with relevant institutions at district and provincial levels brought about high efficiency of activities in sanitary and hygiene outreach. Good knowledge of and being rooted in the community of local stakeholders is indispensable in this regard;
- (30) Targeted focus on increasing the access to water and sanitation specifically by the poor/vulnerable households had significant impacts of these vulnerable target groups and is considered as good practice.

(31) Approach of the implementer and his partner(s) was fully in line with national / regional strategies in WASH sector and contributed to fulfilment of national objectives relevant for WASH in some areas (e.g. Peam commune). (32) However, due to changing approach to the WASH sector by national government as well as key development donor the approach supported by the CzDC to ensuring access to safe water in

rural areas is being discontinued. Therefore, it is not advisable to implement similar projects in the future as such approach will no longer be compliant with national strategies and regulations as well as activities of other international donors and organizations. (33) The main reason for phasing out of support to community owned infrastructure is problematic experience with sustainability of these structures due to lacking capacities and capital. (34) Unless the community structure has been transformed into a more formal structure with clearly assigned responsibilities / accountability and sufficient level of knowledge / skills, this model usually fails as soon as need for larger scale re-investments (major repair, replacement of a part of technology, etc.) occurs.

- (35) Negative trends with regard to organisational structure, high inefficiency of operation due to responsibilities not being clearly assigned as well as due to insufficient capacities and lack of technical knowledge have been observed also in the case of the WSUG that was created by support of CzDC.
- (36) In future, the support to increasing the access to potable water in rural areas will pivot on private operators. (37) Significant efforts will be put on consolidation of the fragmented market by putting pressure on compliance with regulatory / licence requirements and quality standards on the one hand as well as system of support of investments based on achievable loans and leveraging of private investors on the other hand. (38) "Green field" areas localities not covered by any license due to the investment costs being too high and/or return on the investment too insecure will be supported by clustering and finding private operators by a means of public procurement which will include subsidies for investment costs that would offset the lower rate of return on investment.
- (39) However, significant gaps exist in implementation of this new approach. (40) Capacity of institutions of district and province levels is a crucial condition for the successful rollout of this approach. These capacities are often very weak or even non-existent. (41) Moreover, significant efforts will have to be made to increase demand for stable supply of clean and safe water on the part of local communities. (42) CzDC has, unlike larger development partners, clear added value in strong presence in selected districts of Kampong Chnang province and existing channels to the community level bottom-up approach has been one of the key good practices that were identified within the implemented projects. (43) Therefore, support to capacity building on the part of district / provincial institutions and demand on access to clean water, including systematic raising awareness of hygiene and sanitary standards and safe behaviour, further inducing demand on access to clean water would ideally complement the larger-scale approach to increasing access to WASH infrastructure in selected pilot regions.
- (44) No opportunities for long-term commercial cooperation were created in effect of the implemented projects. On the contrary, private companies that were implementing (B2B) or took part on implementation (Diaconia project) have effectively left Cambodia and do not, at the moment, plan to focus on this market in the future. Key reason is the lack of a longer-term presence on the market necessary to develop viable commercial cooperations. Without longer engagement on more than one project, it is not economically viable for the companies to open local representation, which is essential for success on the market.
- (45) There is a potential for replication of the technologies installed in Tang Krous Keut village as this water treatment facility is widely seen as a model facility. Focusing on wider-scale presentation of this good practice and, in general, appropriate approach of Czech supplier to local needs, in cooperation with PDRD who clearly consider this facility as the most advanced one in the province, may lead to stimulation of new business opportunities. (46) However, external resources need to be mobilized in order to achieve this goal local institutions or, to a large extent, private operators are not capable to make such investment on their own. (47) Therefore, developing pilot projects that would be synergic to the efforts of development partners and thus taking part on the development of pilot projects especially in the "green field' localities may increase the awareness of the model solutions on the part of international donors and facilitate new commercial cooperation.

#### 5.2 Conclusions regarding evaluation criteria

**Relevance** of the support is **high**. (48) Projects are fully aligned with the national strategies of the target country and, at the same time, in line with the Bilateral programme. Implementation was coordinated with appropriate regional authorities and the project approach constitutes (when it comes to technical solution, involvement of community or cooperation with other stakeholders on "soft" measures in WASH) good

practice. (49) However, in the future the community-centred approach will no longer be the preferred solution to increase access to WASH infrastructure at local level, the implementation / organisational model thus should not be replicated in future projects. Equally, the B2B project represents a highly relevant and cost-effective solution

**Effectiveness** of the support is **low.** (50) Key objectives were significantly downscaled in the course of the implementation and the overall goals were not met. Instead of originally planned at least 5 new water system only one was built. Also most of the other objectives were not met. The only significant exception is the number of latrines provided to (poor) households – planned figure of 200 was exceeded by 8 more latrines designed specifically for disabled members of the households (which was not a part of the original plan).

Efficiency of the support is rather low. (51) Although the "value for money" of the installed technology (which constituted the biggest part of the project spending) was assessed as rather efficient by the expert member of project team (though in multiples of originally projected costs – which was, however, dealt with in the effectiveness criterion), there are still significant issues that decreased the efficiency of the support. (52) First of all, the involvement of oversees supplier clearly increased the costs of project outputs (although, later in the project parts of the supplies for the water distribution infrastructure was done by local suppliers, such as piping; even to this did, however, the implementer resort only after no bidder presented a bid to the first tender, which included the supply of pipeline along with the treatment technology due to the budget being set too low). (53) Moreover, in case that the local operator (WSUG) is not capable to maintain the treatment technology, the efficiency of supplying the rather advanced technological solution (although very relevant) is also questionable. (54) Efficiency as well as effectiveness of the B2B project was limited in effect of the elimination of the communication activities enforced by COVID-19 measures.

**Impacts** of the support are **high.** (55) Target groups as well as local and regional institutions all recognise profound impacts of all project activities on health (frequency and seriousness of illnesses) as well as school attendance of children and their school results.

**Sustainability** of the support is **rather low**. (56) In current status quo the long-term operation of the water treatment station is not sustainable as the local structure lacks sufficient skills – technical as well as in financial management and organisation/overall operation of the facility. (57) Key reason for this is the late implementation of the key activity, namely construction of the water treatment facility, which was opened only ca. 2 months before the end of the project. (58) However, this lack of capacity and skills is, to some extent, offset by high ownership and motivation of local community. (59) Therefore, if sufficient support is provided in timely manner (trainings, consultancy, operational manuals, etc.), and/or the operation model is appropriately transformed, the operation can be made sustainable in a long term. (60) Support provided to schools is equally rather unsustainable – it has been witnessed that schools lack sufficient funds for even small repairs of hand washing facilities and latrines.

## 6. Recommendations

#### 6.1 Project recommendations

Recommendation	Level of seriousness	Primary addressee	Justification /
Support ways how to immediately increase the capacities of the WSUG in Tang Krous Keut / Tang Krous Lech by the means of additional trainings, mentoring and ad-hoc consultancy – technical skills as well as financial management and operation processes. Connect the local structure with technical experts they may turn to in case of emergency. Analyse the suitability of small grants provided directly by the Embassy for this purpose.	1	CzDA/ Implementers Embassy	Lacking capacities and the feeling of "being left alone" represent critical threat for sustainability of the project in Kampong Chhnang (see points 20 and 35). In its current status quo, the operation of the water system in Tang Krous Keut would very likely stop (unless an intervention from relevant public institution would be provided) in case of any larger investment requirements arises (34, 56). On the other hand, the system can be, according to expert assessment, operational and profitable if further capacity building is provided to the WSUG members (59).
Support the transformation of community structure (WSUG) into more formalized structure that would not be dependent on voluntary work of its members. Involve district and province authorities – MISTI and RD departments in developing a reliable and sustainable structure with clearly assigned responsibilities and accountability and professional conduct; secure a license for the new structure by MISTI to operate in the target region (incl. possible expansion). Alternatively, assist the local structure in designing the public procurement and its implementation for a private operator that would rent the infrastructure and ensure allocation of resources for reinvestment as well as provide income for the community.	2	CzDA/ Implementers Embassy	A significant transformation of the operational model of the water treatment and distribution plant in Tang Krous Keut is necessary to ensure the long-term sustainability (34). As the experience with other community owned systems has shown in the past, voluntary-based operation, lack of technical skills and inappropriate financial model are key factors of failures of these community-based systems (33). The transformation may take form of formalization of the current structure into a licensed operator with clearly assigned responsibilities and accountability of its employees or renting the facility to an experienced private operator or other appropriate operational model.
Continue with long-term support of awareness raising, training and capacities building in good hygiene practices, sanitation and healthy behaviour in targeted region,	2	Implementer / partner	Lacking longer-term support to awareness and capacities at local level can be seen as one of primary reasons for the drop in demand for consumption of piped water after the project ended (8). On the other hand, strong presence of project partner in local communities represent

facilitating the demand on access to clean potable water in	one of	the strongest added values of CzDC and further initiatives should
accordance with quality standards.	capitali	ze on this advantage (27,28).

# 6.2 Programme / sector recommendations

Recommendation	Level of seriousness	Primary addressee	Justification
Within interventions aimed at institutional capacity building and good governance focus, in coordination with development partners and national structures, on building local capacities, most importantly at district level in areas with strong presence of CzDC / local partner with regard to the governance and regulatory framework of local water system operators "ecosystem" – provide capacity building as well as technical assistance (e.g. in analysing local structure, developing framework for performance assessment based on licence requirements, providing technical assistance in assessment of performance criteria, such as water quality, etc.). Focus on pilot regions and put emphasis on dissemination of good practice (e.g. seminars for other district / provincial departments, communication to public, etc.).	1	CzDA Embassy	Lacking capacities at district offices of MISTI which should play a more pro-active and assertive role vis-à-vis private operators in their territory are considered as one of the most critical bottlenecks of the new approach to support access to potable water infrastructure in rural areas – and fulfilling goals of Cambodia till 2028 in WASH sector (40). District offices often do not have even a clear picture regarding the structure of valid licenses and status quo of private operators that are active in their territory; even less are the district offices in most cases capable to monitor compliance with qualitative standards within this "ecosystem" of local private operators. CzDC is, thanks to its long-term support to local projects at community level and existing local networks, in good position to effectively fill this gap in regions where interventions were implemented in the past (27-29).
Explore synergies with other partners regarding support to areas in Kampong Chhnang province (target districts where CzDC initiatives and/or their partners are rooted in local communities) not covered by any licenses; take advantage of exiting water system in promotion of good practice, including facilitation of opportunities for long-term commercial cooperation with Czech suppliers.	2	CzDA Embassy	Pilot projects supported in cooperation with key development partners (WB, UNICEF, Australian ODA, etc.) and national institutions aimed at covering "green fields" areas which are not covered by licenses, will be implemented in the next months and years (38). Taking advantage of good practice and experience of CzDC in Kampong Chhnang province and Samaki Meanchey district may be an incentive to focus pilot initiatives into these areas with the support of CzDC and its partners (43). In such case, opportunities for cooperation with private sector at home might appear (46, 47).
Capitalize on existing cooperation with NGOs and other stakeholders in Kampong Chhnang province as well as on	2	CzDA Implementer	Cooperation with local NGOs and other stakeholders as well as local institutions is a good practice of CzDC intervention (28-29). This

existing good relations with Rural Development departments at provincial and district levels and push for deeper cooperation in supporting awareness and appropriate capacities regarding safe hygiene practices in rural areas.			cooperation did contribute to a more effective spending both in terms of regional distribution as well as thematic coverage in the case of trainings and awareness raising campaigns and should be strengthened in the future (29).
Analyse the locally available expertise related to the operation of water treatment systems and, if relevant, identify project in TVET sector aimed at building such technical capacities in WASH sector, taking into account more advanced technologies potentially provided by Czech providers.	3	CzDA / MFA	Lacking local expertise is one of the bottlenecks of development of more advanced solutions (3-6). It also represents a threat to sustainability of project outcomes. This potential weakness, however, also represents an opportunity to implement cross-cutting measures within the Bilateral development cooperation programme between Czech Republic and Cambodia as support to TVET is one of the priorities of (current) programme (within the Objective II – Inclusive social development).

# 6.3 System or procedure recommendations

Recommendation	Level of seriousness	Primary addressee	Justification
Take part in formal and informal cooperation structures in the WASH sector in Cambodia. Complement support of larger donors provided to water system operators (financial instruments, leverage financing, subsidies for financing of viability gap, technical support, etc.) in pilot regions with bottom-up support to capacity building and empowering of communities.	2	MFA / Embassy	In order to develop synergies between initiatives of key development partners in the WASH sector in Cambodia and CzDC that would take advantage of strong experience and track record of CzDC in bottom-up support of communities and institutions, it is crucial to take part on the coordination platforms, both formal and informal (27-30).
Ensure that support to infrastructure projects (especially those that are highly determined by local physical and socio-economical contexts) is formulated after an in-depth analysis of key local parameters has been performed.	1	CzDA	Insufficient / lacking inputs and access to appropriate data was identified as one of the key reasons why the support failed to deliver objectives set in project documentation – i.e. of substantial scaling down of supported water systems to only one (2-6). Project was identified and formulated without having access to key technical inputs with regard to regulatory framework, geological and hydrological situation, market analysis, etc. – all of these were subject of the Feasibility Study, which was, however, elaborated first after the formulation, thus after the objectives were set (4, 6).
Make sure that appropriate technical skills and capacity is available in core project teams of future support to WASH	1	CzDA	Lacking experience on the part of the implementer (DECCB) and local partner (LWD) of the project with designing and successfully implementing

infrastructure; rather avoid implementation of support for investment projects in WASH by grant modality in favour of public procurement or direct budget support.	Implementer	this type of project was identified as another key issue that caused failure to deliver projected outcomes (5). Both these organizations are experienced in providing support to local communities (including WASH – related activities, such as trainings, public outreach and campaigns, etc.), however, they lack technical expertise in the field of WASH infrastructure. In the implementation of the project an experienced partner was involved (G-servis), however, lacking technical expertise in the formulation phase has significantly contributed to problems with meeting project goals.
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# 7. Annexes to Final Report

#### A. Summary in Czech language

#### Úvod a účel

Ministerstvo zahraničních věcí ČR (MZV) iniciovalo hodnocení dvou klíčových projektů v rámci Zahraniční rozvojové spolupráce ČR ( ZRS ČR ) s Kambodžou na období 2018-2023. Tyto projekty mají za cíl zlepšit přístup k pitné vodě, hygienu a technologie čištění odpadních vod, což má přímý dopad na venkovské obyvatelstvo Kambodže a podporuje udržitelný rozvoj v souladu s Agendou 2030.

První projekt, Zlepšení WASH sektoru v provincii Kampong Chhnang, se zaměřuje na zlepšení vody a hygieny (WASH). Realizovalo jej konsorcium českých a kambodžských organizací a jeho cílem bylo především omezit nemoci přenášené vodou zlepšením přístupu k čisté vodě a hygieny. Finanční podpora ZRS za čtyři roky činila 19,5 mil. Kč.

Druhý projekt, B2B: Implementace přírodě blízkých technologií čistění odpadních vod a jejich následného využití v zemědělských oblastech Kambodži, se snažil zavést udržitelné metody čištění odpadních vod v zemědělských oblastech. Projekt se zaměřil na vytvoření studie proveditelnosti pro umělý systém nakládání s odpadními vodami v podobě tzv. kořenové čističky, reps. umělého mokřadu. Celková podpora ZRS činila 201 824 Kč.

#### Hodnotící tým

Evaluační tým společnosti Naviga Advisory and Evaluation byl složen ze zkušených odborníků z různých oblastí, včetně projektového manažera s bohatými zkušenostmi s evaluacemi, senior experta v oblasti regionálního rozvoje a technického experta se specializací na vodu a sanitaci. Zapojení místních expertů bylo kritické, zejména pro realizaci rozhovorů a fokusních skupin a také pro koordinaci dotazníkového šetření v cílových komunitách.

#### Závěry

#### Implementace projektů a jejich omezení

Podpora z programu B2B přinesla osvědčené postupy v přírodních opatřeních na čištění odpadních vod, která jsou vhodná a účinná za daných okolností a replikovatelná napříč řadou veřejných institucí. Viditelnost těchto přínosů je však příliš nízká – čistírna byla zpracována pouze jako studie proveditelnosti, která navíc v rozporu s původním plánem nebyla ani prezentována zástupcům veřejných institucí – plánovaný seminář se nemohl uskutečnit kvůli pandemii COVID-19. Další replikace tohoto řešení je proto v tuto chvíli vysoce nepravděpodobná.

Podpora poskytovaná na zlepšení sektoru WASH v provincii Kampong Chhnang výrazně nedosáhla plánovaných cílů, především potom byla podpořena výstavba pouze jednoho z předpokládaných minimálně 5 zařízení na úpravu a rozvod vody. Důvodů tohoto nedostatečného výkonu bylo mnoho, které byly dále zhoršeny dopady pandemie COVID-19 a následné navýšení nákladů na stavební materiály a služby.

Výsledky a dopady pro cílové skupiny týkající se zlepšení přístupu k pitné vodě a hygienických návyků a přístupu k hygienickým zařízením v podporovaných obcích a školách

Značný počet domácností v cílovém regionu byl napojen na nově vybudovaný vodovod, jejich počet však v měsících následujících po ukončení podpory poklesl o cca. 40 %. Hlavním důvodem poklesu je skutečnost, že se značnou část místní populace nepodařilo dostatečně přesvědčit o výhodách přístupu k nezávadné pitné vodě – ti tak především z ekonomických důvodů dávají přednost starším zdrojům vody. Tento vývoj je třeba alespoň částečně připsat brzkému odchodu realizátora projektu po zprovoznění úpravny vody – nebyl dostatek času na spolupráci s komunitou poté, co získá přístup ke kvalitnímu zdroji vody. V důsledku toho je v cílových obcích pouze ca. 50 % domácností napojeno na vodovodní systém. Celková spokojenost s vybudovaným vodovodním systémem je vysoká, uživatelé oceňují především bezpečnost upravené pitné vody. Více než polovina uživatelů však spotřebu kombinuje s jinými zdroji vody, a to především kvůli úspoře nákladů.

Projekt přispěl i k napojení domácností v okresech Peam a Chheau Laeung, kde se zaměřil na stávající distribuční systémy – se zaměřením především na zranitelné (chudé) domácnosti. Efektivita této podpory je do jisté míry limitována složitou strukturou soukromých licencí a spory mezi operátory. Také dvě cílové školy v Chraku Tnoat byly s podporou ZRS ČR napojeny na soukromý vodovod, ale voda z těchto přípojek se ve školách z finančních důvodů spotřebovává jen zřídka nebo vůbec.

Podpora ze strany ZRS přispěla ke zlepšení hygienického chování a hygienických standardů v podporovaných školách a domácnostech. Mimo jiné tak přispěla také k tomu, že komunita Peam dosáhla stavu ODF (Open Defecation Free) . Byly zaznamenány významné pozitivní dopady na zdraví žáků i na jejich docházku a studijní výsledky. ZRS je v tomto úsilí jednou z většího počtu stakeholderů, pozorované dopady proto nelze přičítat pouze podpoře ZRS . Na druhou stranu dostatečná koordinace mezi těmito stakeholdery, zejména pokud jde o "měkké" aktivity, zvýšila celkovou efektivitu a efektivnost podpory a umožnila rozšířit územní i tematický záběr této podpory.

#### Dopad na místní kapacity a technické dovednosti místních struktur

Podpora nevytvořila dostatečně kapacity pro bezproblémový provoz a údržbu vybudovaného zařízení, zejména z důvodu opožděné instalace. Ve skutečnosti místní struktura odpovědná za provoz a údržbu (WSUG – Water Sanitation User Group) nemá dostatečné dovednosti, znalosti a celkovou kapacitu k zajištění dlouhodobé udržitelnosti systému. Organizační model WSUG navíc není vhodně nastavený ve vztahu k provozu daného zařízení. V důsledku toho sice instalovaný vodárenský systém aktuálně funguje dobře a dokonce se rozšiřuje, nicméně jakýkoli požadavek na opravu či složitější údržbu představuje velmi vysoké riziko pro pokračování provozu. Navzdory úspěšnému vybírání plateb za spotřebu vody od místních domácností není WSUG schopna akumulovat kapitál pro budoucí reinvestice. Provoz a funkčnost vodárny v době po skončení životnosti klíčových komponent nebo při potřebě instalace náhradních dílů tak je velmi nejistý.

#### Dobrá praxe

Byla identifikována následující dobrá praxe:

- Technické řešení je osvědčeným postupem a může sloužit jako "výkladní skříň" adekvátního přístupu i vhodné technologie;
- Přístup zdola nahoru jednoznačně umožňuje vývoj řešení, které je dobře umístěné (teritoriálně) a reaguje na individuální kontext (přírodní podmínky i socioekonomické podmínky). Vytváří vysokou míru ownershipu na straně místních komunit, což je předpokladem dlouhodobé udržitelnosti.
- Spolupráce s ostatními stakeholdery přinesla vysokou efektivitu činností v oblasti sanity a hygieny. V tomto ohledu je nezbytná dobrá znalost a zakořenění v komunitě spolu s lokálními stakeholdery.
- Cílené zaměření na zvýšení přístupu k vodě a hygieně konkrétně pro chudé/zranitelné domácnosti mělo významný dopad na tyto zranitelné cílové skupiny a je považováno za osvědčený postup.

#### Provázanost a koordinace podpory s národními strategiemi a přístupy

Přístup realizátora a jeho partnera (partnerů) byl plně v souladu s národními/regionálními strategiemi v sektoru WASH a přispěl k naplnění národních cílů relevantních pro WASH v některých oblastech (např. Peam commune). Vzhledem k měnícímu se přístupu k sektoru WASH ze strany národních vlád i klíčových rozvojových dárců, však tento způsob k zajištění přístupu k nezávadné vodě ve venkovských oblastech není nadále podporován. Proto není vhodné podobné projekty v budoucnu realizovat. Hlavním důvodem postupného ukončení podpory komunitní infrastruktury je problematická zkušenost s udržitelností těchto struktur z důvodu nedostatku kapacit a kapitálu. Tento model většinou selže, jakmile nastane potřeba větších reinvestic (velká oprava, výměna části technologie atd.).

Negativní trendy s ohledem na organizační strukturu, vysokou neefektivnost provozu z důvodu nepřesnosti přidělených odpovědností, nedostatečných kapacit a technických znalostí byly pozorovány i v případě WSUG, který vznikl za podpory ZRS .

V budoucnu se podpora zvýšení přístupu k pitné vodě ve venkovských oblastech bude opírat o soukromé provozovatele. Značné úsilí bude věnováno konsolidaci roztříštěného trhu tlakem na dodržování regulatorních / licenčních požadavků a standardů kvality na jedné straně a systém podpory investic v podobě dosažitelných úvěrů a pákového efektu soukromých investorů na straně druhé. Oblasti tzv.

"green fields" – lokality, na které se z důvodu nadměrných investičních nákladů nevztahuje žádná licence, budou podpořeny vytvářením klastrů a následnou distribucí podpory pro tyto klastry ve formě veřejných zakázeki, které budou zahrnovat dotace na investiční náklady.

# Mezery v novém přístupu ke zvýšení dostupnosti infrastruktury WASH ve venkovských oblastech a z toho plynoucí příležitosti pro ZRS

Kapacita institucí na okresní a krajské úrovni je zásadní podmínkou pro úspěšné zavedení tohoto přístupu. Tyto kapacity jsou často velmi slabé nebo dokonce neexistují. Kromě toho bude nutné vyvinout značné úsilí ke zvýšení poptávky po stabilní dodávce čisté a bezpečné vody v místních komunitách. ZRS má jasnou přidanou hodnotu díky silnému zastoupení ve vybraných okresech provincie Kampong Chnang a stávajících kanálech na úrovni komunity – přístup zdola nahoru byl jedním z klíčových dobrých praxí. Podpora budování kapacit v místních institucích, včetně systematického zvyšování povědomí o hygienických standardech a bezpečném chování, další vyvolávání poptávky po přístupu k čisté vodě by proto ideálně doplňovala širší přístup ke zvýšení přístupu k infrastruktuře WASH ve vybraných pilotních regionech.

Existuje potenciál pro replikaci technologií instalovaných ve vesnici Tang Krous Keut , protože toto zařízení na úpravu vody je široce považováno za modelové zařízení. Zaměření se na širší prezentaci této dobré praxe a obecně vhodného přístupu českého dodavatele k místním potřebám ve spolupráci s Provinčním odborem rozvoje venkova, která považuje toto zařízení za nejpokročilejší v provincii, může stimulovat nové obchodní příležitosti. Je však třeba mobilizovat externí zdroje – místní instituce nebo většina soukromých operátorů není schopna takové investice sama provést.

#### Závěry s ohledem na hodnotící kritéria

**Relevance** podpory je **vysoká** . Projekty jsou plně v souladu s národními strategiemi cílové země as Bilaterálním programem ZRS . Implementace byla koordinována s příslušnými regionálními orgány a projektový přístup představuje dobrou praxi. V budoucnu však již nebude preferován přístup zaměřený na komunitu, implementační / organizační model by proto neměl být v budoucích projektech replikován. Stejně tak B2B projekt přinesl vysoce relevantní a nákladově efektivní řešení.

**Efektivnost** podpory je **nízká.** Klíčové očekávané výsledky byly výrazně sníženy a celkové cíle nebyly dosaženy. Místo původně plánovaných minimálně 5 nových vodních systémů byl postaven pouze jeden. Většina ostatních cílů nebyla splněna. Jedinou významnou výjimkou je počet latrín poskytovaných (chudým) domácnostem – plánovaný počet 200 byl překročen o dalších 8 latrín určených speciálně pro handicapované členy domácností (což nebylo součástí původního plánu).

**Efektivita** podpory je **poměrně nízká** . Přestože byla z pohledu "value for money" instalované technologie odborným členem projektového týmu vyhodnocena jako poměrně efektivní (i když v násobku původně projektovaných nákladů), stále existují významné problémy, které účinnost snižovaly. Za prvé, zapojení zahraničních dodavatelů jednoznačně zvýšilo náklady. Navíc v případě, že místní provozovatel (WSUG) není schopen udržovat technologii úpravy, je efektivita dodávky poměrně pokročilého technologického řešení rovněž sporná.

**Dopady** podpory jsou **vysoké.** Cílové skupiny i místní a regionální instituce si uvědomují hluboké dopady všech projektových aktivit na zdraví (četnost a závažnost onemocnění) i na školní docházku dětí a jejich školní výsledky.

**Udržitelnost** podpory je **spíše nízká**. Za současného stavu není dlouhodobý provoz úpravny vody udržitelný, protože místní struktura nemá dostatečné dovednosti a kapacitu. Hlavním důvodem je pozdní realizace klíčové aktivity, a to výstavby úpravny vody, která byla otevřena pouze cca. 2 měsíce před ukončením projektu. Tento nedostatek kapacit a dovedností je však do určité míry kompenzován vysokou mírou ownershipu a motivovanosti místní komunity. Pokud tedy bude včas poskytována dostatečná podpora (školení, poradenství, provozní manuály atd.) a/nebo bude vhodně transformován provozní model, lze provoz učinit udržitelným. Stejně tak neudržitelná je podpora školám – školám chybí dostatek finančních prostředků i na drobné opravy zařízení na mytí rukou či latrín.

#### Doporučení

## (Stupeň závažnosti: 1 – nejzávažnější, 3 – nejméně závažná)

Doporučení: projektová úroveň	Úroveň vážnosti	Primární adresát
Podpořit způsoby, jak v krátkém horizontu zvýšit kapacity WSUG v Tang Krous Keut / Tang Krous Lech dalšími školeními, mentoringem a ad-hoc poradenstvím – technické dovednosti i procesy finančního řízení a provozu. Propojit místní strukturu s technickými odborníky, na které se mohou obrátit v případě nouze. Analyzovat vhodnost malých grantů poskytovaných přímo ZÚ pro tento účel.	1	CZDA / Realizátoři ZÚ
Podpořit transformaci WSUG na formalizovanější strukturu, která by nebyla závislá na dobrovolné práci. Zapojit okresní a provinční úřady – ministerstvo průmyslu, vědy, technologie a inovací (MISTI) a ministerstvo rozvoje venkova (RD) do rozvoje spolehlivé a udržitelné struktury s jasně přidělenými odpovědnostmi a profesionálním chováním; zajistit licenci na provoz nové struktury od MISTI v cílovém regionu (včetně případného rozšíření). Případně pomoci místní struktuře v přípravě a implementaci výběrového řízení na soukromého operátora, který by si infrastrukturu pronajal a zajistil alokaci zdrojů na reinvestice a zároveň zajistil příjem pro komunitu.	2	CZDA / Realizátoři ZÚ
Pokračovat v dlouhodobé podpoře osvěty, školení a budování kapacit v oblasti správných hygienických postupů, sanitace a zdravého chování v cílovém regionu, posilovat poptávku po přístupu k čisté pitné vodě v souladu se standardy kvality.	2	Realizátor / partner

Doporučení: Programová / sektorová doporučení	Úroveň vážnosti	Primární adresát
V rámci intervencí zaměřených na budování institucionálních kapacit a good governance se v koordinaci s rozvojovými partnery a národními strukturami zaměřit na budování místních kapacit, především v oblastech se silnou přítomností ZRS /místního partnera s ohledem na organizační a regulační rámec provozovatelů místních vodárenských soustav – podpořit budování kapacit a také technickou pomoc. Zaměřit se na pilotní regiony a klást důraz na šíření dobré praxe.	1	CZDA ZÚ
Prozkoumat synergie s ostatními partnery ohledně podpory oblastí v provincii Kampong Chhnang, na které se nevztahují žádné licence; využít existujícího vodního systému při propagaci dobré praxe, včetně podpory příležitostí pro dlouhodobou obchodní spolupráci s českými dodavateli.	2	CZDA ZÚ
Zúročit stávající spolupráci s nevládními organizacemi a dalšími stakeholdery v provincii Kampong Chhnang a také stávající dobré vztahy s institucemi na úrovni provincií a okresů a prosazovat hlubší spolupráci při podpoře informovanosti a vhodných kapacit týkajících se bezpečných hygienických postupů ve venkovských oblastech.	2	CZDA Realizátor
Analyzovat místně dostupné odborné znalosti související s provozem systémů úpravy vody a případně identifikovat projekt v sektoru technického a odborného vzdělávání a přípravy (TVET) zaměřený na vybudování takových technických kapacit v sektoru WASH s přihlédnutím k pokročilejším technologiím, které potenciálně poskytují čeští poskytovatelé.	3	ČRA / MZV

Doporučení: Doporučení na úrovni systémů nebo procesů	Úroveň vážnosti	Primární adresát
Zapojit se do se formálních a neformálních struktur spolupráce v sektoru WASH v Kambodži. Vhodně doplňovat podporu větších dárců poskytovanou provozovatelům vodních systémů v pilotních regionech o podporu zdola nahoru pro budování kapacit a posilování komunit.	2	MFA / ZÚ
Zajistit, aby podpora infrastrukturních projektů byla formulována po provedení hloubkové analýzy klíčových místních parametrů.	1	CZDA
Zajistit, aby projektové týmy budoucí podpory infrastruktury WASH zahrnovaly dostatečné technické dovednosti a kapacity; spíše nepodporovat implementaci podpory investičních projektů ve WASH formou grantů ve prospěch veřejných zakázek nebo přímé rozpočtové podpory.	1	CZDA Realizátor

#### B. List of abbreviations

ASIE Asia and Pacific Department

CAPI Computer-Assisted Personal Interviews

CES Czech Evaluation Society

CzDA Czech Development Agency

CzDC Czech Development Cooperation

CZK Czech crown

DCD Development Cooperation and Humanitarian Aid Department of the MFA

DECCB Diaconia of the Evangelical Church of Czech Brethren - Centre for Humanitarian and

**Development Cooperation** 

EC Embassy in Cambodia

EU European Union

EQ Evaluation question

FGD Focus Group Discussion

IDI In-depth Interview

KII Key Informant Interview

LWD Life with Dignity

MFA Ministry of Foreign Affairs

MISTI Ministry of Industry, Science, Technology and Innovation

MRD Ministry of Rural Development
NGO Non-governmental Organization
ODA Official Development Assistance

ODF Open defecation free

OECD-DAC Organization for Economic Co-operation and Development, Development Assistance

Committee

PDRD Provincial Department of Rural Development

RD Rural Development

RWWTP Root-type wastewater treatment plant

SDG Sustainable Development Goal SSC School Support Committee

VDC Village Development Committee

WB World Bank

WMCs Water Management Committees

WSUG Water Sanitation User Group

# C. Evaluation Matrix

Indicators	Data source	Data collection tools	Data analysis tool					
EQ 1: Can good practice be identified within the interventions evaluated for further replication in bilateral cooperation or in delegated cooperation with the EU?								
	<ul> <li>Project documentation, outputs of supported projects (project documents, interim and final reports, etc.),</li> <li>Programme documentation (in relation to the bilateral and B2B programme)</li> <li>Documentation for calls for applications for subsidies</li> <li>Other relevant CzDC documents related to the implementation of both projects, relevant strategic and sectoral documents in the target country;</li> <li>Strategic and programme documents at the level of the CzDC, etc.</li> <li>Background information on other relevant activities of CzDC in the target country, etc.</li> <li>Representatives of the contracting authority (MFA, CzDA, Embassy in Cambodia)</li> <li>Representatives of project implementers in the Czech Republic and, where appropriate, the local team), project partners and other entities directly involved in implementation, e.g. key subcontractors (in the Czech Republic and Cambodia)</li> <li>Ministry of Regional Development, Ministry of Industry and Handicraft,</li> </ul>	Desk research Semi-structured interviews Focus groups Questionnaire survey Evaluation visit, transect walk (observation)	Content analysis Synthesis					
(in terms of efficiency) compared to similar initiatives by other entities;	Ministry of Water Resources and Meteorology (limited)							

- The support is aligned with the partner country's strategic WASH objectives;
- Support is coherent with the target country/region's system and approach to addressing the needs of target groups in the WASH sector.
- The projects implemented and/or the approach of the implementers to achieving their objectives are in line with the strategic or operational priorities of other donors and the good practice acquired is replicable in this sense
- Representatives of the administrative structure at provincial level: mainly the Provincial Department of Rural Development and the Provincial Office of Education, Youth and Sports, and to a limited extent (if relevant) the Provincial Department of Agriculture, Forestry and Fisheries - all in Kampong Chhnang province
- Representatives of relevant institutions at district level - esp. District Office for Rural Development - Sameakki Mean Chey, Tuek Phos and Kampong Tralach districts
- Relevant NGOs e.g. Water for Cambodia
- Representatives of some of the schools supported in both projects (Sihamoni Technical School, Tang Krous Keut Primary School, Damnak Khlong Primary School and at least two other schools supported in the DECCB project)
- Members of supported communities
- Samples of members of WSUG, VDC, SSC and other community structures
- Sample of supported households
- Representatives of the supported communities - village chief, administrator, etc.
- Leaders of supported schools
- Sample of teachers in supported schools
- Sample of parents of supported schools

### EQ 2: What is the level of coordination and coherence in the WASH sector in Cambodia and the resulting opportunities for the CzDC?

- Synergies of support with initiatives of other donors and national actors in the WASH sector are identified and sufficiently exploited;
- The project activities are implemented in accordance with the local/regional/national system and approach, and the project outputs and results are integrated into the target country's strategic approach to strengthening
- Sources of data for desk research see EQ
- Strategies, programmes, operational documents and relevant projects of other donors and relevant actors (international organisations, NGOs, development banks)

#### Desk research

Semi-structured Interviews

Focus groups (limited)

Content analysis

Synthesis

- access to drinking water and eliminating health risks related to hygiene habits and resources (including, for example, the hygiene education system in schools);
- The content of the educational activities and campaigns on drinking water management and hygiene are in line with common practice in the target country, but also added value;
- It is documented that the implementers and/or partners of the supported projects coordinate their activities with relevant public authorities (including at local level) and with the activities of other donors;
- Examples of cooperation of project implementers/partners with other stakeholders in relation to the achievement of project objectives are documented;
- Implementers and partners of supported projects identify the added value of coordination/cooperation with other stakeholders (including other donors);
- There is sufficient awareness among relevant stakeholders (public institutions, other donors, relevant NGOs) of the results of the support to the evaluated projects;
- Examples are documented where other stakeholders (public institutions, other donors, relevant NGOs, etc.) build on the outputs of supported projects - they work directly with the outputs/results and develop them further

- relevant to the WASH sector in the target country and region
- Representatives of the contracting authority
- Representatives of project implementers in the Czech Republic and, where appropriate, the local team), project partners and other entities directly involved in implementation, e.g. key subcontractors (in the Czech Republic and Cambodia)
- Representatives of relevant institutions at central, provincial and district level - see EQ1
- Relevant NGOs
- Representatives of key donors and other actors supporting the WASH sector in the target region
- Representatives of relevant coordination structures

#### EQ 3: To what extent/how have the evaluated interventions contributed to creating opportunities for long-term commercial cooperation?

- There is evidence of effective transfer of knowledge and know-how gained through support to other entities;
- The support directly or indirectly develops and deepens cooperation between entities from the Czech Republic and the target country and more generally initiates the establishment of new cooperation in the international context beyond the cooperation directly supported by the programme;
- EQ1 and EQ2 results
- Implementers and partners of supported projects, representatives of public administration at provincial / district level see EQ1
- Representatives of identified private entities that have engaged in commercial cooperation based on supported projects.

#### Desk research

# Semi-structured Interviews

#### Content analysis

Synthesis

<ul> <li>There is evidence that the support has generated follow-up initiatives, and the results of this support are feeding into the identification of new initiatives, particularly of a commercial nature;</li> <li>Specific follow-up initiatives are documented</li> </ul>	•	Available data and documents at the level of supported entities in the Czech Republic and partner institutions in the target country, if relevant (e.g. annual reports, data from financial statements, etc.)		
Cross-cutting criteria				
<ul> <li>Support from CzDC had indirect effect on increasing the engagement and participation of local partners on decision-making</li> <li>Support has contributed to setting up of transparent processes within and accountability of community-led structures vis-à-vis public administration as well as private partners</li> <li>Support has contributed to a more effective utilization of local resources and technologies</li> <li>Support has directly contributed to an increase in access to safe drinking water and a more efficient and sustainable water management (incl. water harvesting, recycling, etc.)</li> <li>Support has contributed to an increase of capacities of local decision-makers with regard to environmental governance</li> <li>Impacts of projects are distributed equally within local communities, disregarding ethnic origin, gender, socioeconomic status or any other potential exclusion factors</li> <li>There is evidence that support has contributed to an increase in quality of life and engagement of most disadvantaged groups in local communities</li> <li>Gender equality requirements have been sufficiently taken into account in implementation of supported projects as well as in provision of support to local communities (e.g. participation, decision-making, etc.)</li> </ul>	•	EQ1 and EQ2 results Implementers and partners of supported projects, representatives of public administration at provincial / district level - see EQ1 Representatives of the supported communities - village chief, administrator, etc. Members of local communities Implementers and their local partners Project documentation and reporting	Semi-structured interviews  Focus groups  Desk research	Synthesis
Visibility of CzDC				

•	Stakeholders recognize the role of CzDC in	•	Representatives of administrative	Observation	Synthesis
	implementation of supported projects		structure at national, regional and local		
•	Purchased equipment is visibly labelled with		levels	Semi-structured	
	appropriate visibility tools	•	Relevant local stakeholders – village	interviews	
•	Development partners and local authorities recognize		chiefs / administrators, other relevant local		
	CzDC / Czech Republic as relevant and reliable partner		stakeholders		
	in the WASH sector	•	Evaluation visits		

#### D. List of studied documentation and other resources

#### Primary sources

- Project documentation
- Project outputs materials, reports, etc.
- Terms of Reference of the project
- · Web pages of implementer, partners, etc.

#### Strategies, context information and evaluations

- Strategy of CzDC 2018–2030
- Concept of CzDC 2010–2017
- Development Cooperation Programme of the Czech Republic to Cambodia 2018–2023
- OECD: Evaluation Systems in Development Co-operation (peer review)
- CzDC Annual reports
- Water, sanitation and hygiene UNICEF Country Programme 2019–2023
- Coutnry programmes of other donors such as UNDP and other UN agencies, ADB, etc.

#### Strategic documents and other documents of Cambodia

- Pentagonal Strategy Phase One
- National Strategic Development Plan 2019-2023
- Development Cooperation and Partnership Strategy 2024-2028
- National Guidelines for Water, Sanitation and Hygiene in Health Care Facilities, Cambodia, 2018
- National Strategy for Rural Water Supply, Sanitation and Hygiene 2011-2025 (ENG)
- National action plan Rural Water Supply, Sanitation and Hygiene 2019-2023
- Law on Clean Water Management
- The Water Supply and Sanitation Regulatory Law

#### Methodological and context sources

- OECD: Quality Standards for Development Evaluation (2010)
- UNDP: Handbook on planning, monitoring and evaluation for development results (2009)
- *UNDP:* Project-level evaluation Guidance for conducting terminal evaluations of UNDP-supported GEF-financed projects (2012)
- The World Bank: Handbook on impact evaluation quantitative methods and practices (2010)
- The World Bank: User-friendly handbook for mixed method evaluations (1997)
- Bamberger, M Rugh, J. Mabry, L.: Real World Evaluation (2006)
- INESAN: Methodology for the Evaluation of Cross-Cutting Themes in Development Cooperation (2017)
- Rogers, E.M.: Diffusion of Innovations, 5<sup>th</sup> edition (2003)
- FAO: Participatory Training and Extension in Farmers' Water Management (2001).

# F. Evaluation mission – list of interviews and FGDs

N	Date	IDI/FGD	Time	Respondents	Institution	Meeting place/venue
1	9 September 2024	Meeting with Czech Embassy	10:00-11:00am	Embassy staff in charge of development cooperation	Czech Embassy in Phnom Penh	Czech Embassy in Phnom Penh
		KII with relevant people at Ministry of Rural Development	1:30-2:30pm	Officials in charge of rural water supply and sanitation	MRD	MRD
	10 September 2024	Site inspection of Water Station	8:30am	N/A	Taing Krous Keut village and Taing Krous Lech village	Taing Krous Keut village and Taing Krous Lech village
		FGD with members responsible for maintenance	9am-10:30am	WSUG members	Tang Krous Keut/Lech	Water station
2		Group IDI with Commune chief and village chiefs	10:30-11:30am	Mr. Thor Lim and two village chiefs	Krang Lvea Commune and Taing Krous Keut village and Taing Krous Lech vllage	Taing Krous Keut village, Krang Lvea Commune
		Visit to Tang Krous Keut school (connection to water system, installed latrines and hand- washing stations)	1:00-1:30pm	N/A	Tang Krous Keut school	Tang Krous Keut school

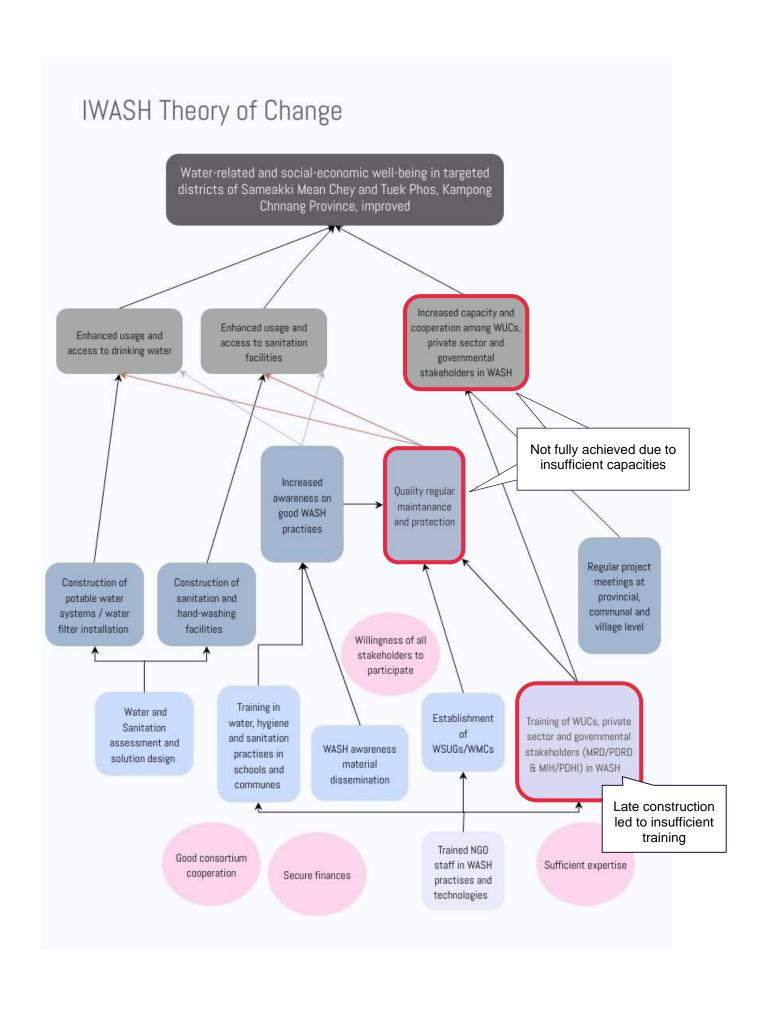
		IDI with school director	1:30-2:00pm		Tang Krous Keut school	Tang Krous Keut school
		FGD with teachers of Tang Krous Keut school	2:30-3:30pm	School teachers	Tang Krous Keut school	Tang Krous Keut school
	11 September 2024	FGD with HH members in Chrak Thnoat village	8:30am-9:45am	10 HH members	Chrak Thnoat village	Chean Leung commune office
		IDI with Commune chief	10am-10:30am	Mr. Pol Chan Neang	Chean Leung commune	Chean Leung commune office
		IDI with village chief of Chrak Thnoat village	10:30-11:15am	1 village chief	Chrak Thnoat village	Chean Leung commune office
		Visit to Chrak Thnoat primary and secondary schools	1:00-1:30pm	N/A	Chrak Thnoat primary and secondary schools	Chrak Thnoat primary and secondary schools
3		FGD with parents/SSC members of Chrak Thnoat primary and secondary schools	1:30-2:45pm	10 parents/SSC members	Chrak Thnoat primary and secondary schools	Chrak Thnoat primary and secondary schools
		Group IDI with school directors	3:00-3:30pm	2 directors (1 primary &1 secondary)	Chrak Thnoat primary and secondary schools	Chrak Thnoat primary and secondary schools
		Group IDI with school teachers	3:30-4:00pm	2 teachers (1 primary and 1 secondary)	Chrak Thnoat primary and secondary schools	Chrak Thnoat primary and secondary schools
		IDI with water private operator	4:00-4:30pm	Mr. Heng, owner	Private Water Operator	Peam Commune

4	12 September 2024	Visit Sahamoni Technical school	8:30am	N/A	Sahamoni Technical school	Sahamoni Technical school
		IDI with director of Sahamoni Technical school	8:45am-9:15am	1 school director	Sahamoni Technical school	Sahamoni Technical school
		IDI with Project Coordinator of LWD	10:30-11:30am	Mr. Samang	Kampong Tralach	Kampong Tralach
		IDI with PDRD of Kampong Chhnang	1:30-2:30pm	Mr. Chhoun Sophat	PDRD	PDRD office
5	13 September 2024	KII with WaterAid Cambodia	8:30am-9:30am	Executive Director	WaterAid Cambodia	WaterAid Cambodia
		KII with Water Specialist	10:30-11:30am	Mr. Hor Chikheng	RWST	Aquarius Hotel, Phnom Penh
		KII with WB	1:30-2:30pm	WASH Specialist	Office of WB	World Bank
		Debriefing meeting with Czech Embassy	10:00-11:00am	Embassy staff in charge of development cooperation	Czech Embassy, Cambodia	Czech Embassy Cambodia
6	15 September 2024	IDI with DoE of Samaki Mean Chey	2:30-3:00pm	Mr. Ek Vanny	Chief of DoE of Samki Mean Chey	DoE of Sameki Meanchey district

		FGD with HH members in Takeo village	8:30am-9:45am	10 HH members	Takeo village	Takeo village, Peam commune
		IDI with Takeo village Chief	10:00am- 10:30am	Village chief	Takeo village	Takeo village, Peam commune
7	16 September 2024	IDI with commune chief	11:00am- 11:30am	Commune chief	Peam commune	Peam commune
		IDI with Chrok Sdach Primary School	2:00-2:30am	Director/teachers	Chrok Sdach Primary School	Chrok Sdach primary School
		IDI with Chrok Sdach Secondary School	3:00-3:30pm	Director	Chrok Sdach secondary School	Chrok Sdach secondary School
8	17 September 2024	FGD with parents/SSC members of Kraign Smor High school	8:30-9:45pm	10 parents/SSC members	Kraign Smor High school	Kraign Smor High school
		IDI with school director/teachers	10:00-10:30pm	Director/teachers	Kraign Smor High school	Kraign Smor High school
9	21 September 2024	Phone IDI with DoRD of Samaki Meanchey district	2:30-3:00pm	Mr. Heng Savang	Chief of DoRD	Samaki Meanchey DoRD

# G. Theory of Change

The original theory of change as presented by the implementer. However, verification of the ToC suggests that some of these components were not sufficiently implemented due to late installation of the technology. These parts of the ToC are highlighted in red. It is clear that deficiencies in implementation of some of these components did weaken the capacity of the project to fully achieve its objectives.



# **IDIs – Project partners**

#### Introduction

- 1. How did you get involved in the project?
- 2. What were your duties and tasks?
- 3. What were your initial expectations when you joined the project regarding the target groups or the WASH sector in general? How did your expectations change during the implementation of the project, if they did?

#### **Objectives**

- 4. How do you assess the way to which the project responded to the needs of the target groups as you know them?
  - Was there anything missing in the project regarding the relevant needs of the target groups?
- What was the role of institutions (district, province) in Cambodia in formulating the project's objective? (asked only if relevant)
- 6. Did you have to modify/adapt the project to meet the requirements of national institutions / policies?

#### **Efficiency**

- 7. How would you assess the project spending? Were there any expenditures that you considered to be unnecessary or that did not have the effect you expected? (What specific expenditure do you consider inadequate in relation to the results achieved?)
- 8. Conversely, are there any expenditures on project activities that you perceive as financially unsatisfactory? How has this affected the results of the project?
- 9. From your perspective, how do you assess the management and administration of the project?
  - Have you observed any significant management weaknesses that have hindered the smooth implementation of the project?
  - Which factors, on the other hand, have contributed to the success of the project?

#### Cooperation, synergies

- 10. Have you coordinated your activities with other donors, national actors or other stakeholders? If yes, please provide details:
  - o Who initiated the cooperation?
  - Did you coordinate your activities (inform each other, exchange experiences) or did you cooperate share the work with other donors/actors?
  - What did you consider to be the benefits of this cooperation and were there any disadvantages?
- 11. Would you say that the potential of collaboration with other donors/actors was sufficiently exploited in your project?
  - If not, what was the reason for this-what were the obstacles that prevented more intensive collaboration?
  - In what ways do you think the benefits and impacts of your project would have been enhanced if you had worked more intensively with other donors/actors?
- 12. Have you experienced that the project was perceived as an example of good practice by other donors or national institutions? If yes, please give examples.
- 13. From your perspective, what is the added value of your organisation in implementing this type of project vis-à-vis other implementers/donors or national institutions?

#### **Effectiveness**

- 14. To what extent did the project meet your expectations?
- 15. In which areas, if any, did the project not meet your expectations?
  - What were the reasons for its failure in these areas? Did the project logic not work as planned? Was any important activity missing from the project? Or was it the influence of external factors that you did not take sufficiently into account?
  - How did you try to mitigate these shortcomings?
- 16. If you were to plan the same project today, with the knowledge you gained during implementation, would you plan it differently? In what ways?
  - o Do you consider some project activities redundant?

 Conversely, were any activities missing that could have increased the positive impacts of the project if implemented?

#### **Impacts and sustainability**

- 17. In your experience, how has the project contributed to improving the living conditions of the target groups? Which project activities and/or other factors were decisive in this respect? And, conversely, what obstacles did not enable for the expected impacts to fully materialize?
- 18. What specific changes have been observed in access to drinking water, hygiene habits and sanitation? (If not covered in response to Q17)
- 19. What measures have been put in place to ensure that these results are further developed and implemented?
- 20. What are, from your point of view, key threats, and obstacles to sustainability? What issues or challenges were identified in terms of sustaining the operation and maintenance of the constructed resources and how were they addressed?

#### **Overall assessment**

- 21. What do you personally see as the most important impacts of the project? Which are essential in the short term and which in the long term?
- 22. Did you encounter any negative impacts of the project in your project region? What lessons did you learn from this?

#### **Exit**

- 23. Who did take over the outputs of your project? To your knowledge, is or was this institution about to carry on with project activities especially in extension?
- 24. Were local institutions that took over the responsibility for sustainability, from your point of view, strong enough, did they have sufficient capacity? If not, how does it affect the sustainability?

#### **IDIs – Local Institutions**

1. Please describe your position and tasks in the water-sanitation sector in Cambodia.

#### **General assessment**

- 2. Are you aware of projects from the Czech Republic's bilateral development cooperation program with Cambodia? Specifically, "Improving the WASH Sector in Kampong Chhnang Province, Cambodia" and "B2B Implementation of near-nature wastewater treatment technologies and their subsequent use in agricultural areas of Cambodia"? If yes, investigate:
  - a. Do you know how the projects were initiated?
  - b. What were your personal expectations regarding the projects?
  - c. Give us your general assessment of the projects and the general approach of the project staff to the issue
  - d. How do you assess the management of the project and communication with institutions and other key stakeholders? What could have been done better in this field?
  - e. In general, are you rather satisfied or dissatisfied with the project and its activities?
- 3. To what extent is the support in line with the strategic goals of your country in this sector? In which aspects was the support not fully aligned, if you observed any?

#### Relevance to needs of local communities

- 4. In your experience, what are the most significant barriers to access to drinking water, sanitation facilities and improving hygiene habits?
- 5. If it were your decision, what activities would you implement to strengthen the water-sanitation sector?
- 6. Does the project reflect the (specific) needs of local people? In your opinion, were they taken into account in the project?

#### Other donors

- 7. What other donors or institutions were or are active in the region who are also aimed at similar goals?
- 8. Please compare the Czech projects to the approach of other donors: what did the Czech projects do better, and what did they do worse?

- 9. Did you observe effective coordination or cooperation between donors and the Czech projects? Please elaborate why do you see the coordination as effective or ineffective? What should have been done better in this regard?
- 10. Was there any duplication of activities of Czech projects and other donors observed? What was the impact positive, negative...? How was this solved?

#### Sustainability, added value

- 11. Have you identified any good practice (lessons learned) regarding the project approach possibly compared to approach by local/national stakeholders or other donors?
- 12. From your point of view, is this good practice repeatable in other communities without direct donor support? Why yes or no?
- 13. In the direct impact of the project, have you changed anything about how you or the institutions that are subordinate to you operate in the field of water and sanitation?
- 14. What direct impacts of the development cooperation program have you observed? Do you observe any indirect effects of Czech support?
- 15. Were there any unintended consequences? Something that surprised you positively or negatively?
- 16. In your opinion, is the project sustainable in the longer term?
- 17. According to your experience, what are the most fundamental threats and obstacles to the sustainability of project results today?
- 18. Can you give concrete examples of how other stakeholders can follow up on the outputs of the supported project and develop it further? (If yes examples)

# **Focus Group Discussion Guide: Households**

#### **Consent Process**

Consent forms for focus group participants are completed in advance by all those seeking to participate. Below is a summary of the information in the consent form that focus group organizers and facilitators should use to make sure participants understand the information in the consent form.

#### Introduction:

1. Welcome

Introduce yourself and the notetaker and send the Sign-In Sheet with a few quick demographic questions (age, gender, ...) around to the group while you are introducing the focus group.

Review the following:

- Who we are and what we're trying to do (we have been hired by the Czech Ministry of Foreign Affairs to explore the results of the project and formulate recommendations to improve Czech programs)
- What will be done with this information (we will use the information in our evaluation; first-hand experience in your household is very valuable for us)
- Why we asked you to participate (we want to understand your problems and barriers in accessing drinking water, as well as your views on connecting to the water system)
- 2. Explanation of the process

About focus groups

- We learn from you (positive and negative)
- Not trying to achieve consensus, we're gathering information. You do not need to agree with each other.
- In this project, we are doing both questionnaires and focus group discussions. The reason for using both these tools is that we can get more in-depth information from a smaller group of people in focus groups. This allows us to understand the context behind the answers given in the survey and helps us explore topics in more detail.

### Logistics

- The focus group will last about one hour
- Feel free to move around
- Where is the bathroom? Exit?

#### 3. Ground Rules

- When you do have something to say, please do so. The views of each of you are important.
- Information provided in the focus group will be kept confidential
- One person speaks at a time. There may be a temptation to jump in when someone is talking but please wait until they have finished.
- There are no right or wrong answers
- Stay with the group and please don't have side conversations
- Turn off cell phones if possible
- Have fun

#### 4. Turn on Tape Recorder (ask for consent!)

- 5. Ask the group if there are any questions before we get started and address those questions.
- 6. Introductions, icebreaker
  - Go around the circle: what is your name, where are you from?
  - Is your HH connected to water distribution system? Since when?

#### Discussion:

Discussion begins, make sure to give people time to think before answering the questions, and don't move too quickly. Use the probes to make sure that all issues are addressed but move on when you feel you are starting to hear repetitive information.

#### **TOPIC I: access to the new water system**

#### Questions for the connected households:

1. How has having access to a water supply system changed your daily life?

Please describe any changes in your routine since getting access to the water supply.

- 2. How has the water connection influenced your household expenses? (e.g., reduced costs for buying water, more time for work, medical expenses)
- 2.1 How much water does your household use more or less than before? Mostly for what purpose?

(e.g., for drinking, cooking, cleaning, gardening)

- 2.2 Have there been additional costs with the installation and maintenance of the water system?
- How reliable is the water supply system?
   (e.g., frequency of outages, water pressure consistency)
- 3.1 Are you satisfied with the quality of water provided? (e.g., taste, cleanliness, safety)
- 3.2 Have you faced any issues with the water supply system since it was installed? Did you encounter any problems? Are there any negatives?
- 4. Is the household connection to the water system important to your community?
- 4.1 If you participated. Did the training on drinking water and hygiene influence your opinion?
- 4.2 Would you recommend this project to other communities?

#### Concluding the topic:

All that being said, what kind of support do you think would most help increase the number of households connected to the water system and improve its water quality?

#### Conclusion:

- That concludes our focus group.
- Thank you so much for coming and sharing your thoughts and opinions with us.
- This has been a very successful discussion, and your input will be an asset to our evaluation.
- We hope you have found the discussion interesting as well.
- If you have additional information that you did not get to say in the focus group or if you have any complaints, please feel free to write it down on a piece of paper (?), talk to us privately afterward or call us.

# Focus Group Discussion Guide: WSUG members / maintenance

Introductory phase and conclusion similar to previous FG

#### **TOPIC II: System maintenance**

Questions for the members/staff responsible for maintenance:

- 1. How often do you perform water system maintenance?
  - 1.1 What types of maintenance do you perform most often?
  - 1.2 Doesn't the use of foreign (Czech) technology complicate the maintenance of the system?
  - 1.3 What are the most common problems that occur in the water system? How do you usually solve these problems?
  - 1.4 Are there parts of the system that require more frequent maintenance than others? If so, which parts and why?
- 2. How do you rate the reliability of the water supply system? (on the scale from 1 to 5, which one being the lowest and 5 the highest)
  - 2.1 Are there frequent outages or malfunctions? If so, how often do they occur?
- 3. What training have you received for the maintenance and operation of the water system?
  - 3.1 Are the trainings sufficient and regular?
  - 3.2 Do you have all the necessary tools and equipment for system maintenance? If not, what are you missing?
- 4. What procedures do you have in place to ensure water quality and safety? (water quality tests, response to reported problems)
  - 4.1 How is the communication between you and the users of the water system?
  - 4.2 What is the level of collaboration between the maintenance team and other departments or organizations? (For example, local government, NGO, etc.)

#### Concluding the topic:

All that being said, how do you overall evaluate the functionality and efficiency of the water supply system? Where do you see the greatest potential for improvement?

# **Focus Group Discussion Guide: Parents of pupils**

Introductory phase and conclusion similar to previous FG

#### **TOPIC IV: an impact on schools**

Questions for the parents of pupils

1. What changes have you seen in your child's health and hygiene habits since the installation of the water system and latrines at school? Can you give specific examples?

Probe: Compare today to before the project – what are the actual changes?

- 2. How well-informed were you about the installation of new water systems and latrines at your child's school?
  - 2.1 Did you feel sufficiently involved in the process?
  - 2.2 How do you rate the communication between the school and parents about this project?
  - 2.3 Were you informed about the benefits and use of these facilities?
- 3. Have you seen any economic benefits, such as lower health costs due to improved sanitation in the school? If so, can you give specific examples?
- 4. Has the child received any training on improving awareness of the benefits of the drinking water system?
  - 4.1 Did the training help raise awareness of good hygiene practices and environmental clean-up in your school (or community)?

#### Concluding the topic:

All that being said, how do you rate the impact of this project on the school and your child's life? Would you recommend similar projects for other schools?

# Focus Group Discussion Guide: Teachers, SSC members

#### **TOPIC III: an impact on schools**

Questions for the schools' teachers and the SSC:

- 1. How did the installation of the water system, latrines, and hand water stations affect daily life at the school? How has the installation of these devices affected the educational process?
  - 1.1 What changes have you noticed in the behavior of students and other staff?
  - 1.2 Have you noticed any changes in the level of hygiene among students since the system was installed? (e.g., more frequent hand washing, better personal hygiene)
- 2. Are there any problems with using the new water system, latrines or water stations??
  - 2.1 Is there any special training or instructions on how to use them?
- 3. How have these changes affected the school's costs?
  - 3.1 How is the maintenance? Have there already been any problems such as water shut-off?
- 4. Did the training help raise awareness of sanitation, maintenance (for teachers and the SSCs) and good hygiene practices and environmental clean-up in your school?
  - 4.1 What was the level of awareness and knowledge among students about the importance of hygiene and clean water before the project? What has changed since then? How was this information communicated to students?
  - 4.2 How was the communication about the project between the school, parents and the community?

#### Concluding the topic:

All that being said, how do you assess the overall impact of the project on your school? Would you recommend similar projects for other schools? (*These questions should provide a comprehensive view of the impact of the project in schools from the perspective of teachers and the SSC and help identify areas for possible improvements.*)

#### I. Questionnaire

Identification questions.

- HH/Questionnaire code:
- Total HH members....
- Number of children below 15 years old
- Head of the HH: male or female
- Age of the respondent
- · Highest education of respondent
- 1. Are you aware that a water treatment and distribution system has been constructed for your village in 2023?
  - Yes
  - No
  - I don't know
- 2. Is your household connected to a public system of distribution of potable water?
  - Yes
  - No
  - I don't know

#### If answer to Q2 is NO

- 3. Please indicate the reason why your HH is not connected to potable water distribution system:
  - Technical issues our HH could not be connected to the water distribution system due to technical problems (e.g. too far away from the main line, low pressure due to elevation, etc.)
  - I am not aware of an offer to connect our HH to a water distribution system.
  - I decided not to connect to the water distribution system.
  - Other reasons, please elaborate:\_\_\_\_\_\_
- 4. If response to Q3 is "I decided not to connect..." Please elaborate on your reasons why you decided not to connect to the water distribution system (multiple selection):
  - The cost of connecting was too high;
  - The cost of consumed water would be too high, we could not afford it;
  - I don't feel the need current sources of potable water we use are sufficient;
  - I don't trust the safety of the treated water;
  - I don't trust the people responsible for managing and maintenance of the water treatment and distribution infrastructure;

•	Any other reason,	please elaborate:
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5.	response to Q3 is DIFFERENT than "I decided not to connect": If you wish, please elaborate on your response (open question):

- 6. Do you plan / think of connecting to the water supply system in the future, if available?
  - Definitely not
  - Probably not
  - I don't know
  - Probably yes
  - Definitely yes
- 7. Would you like to add any further comment regarding the availability of drinking water supply for your HH? *(open question)*

Thank you for your time. (End questioning here)

Rather satisfied

Rather dissatisfied Very dissatisfied

Neutral

## If answer to Q2 is YES:

8.	Please indicate since when you have been connected to this system (month and year):
9.	What was the key source of <u>potable</u> water for your HH before you were connected to this system? <i>(multiple choice)</i>
	<ul> <li>Own source (e.g. a well)</li> <li>Buying bottled water</li> <li>Public water source, please indicate what kind and how far away from your HH (e.g. public well / community pond 1 km from my HH, etc.)</li> <li>Surface water (nearby stream, river, etc.)</li> <li>Collected rainwater</li> <li>Other, please elaborate:</li> </ul>
10.	Please indicate what was the <b>main</b> reason why you decided to connect to the new distribution system:  Water safety – previous source(s) did not provide safe drinking water  Water scarcity – previous source(s) did not provide sufficient amount of safe drinking water  Reducing labour intensity and generally more comfortable – eliminating the need to collect water from a far away source  Cost – access to drinking water from the distribution system is less costly than previous source of drinking water, e.g. having to buy bottled water  Other reason, please elaborate:  Other reason, please elaborate:
11.	Please estimate what is the share of the water that you used from the the newly built public water distribution system since you were connected until today on the overall water consumption of your HH in the same period of time (including for washing, etc.):  • Max. 20%  • $20 - 40\%$ • $40 - 60\%$ • $60 - 80\%$ • $80\%$ or more
12.	<ul> <li>If response to Q11 is less than 80%: Please share with us, why you don't use the public water distribution system more:</li> <li>Scarcity: the water source and/or capacity of the system is limited, we are encouraged to save water and only use it for direct consumption, cooking, etc. (Including situation where maximum consumption quotas are implemented)</li> <li>Costs: the costs of consumed water is high, therefore, we are trying to limit our consumption and combine it with other sources when safe drinking water is not necessary (e.g. washing)</li> <li>Limited access: water not accessible 24 hours, 7 days a week, we need to use other sources as well</li> <li>Other reasons, please indicate:</li> </ul>
13.	Optional: If you have any comments regarding Q11, please share them here: (open question)
14.	What is your overall satisfaction with the access to drinking water system that was built in your village?  • Very satisfied

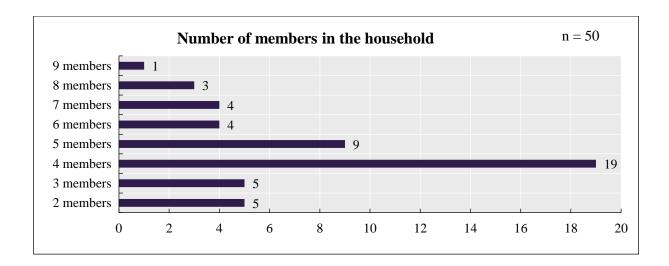
- 15. Please provide reasons of your satisfaction or dissatisfaction: *(open question, compulsory or at least strongly encouraged)*
- 16. Would you like to add any further comment regarding the availability of drinking water supply for your HH and/or village? *(open question)*

Thank you for your time. (End questioning here)

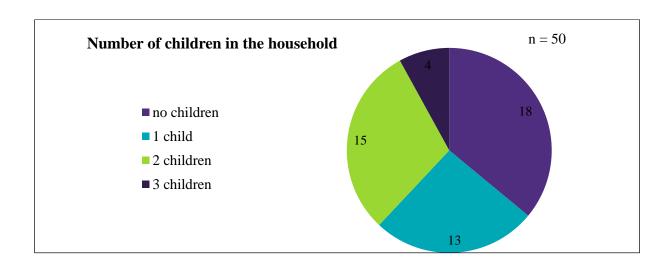
#### J. Questionnaire - results

#### Responses from a questionnaire

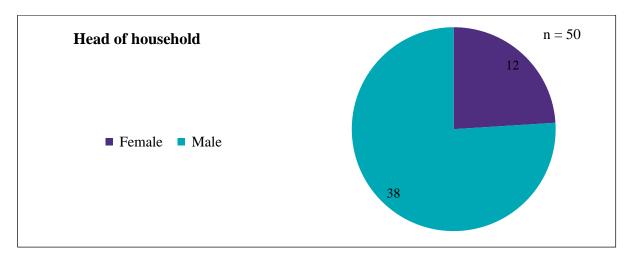
The first question in the survey asked respondents about the number of members in their household. The results indicate that most households consist of 4 members, representing 38.00% (19 responses) of the total. This is followed by households with 5 members, which account for 18.00% (9 responses). Households with 2 or 3 members each constitute 10.00% (5 responses each). Households with 6 or 7 members are less common, representing 8.00% (4 responses each). Households with 8 members make up 6.00% (3 responses), while those with 9 members are the least common, accounting for only 2.00% (1 response).



The second question in the survey inquired about the number of children under 15 in the respondents' households. The findings reveal that the largest group consists of households with no children under 15, making up 36.00% (18 responses) of the total. This is followed by households with 2 children under 15, representing 30.00% (15 responses). Households with 1 child under 15 account for 26.00% (13 responses). The least common are households with 3 children under 15, comprising 8.00% (4 responses).

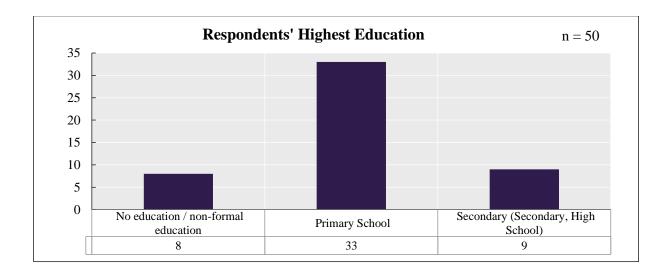


The third question in the survey asked respondents about who the head of household is. The results show that the majority of households are headed by males, representing 76.00% (38 responses) of the total. Households headed by females account for 24.00% (12 responses).

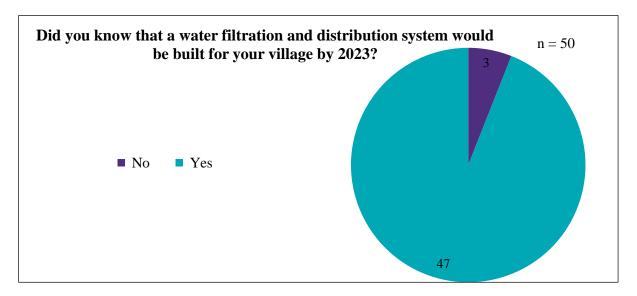


The survey also collected data on the age of respondents, revealing a diverse age range from 21 to 77 years old. Each age group represents a small percentage of the total. Notably, the ages with the highest representation include those aged 58 (4 respondents), 35 (3 respondents), and 50 (3 respondents), each accounting for 8.00% of the total responses. Other age groups are more evenly distributed, with most ages having one or two respondents.

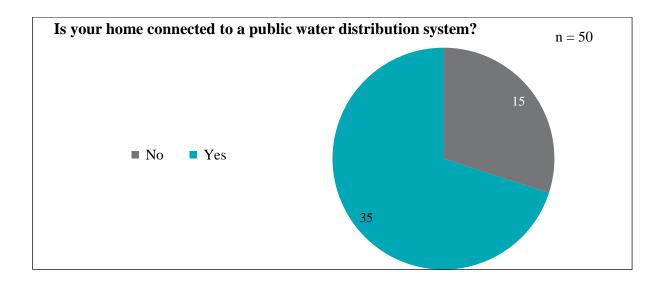
The next question in the survey explored the highest level of education attained by the respondents. The findings reveal that a significant portion of respondents, 66.00% (33 responses), have completed Primary School. This is followed by 18.00% (9 responses) who have attained Secondary education. Meanwhile, 16.00% (8 responses) of the respondents reported having no formal education or only non-formal education.



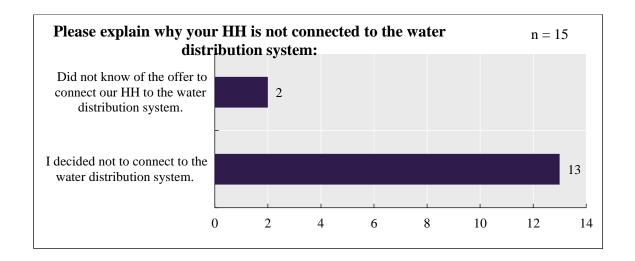
The survey included a question about awareness of a water filtration and distribution project that was expected to be completed by 2023. The vast majority of respondents, 94.00% (47 individuals), said they were aware of the project. Conversely, a small minority, representing 6.00% (3 individuals), did not know about the initiative.



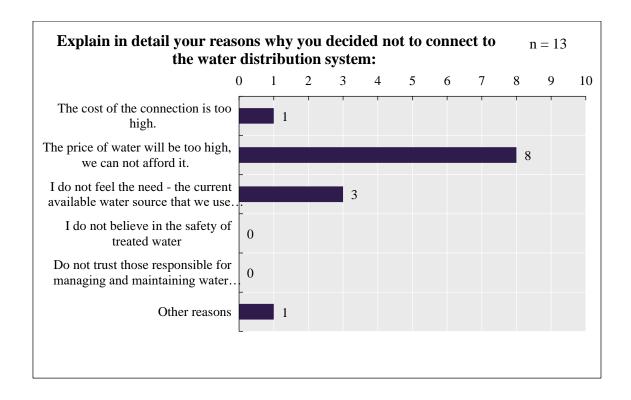
Respondents were asked whether their houses are connected to public water supply. The results show that 70.00% (35 households) have access to public water supply. And only 30.00% (15 households) reported that they are not connected to the public water network.



Respondents not connected to the water supply network were asked to explain the reason for this decision. The responses show that the majority of them (13 out of 15 respondents) chose not to connect to the system, while 2 respondents were unaware of the offer to connect. Additionally, 60.00% (9 respondents) provided other reasons for not connecting.

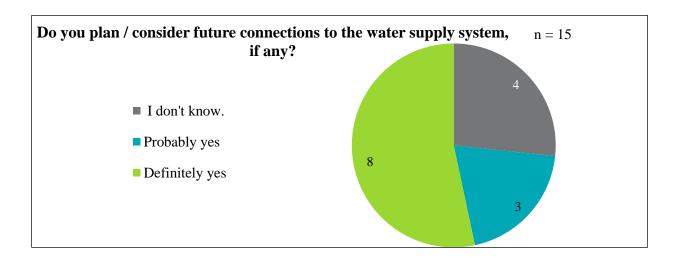


Respondents who decided not to join were also asked to elaborate on their detailed reasons for deciding not to connect to the water distribution system. The results show that most of them (8 respondents) mentioned the high cost of water as a significant factor - they were concerned about the ongoing cost of water, believing it would be too expensive for them to afford. Another three respondents claimed that their current source of water is sufficient for their needs. Lastly, 1 respondent felt that the on-time cost (of 50.000 KHR) was too high to afford for them. One "other" response mentioned mainly technical issues.



Respondents were asked to elaborate on any additional information that led them to decide not to connect to the water system. Responses were varied, with each reason representing 9.09% (1 respondent) of the total. Common themes included financial constraints, dependence on existing water sources, and uncertainty about the cost and efficiency of a new system.

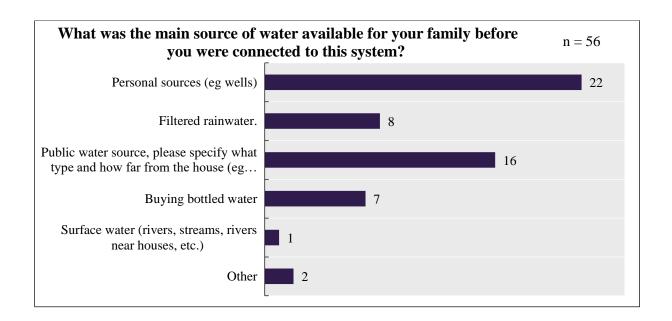
When asked about their plans or considerations for future connections to the water supply system, respondents provided the following insights: 26.67% (4 respondents) were uncertain about their plans. Meanwhile, 20.00% (3 respondents) indicated that they would probably connect to the system in the future. A more definitive stance was taken by 53.33% (8 respondents), who expressed a definite intention to connect.



Respondents who were connected to a public water distribution system were asked to specify the month and year they were connected to the water distribution system. The responses ranged from the initial connection to May 2024. The majority, 34.29% (12 respondents), reported being connected in January 2024. Other notable months include February 2024 with 11.43% (4 respondents) and December 2023 with 8.57% (3 respondents). The remaining responses were more evenly distributed across other months and years.

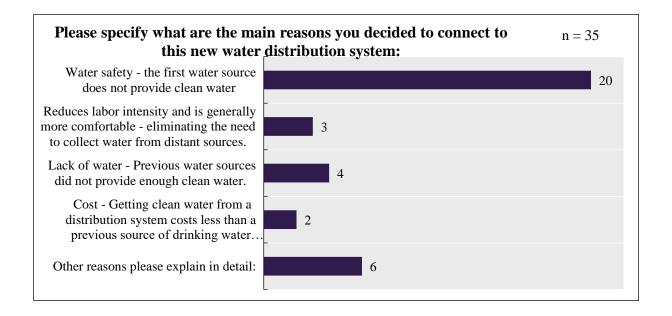
Respondents were asked also about their primary water source before the connection. They could select multiple answers to this question. The findings indicate that 39.29% (22 respondents) relied on personal sources such as wells. Public water sources were utilized by 28.57% (16 respondents), while 14.29% (8 respondents) depended on filtered rainwater. Buying bottled water was a common practice for 12.50% (7 respondents). A smaller percentage, 1.79% (1 respondent), used surface water like rivers and streams. Lastly, 3.57% (2 respondents) mentioned other reasons.

Respondents who selected "Public water source" were asked to specify the type and distance from their house. The responses varied widely, with distances ranging from 10 meters to 20 kilometers. The most common distances mentioned were 20 meters (17.65%, 3 respondents) and 30 meters (11.76%, 2 respondents). Other distances included 50 meters (11.76%, 2 respondents), about 1 kilometer (5.88%, 1 respondent), and various other distances.



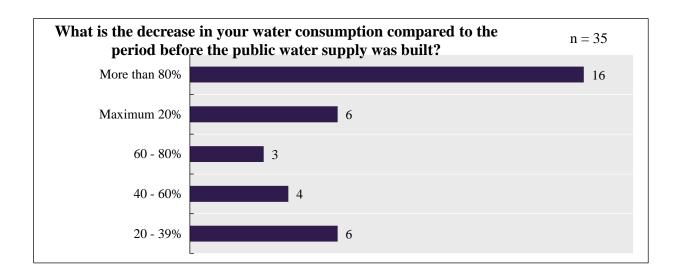
Respondents were asked to specify their main reasons for connecting to the new water distribution system. The results indicate that 57.14% (20 respondents) cited water safety as their primary reason, as their previous water source did not provide clean water. Additionally, 17.14% (6 respondents) mentioned other reasons, which they explained in detail. 11.43% (4 respondents) connected due to a lack of sufficient clean water from previous sources. 8.57% (3 respondents) connected to reduce labor intensity and for greater convenience. Lastly, 5.71% (2 respondents) found that getting clean water from the distribution system was more cost-effective than their previous source.

Among those who provided other reasons, common themes included ensuring a backup supply and convenience. Respondents mentioned wanting protection against well failures, ease of use, and trying out the quality of clean water.



Respondents were asked to estimate the proportion of their total household water consumption that came from the newly constructed public water distribution system. The findings reveal that 45.71% (16 respondents) reported using more than 80% of their water from this system. Additionally, 17.14% (6 respondents) estimated their usage to be

between 20% and 39%, while another 17.14% (6 respondents) indicated that it was at most 20%. 11.43% (4 respondents) used between 40% and 60%, and 8.57% (3 respondents) reported using between 60% and 80%.



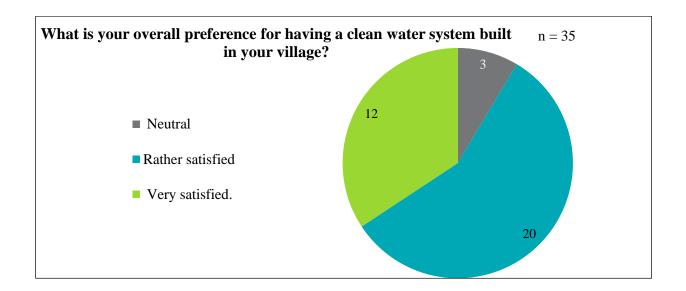
When respondents answered less than 80% to the previous question, they were asked to share their reasons for no longer using the public water distribution system. The results indicate that 43.33% (13 respondents) cited the high cost of drinking water as the main reason, leading them to limit their consumption and supplement it with other sources. Additionally, 53.33% (16 respondents) provided various other reasons. Only 3.33% (1 respondent) mentioned limitations related to water resources and system capacity.

Among those who provided other (53.33%) reasons, common themes included financial constraints and reliance on existing water sources. Respondents mentioned continuing to use well water due to long-term usage, saving money with public wells, and using rainwater during rainy months.

Respondents were also asked to share any suggestions regarding previous questions. The responses covered a wide range of topics. Some respondents mentioned the convenience and safety of using clean water, highlighting that it is easy to use and provides peace of mind regarding health (4.55%, 1 respondent). Others expressed concerns about the cost of water, noting that high prices make it difficult to use large quantities, and some even suggested reducing the price to make it more affordable (4.55%, 1 respondent).

Additionally, there were comments about the quality of the water, with one respondent mentioning that the water has a lot of lime (4.55%, one respondent). Another respondent suggested that they still use well water in combination with clean water to manage costs and ensure a reliable supply (4.55%, one respondent). Other suggestions included using clean water primarily for cooking and drinking, the convenience of having clean water available, and the importance of maintaining a balance between using clean water and other sources to manage expenses.

Respondents were asked about their overall satisfaction with the newly built clean water system in their village. The findings reveal that a majority, 57.14% (20 respondents), reported being rather satisfied with the system. Additionally, 34.29% (12 respondents) expressed a high level of satisfaction. Meanwhile, 8.57% (3 respondents) indicated a neutral stance on the matter.



In the final section of the survey, respondents were asked to provide reasons for their satisfaction or dissatisfaction with the availability and quality of clean water. The responses highlighted various factors contributing to their overall sentiment.

Many respondents expressed satisfaction due to the convenience and ease of use that clean water provides. For instance, several respondents mentioned that clean water is readily available and can be used immediately, which is particularly beneficial during water shortages or power outages. One respondent noted, "Convenient when needed urgently, have water to use on time, avoid only when the power goes out."

Another common theme was the safety and hygiene associated with clean water. Respondents appreciated that clean water is safe for drinking and cooking, reducing health concerns. One respondent stated, "He is satisfied because there is clean water to drink. No more health concerns." Others highlighted the absence of lime and rust in clean water, making it suitable for various household uses, such as washing and cooking.

The availability of clean water also brought peace of mind to many respondents, especially those who previously relied on well water. One respondent mentioned, "Due to clean water, fear of not using well water." Another added, "Have enough water to use, do not worry if the well is damaged or not water."

In summary, the primary reasons for satisfaction with clean water among the respondents include its convenience, safety, and reliability. These factors contribute to a higher quality of life and reduced stress related to water availability and health concerns.

In the last question of the survey, all respondents were asked to provide a final commentary on the availability of clean water supply for their households (HHs) and/or their village. The responses highlighted various factors contributing to their overall sentiment.

Many respondents expressed concerns about the cost of clean water, requesting lower prices or discounts. Comments included "Ask for a discount on water" and "Ask for cheaper water prices." Some specified desired price points, such as "If the price  $2,000R / m^3$  is good."

Quality issues were also mentioned, particularly the presence of lime in the water. Respondents requested improvements, with comments like "Please check the water because there is too much lime."

Despite these concerns, many appreciated the convenience and safety of having clean water. Positive feedback included remarks about ease of use and health benefits, such as "Easy and safe" and "Good for health." The availability of clean water was especially valued during shortages or power outages.

Some respondents highlighted the positive impact on their daily lives, noting improved quality of life. Comments included "Happy to have water at home" and "Since connected to clean water, it feels safe and convenient."

#### K. Expert assessment of installed technologies (in Czech only)

#### Zlepšení systému WASH v provincii Kampong Chhnang, Kambodža

Evaluace technického řešení

Zpracovatel:

Miroslav Čapka

Předmětem tohoto posouzení je vyhodnocení vhodnosti zvoleného řešení zkvalitnění vodohospodářské infrastruktury v provincii Kampong Chhnang, Kambodža. Posouzení se skládá ze dvou hlavních částí:

- Posouzení technického řešení úpravny vody vybudované v komuně Krang Lvea vesnice Tang Krous Keut a Tang Krous Lech
- 2. Posouzení možnosti rozšiřování navrženého zařízení pro nové uživatele v oblasti (scalability)

Posouzení se týká výhradně vybudované úpravny vody v komuně Krang Lvea a nezabývá se ostatními aspekty celého projektu (tj. včetně jeho původního a reálného rozsahu).

#### 1. Posouzení technického řešení úpravny vody a případných rizik

#### 1.1. Obecné informace

Nová úpravna vody byla vybudována a zprovozněna ve druhé polovině roku 2023. Zdrojem vody pro tuto úpravnu jsou dva nové vrty NW1 a NW2 hluboké cca 60 m navržené pro zásobování vesnic Tang Krous Keut a Tang Krous Lech. Tato nová úpravna vody měla dle původních předpokladů dodávat pitnou vodu 574 domácnostem, což představuje cca 2300 obyvatel (viz kapitola 4.1.1.1 Studie proveditelnosti).

Reálný počet napojených domácností je však nižší. Jedná se o 374 domácností a tento počet zahrnuje i 73 domácností v sousední vesnici, s nimiž se v původních předpokladech projektu nepočítalo. Této problematice (kapacita úpravny vody) se věnujeme v další části textu.

Úprava vody financovaná s využitím rozvojové pomoci byla velmi správně vybudována v lokalitě, kde není možné poptávku po vodě jednoduše pokrýt z povrchových zdrojů bez nutnosti úpravy surové vody. V oblasti Krang Lvea – vesnice Tang Krous Keut a Tang Krous Lech není k dispozici povrchová voda pro zásobování obyvatel. Je tedy nutné ji čerpat a následně upravovat, což představuje v porovnání s využíváním povrchové vody zvýšené náklady. Ty lze jen velmi komplikovaně a v omezené míře promítnout do ceny za odebranou vodu tak, aby tato cena nepřekročila úroveň, kterou jsou obyvatelé ochotní akceptovat. Bez podpory do investice do vrtu a úpravny vody by obyvatelé byli závislí na jiných zdrojích (voda z barelů).

Velmi vhodně úpravna vody obsahuje i místo pro stáčení upravené pitné vody do sudů – řešení vhodné pro ty obyvatele oblasti, kteří se z nejrůznějších důvodů nebudou moci připojit na rozvod upravené pitné vody.

#### 1.2. Technologické řešení

Ze stavebního a technologického hlediska se jedná (z pohledu evropské legislativy i obvyklých technologických řešení) o standardizovanou kontejnerovou úpravnu vody se čtyřmi stupni úpravy. To umožní dodávat nezávadnou pitnou vodu obyvatelům.

Z poskytnutých podkladů nelze plně vyhodnotit vhodnost zvolené technologie úpravny vody na místní podmínky (z logiky věci není technologie úpravny vody ve shrnutí popsána do detailů). Dovolujeme si na tomto místě poukázat na možné nepřesnosti či nejasnosti v popisu zvolené technologie úpravny vody:

- 1. V popisu není uvedena filtrační rychlost surové vody. Tato skutečnost má vliv na posouzení vhodnosti zvolené technologie (pomalá filtrace vs. rychlofiltrace)
- 2. Dle popisu na straně 2 dokumentu Technologické řešení projektu vyplývá, že první stupeň chlorace je instalován před filtr s aktivním uhlím. Jedná se pravděpodobně o nepřesnost v popisu, protože takto umístěný stupeň chlorace by mimo jiné znamenal významné zkrácení životnosti filtru s aktivním uhlím. Doporučujeme prověřit správnost popisu instalované technologie, případně doplnit její upřesnění

- 3. Objem zásobní nádrže na surovou vodu (25 m³) se pro danou lokalitu jeví jako zbytečně velký. Je ale možné, že s ohledem na místní podmínky má tento objem své opodstatnění. Doporučujeme zvážit možnost doplnění zdůvodnění tohoto objemu do průvodní zprávy
- 4. V poskytnutých podkladech není detailněji odůvodněna velikost zásobníku na upravenou pitnou vodu (80 m³); pravděpodobně vychází z konkrétní potřeby na místě. Doporučujeme do zprávy doplnit stručný popis toho, proč byla stanovena právě tato kapacita pro pitnou vodu. Tato problematika má i úzkou vazbu na případné rozšiřování navrženého řešení pro dané uživatele (viz dále v textu).

Instalovaná úpravna vody odpovídá potřebám v místě a dokáže zajistit úpravu vody z vrtů NW1 a NW2 na požadovanou úroveň. Je však třeba upozornit na skutečnost, že tato instalovaná technologie vyžaduje, v porovnání s jednoduššími technologiemi, vyšší nároky na údržbu – a to jak finanční, tak i personální.

#### 1.3. Zajištění provozuschopnosti

Z pohledu zajištění dlouhodobé provozuschopnosti nově vybudované úpravny vody je klíčové proškolení místního provozovatele pro provádění běžných oprav a údržby. Dle informací uvedených Zhotovitelem toto proškolení proběhlo, ale z poskytnutých podkladů není zřejmé, zda byl zpracován provozní řád či jiný dokument určující pravidla a postupy pro provozování nově vybudované úpravny vody a kdo je odpovědný za jeho dodržování. Dle šetření na místě provoz úpravny vody zajišťují de facto dobrovolníci z místní komunity. Běžný "komerční" provozovatel nemá o podzemní zdroje vody vyžadující navíc dodatečnou úpravu zájem; komunální provozovatel tedy v těchto případech hraje klíčovou roli. To jen podtrhuje potřebu důkladného proškolení obsluhy nové úpravny vody. Tito dobrovolníci nemají s provozováním těchto typů zařízení takové zkušenosti, které postačí pro zajištění bezproblémového dlouhodobého provozu.

Doporučujeme tedy prověřit, zda je pro zajištění dlouhodobé provozuschopnosti uděláno maximum. V poskytnutých podkladech není uvedeno, zda byl zpracován provozní řád přizpůsobený místním podmínkám a jakým způsobem bylo provedeno proškolení (v podkladech je pouze stručně zmíněna skutečnost, že proškolení proběhlo, ale nejsou k tomu uvedeny žádné detailní informace – co školení obsahovalo, kolik zaměstnanců provozovatele bylo proškoleno apod.). V tomto ohledu identifikujeme možné riziko pro zajištění dlouhodobé udržitelnosti projektu.

S provozuschopností úzce souvisí i zajištění nejen běžného provozu a údržby, ale i oprav a obnovy majetku. Existuje nezanedbatelné riziko, že vybírané poplatky za dodávku pitné vody dokáží pokrýt provoz (např. čerpání surové vody z hloubky 60 m je energeticky dosti náročné), ale již nikoliv prostředky na obnovu majetku. Životnost některých technologií úpravny vody v místních podmínkách pravděpodobně nepřekročí vyšší jednotky let.

Doporučujeme tedy ČRA, aby součástí obdobných projektů byl i jednoduchý výpočet nákladů na provoz, údržbu a obnovu majetku a z něj vyplývající minimální cena poskytovaných služeb (tedy v praxi vodné a/nebo stočné). Důvodem pro tento návrh je eliminace případného rizika, kdy by provozní náklady byly na vyšší úrovni, než jaké je akceptovatelná cena v dané lokalitě. Tento jednoduchý výpočet napomůže minimalizovat riziko, že projekt nebude z finančního hlediska udržitelný.

#### 2. Posouzení možnosti rozšiřování navrženého zařízení pro nové uživatele v oblasti (scalability)

Vybudovaná úpravna vody byla svou kapacitou, resp. zásobním prostorem pro upravenou pitnou vodu (80 m³) navržena pro zajištění plynulého zásobování vesnic Tang Krous Keut a Tang Krous Lech. Na úpravnu vody mělo být dle původních předpokladů napojeno cca 2300 obyvatel, což při orientační spotřebě pitné vody 100 l/os/den představuje cca denní spotřebu pitné vody 230 m³. Reálně je však na úpravnu vody napojeno 374 domácností, tj. cca 1500 obyvatel včetně obyvatel v sousední vesnici (viz text výše).

Nepřímo dostatečnou kapacitu úpravny vody potvrzuje i skutečnost, že se na ni nově vybudovaným vodovodem napojila i další vesnice vzdálená cca 5 km. To potvrzuje i zájem obyvatel žijících v oblasti o zajištění stabilních dodávek kvalitní pitné vody. Dle zjištění na místě na vodovod reálně napojuje jen přibližně polovina obyvatel jednotlivých vesnic. Lze dovodit, že navržená kapacita úpravny vody dostačuje jak pro její nejbližší okolí, tak umožní napojení i dalších oblastí, které o takto upravovanou pitnou vodu projeví zájem. To se i v praxi již děje, kdy si obyvatelé vybudovali přívodní potrubí do sousední vesnice vzdálené cca 5 km. I tak zde ještě může existovat volná kapacita pro napojení dalších obyvatel.

- L. Terms of Reference (in separate file)
- M. Presentation of the Final Report (in separate file)
- N. Photo documentation (in separate file)

#### O. Schematic map



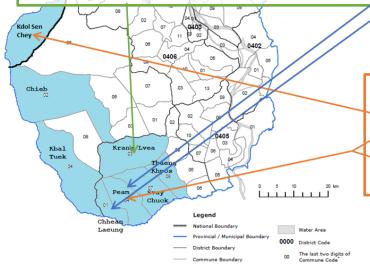
## 1 new water system built

(Krang Lvea commune)

- 2 villages connected, 574 households
  - Tang Krous Keut
  - Tang Krous Lech
- 1 school connected to new water system
  - Tang Krous Keut Primary School (291 pupils)

# 2 villages and 2 target schools connected to existing private water supply

- 2 villages, support to 200 households
  - Takeo (Peam commune)
  - Chrak Thnoat (Chhean Laeung commune)
- 2 school connected
  - Chrak Thnoat Primary School (278 pupils in 2021)
  - Chrak Thnoat Secondary School (185 pupils)



### 3 schools received water storage tanks (3 m<sup>3</sup>)

- Khneang Primary School (Kdol Saen Chey commune, 89 pupils)
- Chrak Sdach Primary School (Peam commune, 364 pupils)
- Chrak Sdach Secondary School (Peam commune, 264 pupils)

P. Comments to Final Report by members of the Reference Group

Č.	Komentář / připomínka	Odkaz	Autor	Reakce evaluačního týmu
	Do příloh by mělo být doplněno Manažerské shrnutí v češtině a zadávací podmínky. Doporučuji doplnit také fotodokumentaci (viz pozorování např. u vizibility nebo potvrzení instalovaných technologií a vybavení), případně na ni odkázat v textu.			
1	Pomohla by i mapa s místy implementace.	Celkové posouzení	ČES	Připomínka akceptovaná, doplněno
2	The summary should be 4 pages max. Can you reduce it, please? I propose some reductions for your consideration (although I did not fully succeed).	Management Summary	ČES	Připomínka akceptována, zkráceno
3	Can you add information about observation? As you visited the implementation sites, it would be also very useful to add photos (of technologies, equipment, visibility).	kap. 3.1	ČES	Připomínka akceptována, doplněno
4	The Final report should not refer to the Input report. Therefore, the key details should be repeated here (I think that the substantial details are provided below) or the reference should be deleted.  I would say that this can concern DECCB and LWD. Other organizations - DEKONTA, G-servis and	kap. 4.1	ČES	Připomínka akceptována, odkaz na VZ odstraněn
5	Ekomonitor are quite experienced in this sector	kap. 4.1	ČES	Připomínka akceptována, text uprave
6	This probably explicitly concerns the first (WASH) project and its key actors - DECCB and LWD. I would propose mentioning it. DEKONTA, G-servis and Ekomonitor are quite experienced in the field of WASH infrastructure.	doporučení	ČES	Připomínka akceptována, podrobněji vysvětleno v textu
7	Verified or assessed? Do you propose a revised Theory of Change?	Příloha F	ČES	<b>Připomínka akceptována:</b> ToC je validní, ale nebyla plně implementovaná. ToC upravena - doplněna o připomínky z evaluace
	Some of the recommendations call for new projects or other activities, while the upcoming bilateral programme 2024-2030 does not list WASH as a priority sector.  Perhaps, there could be some disclaimer such as "Should the support to WASH sector continue, we recommend the following steps"		Kamil Pikal, ambasáda	<b>Připomínka částečně akceptována</b> s vysvětlením: Being aware of this fact, we tried to formulate the recommendations in such way that it is applicable also to cross-cutting sectors aimed at public governance. Added that explicitly into the text.
9	Very relevant point across the sectors (beyond WASH) - navržena úprava důležitosti hodnocení z 2 na 1	Doporučení	Kamil Pikal, ambasáda	Připomínka akceptována, hodnocení důležitosti upraveno
10	Given the ongoing phase out and no WASH projects in a pipeline. - navržena úprava důležitosti hodnocení z 1 na 2	Doporučení	Kamil Pikal, ambasáda	Připomínka akceptována, hodnocení důležitosti upraveno
11	Reference to the new priority sector in upcoming bilateral programme (and possible justification for identifying a new project or other activity in that field) - úprava textu doporučení	Doporučení	Kamil Pikal, ambasáda	Připomínka akceptována - úprava akceptovaná

(	Q. Checklist o	of mandatory req	uirements of the	ne evaluation	contract	

Seznam povinných náležitostí evaluační zakázky – povinná příloha k příkazní smlouvě o vyhodnocení dvou projektů dvoustranné ZRS ČR v sektoru vodasanitace v Kambodži

Všeobecné podmínky	Splněno	Kdy	Poznámka
Použití min. tří evaluačních metod	Ano	Průběžně v zakázce	
Realizace mise/dálkového průzkumu v partnerské zemi (Bosna a Hercegovina)	Ano	Září 2024	
Řádné vyúčtování	Ano	28. 11. 2024	
Vypořádání připomínek	Ano	23. 11. 2024	
Závěrečná prezentace na MZV	Ano	12. 11. 2024	
Dokumenty	Splněno	Kdy	Poznámka
Vstupní zpráva se strukturou dle povinné osnovy	Ano	Návrh 28.6.2024, fin. verze 27.8.2024	
Přílohy vstupní evaluační zprávy dle povinné osnovy	Splněno	Kdy	Poznámka
Seznam a vysvětlení použitých zkratek	Ano	Návrh 28.6.2024, fin. verze 27.8.2024	
Seznam prostudovaných dokumentů, příp. též dřívějších evaluačních zpráv v dané tématice a odborné literatury, relevantní internetové odkazy	Ano	Návrh 28.6.2024, fin. verze 27.8.2024	
Seznam interview (přehled klíčových respondentů) a skupinových diskusí (fokusních skupin) v ČR, při dodržení pravidel ochrany osobních dat	Ano	Návrh 28.6.2024, fin. verze 27.8.2024	
Navržený harmonogram mise do partnerské země/dálkového průzkumu včetně plánu rozhovorů, fokusních skupin, pozorování, odborných měření, dotazníkových šetření, apod.	Ano	Návrh 28.6.2024, fin. verze 27.8.2024	
Navržené dotazníky, okruhy pokládaných otázek (případně evaluační matice)	Ano	Návrh 28.6.2024, fin. verze 27.8.2024	
Závěrečná evaluační zpráva se strukturou dle povinné osnovy a s přílohami: Identifikační formulář Zodpovězení evaluačních otázek Zohlednění kritérií DAC Stupnice míry naplnění evaluačních kritérií	ano		
Zohlednění průřezových principů Provázanost zjištění, závěrů a doporučení Adresnost doporučení		Návrh 18. 10. 2024, fin.verze 28. 11. 2024	

Soulad se standardy ČES			
Rozsah textu zprávy maximálně 25 stran A4 (bez příloh)			
Korektnost překladu do anglického/českého jazyka			
Povinné přílohy závěrečné evaluační zprávy dle povinné osnovy	Splněno	Kdy	Poznámka
Shrnutí zprávy v anglickém jazyce v případě české nebo slovenské verze zprávy nebo v českém	Ano	fin.verze 28. 11. 2024	
jazyce v případě anglické verze zprávy (se shodným obsahem a strukturou jako shrnutí v textu			
zprávy)			
Seznam a vysvětlení použitých zkratek	Ano	Návrh 18. 10. 2024,	
		fin.verze 28. 11. 2024	
Schéma intervenční logiky hodnocené intervence (v případě potřeby rekonstruované)	Ano	Návrh 18. 10. 2024,	
		fin.verze 28. 11. 2024	
Seznam prostudovaných dokumentů, příp. též dřívějších evaluačních zpráv v dané tématice a	Ano	Návrh 18. 10. 2024,	
odborné literatury, relevantní internetové odkazy		fin.verze 28. 11. 2024	
Seznam interview (přehled klíčových respondentů) a skupinových diskusí (fokusních skupin), při	Ano	Návrh 18. 10. 2024,	
dodržení pravidel ochrany osobních dat		fin.verze 28. 11. 2024	
Využité dotazníky, okruhy pokládaných otázek	Ano	Návrh 18. 10. 2024,	
		fin.verze 28. 11. 2024	
Analýzy výsledků průzkumů, dotazníkových šetření, faktická zjištění	Ano	Návrh 18. 10. 2024,	
		fin.verze 28. 11. 2024	
Shrnutí zásadních výsledků rozhovorů a fokusních skupin s klíčovými respondenty (nejsou-li v	Ano	Návrh 18. 10. 2024,	Součástí zprávy
textu), při dodržení pravidel ochrany osobních dat		fin.verze 28. 11. 2024	
Vyhodnocení jednotlivých průřezových principů dle nástrojů certifikované metodiky evaluace	Ano	Návrh 18. 10. 2024,	Součástí zprávy
průřezových principů ZRS ČR		fin.verze 28. 11. 2024	
Zadávací podmínky (Terms of Reference)	Ano	fin.verze 28. 11. 2024	
Tabulka vypořádání (zásadních) připomínek referenční skupiny a dalších zapojených aktérů	Ano	fin.verze 28. 11. 2024	
k závěrečné zprávě			
Přehled připomínek vzešlých z diskuse při závěrečné prezentaci a jejich vypořádání ze strany	Ne		Z diskuse
evaluačního týmu (v případě potřeby)			nevzešly
			připomínky, ke
			kterým by bylo
			třeba uvádět
			vypořádání

Checklist povinných náležitostí evaluační zakázky	Ano	Příloha hlavní zprávy	
Doporučené přílohy závěrečné evaluační zprávy dle povinné osnovy	Splněno	Kdy	Poznámka
Rozsáhlejší tabulky a grafy (krátké je naopak vhodné vložit do textu hlavní části)	Ano	Návrh 18. 10. 2024,	
		fin.verze 28. 11. 2024	
Výběr fotografií	Ano	fin.verze 28. 11. 2024	
Citace stanovisek zainteresovaných stran (zejména cílových skupin), případové studie	Ano	Návrh 18. 10. 2024,	Je součástí
		fin.verze 28. 11. 2024	hlavní zprávy
Doplňující informace k evaluačním metodikám sběru dat a analýz, případně k evaluačnímu týmu	Ne		
Doplňující informace ke zjištěním a závěrům evaluace	Ano	Návrh 18. 10. 2024,	Expertní
		fin.verze 28. 11. 2024	technické
			posouzení
Prezentace výsledků evaluace (z debriefingu či závěrečné prezentace na MZV)	Ano	12. 11. 2024	