

Final Report

Local Government and Private Sector Partnership for Service Delivery: The Case of Clean Water Supply in Cambodia



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DISCLAIMER

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ABBREVIATION

3i	Investing in Infrastructure
AFD	Agence Française de Développement (French Development Agency)
CMDGs	Cambodian Millennium Development Goals
CSDGs	Cambodian Sustainable Development Goals
CSES	Cambodian Socio-Economic Survey
CSW	Center for Sustainable Water
CWA	Cambodian Water Supply Association
D&D	Decentralization and Deconcentration
DM	District/Municipal
DMK	District, Municipal or Khan
DWG	District Technical Working Group
GDP	Gross Domestic Product
KII	Key Informant Interview
MEF	Ministry of Economy and Finance
MIS	Management Information System
MISTI	Ministry of Industry, Science, Technology, and Innovation
MOI	Ministry of Interior
MRD	Ministry of Rural Development
NAP I	National Action Plan 2014-2018
NAP II	National Action Plan 2019-2023
NCDD-S	Secretariat of the National Committee for Sub-National Democratic Development
NGO	Non-Government Organization
NP-SNDD	National Program for Subnational Democratic Development
NSDP III	National Strategic Development Plan 2014-2018
NSP	National Strategic Plan
PDISTI	Provincial Department of Industry, Science, Technology, and Innovation
PDRD	Provincial Department of Rural Development
PFM	Public Financial Management
PPP	Public-Private Partnership
PWGs	Provincial Working Groups
PWOs	Private Water Operators
RGC	Royal Government of Cambodia
RWSSH	Rural Water Supply, Sanitation and Hygiene
SNAs	Sub-National Administrations

1. BACKGROUND

The Royal Government of Cambodia (RGC) established the National Policy on Water and Sanitation in 2003 wherein it envisioned that every rural population would have sustained access to a safe water supply, improved sanitation services, and the ability to live in a hygienic environment by 2025.¹ To support the RGC to fulfil the sector's vision of universal water and sanitation coverage, the National Strategy on Rural Water Supply, Sanitation and Hygiene (RWSSH) 2011-2025, subsequently launched as the National Strategic Plan (NSP) RWSSH 2024-2025, was developed with the primary aim to facilitate accelerated progress towards achieving the Cambodian Millennium Development Goals (CMDGs) in 2015 and the RWSSH vision of full coverage by 2025.²

The implementation of NSP has been guided by the 2014-2018 National Action Plan (NAP I) and the 2019-2023 National Action Plan (NAP II). The NAP I, which was aligned with the 2014-2018 National Strategic Development Plan (NSDP III), had a target of 60% improved access for rural and 85% of piped access for urban water supply by 2018.³ As a result, rural and urban water supply reached 62% and 85.84%, respectively, in 2018.⁴ However, challenges remain; the distribution of services is unequal, as evidenced by significantly lower levels of access to services in remote communes and provinces, to poor households, and for people who live in challenging environments. Therefore, the second NAP II was developed to enable 90% of the rural population of Cambodia to have access to equitable, sustainable, safe and affordable drinking water, sanitation, and hygiene services which will contribute to the Cambodian Sustainable Development Goals (CSDGs), particularly CSDG 6.¹

For more than a decade, the RGC has initiated a decentralization and deconcentration (D&D) process, with the aim of increasing the responsiveness of service delivery, improving efficiencies, and enhancing accountabilities. Under the D&D reforms, responsibilities for providing government services are being shifted to Sub-National Administrations (SNAs), including the commune/Sangkat, district, municipal, or Khan, and capital and provincial levels of government. Strengthening the ability of the SNAs to deliver public services is a key to the success of this reform agenda. In 2021, the RGC also adopted the National Program for Subnational Democratic Development (NP-SNDD) Phase 2, which emphasizes the role of effective SNA planning and strong Public Financial Management (PFM) systems for fiscal decentralization.

Clean water supply, including piped-water, is one of the essential services to be improved through the D&D reforms. In providing the services, the Government, both national and

¹ National Action Plan on Rural Water Supply, Sanitation and Hygiene 2019-2023

² National Strategy for Rural Water Supply, Sanitation and Hygiene 2011-2025

³ Water Supply and Sanitation in Cambodia (2015): Turning Finance into Service for the Future

⁴ National Strategic Development Plan 2019-2023

sub-national, can either 1) directly deliver services or 2) act as a regulator and coordinator for private operators.

In Cambodia, much attention has been given to the first role but less to the second. The shrinking of the already limited fiscal space of the Government, due mainly to the COVID-19 crisis, suggests that the second role should be given more attention in the years to come. Available data indicate that there has been more financing support from non-state actors and even more private investment in delivering services and investments, especially for public water supply, both in rural and urban areas.

However, the current partnership between SNAs in Cambodia and Private Water Operators (PWOs) has not been well developed. According to the existing policy, the district, municipal, or Khan (DMK) level is the intended main tier for service delivery, including on clean water. However, in reality, after more than a decade of D&D, the DMK level receives the least level of resources compared to the capital/provincial and commune/Sangkat levels. In addition, while the Government's policy recognizes the importance of working with the private sector to improve local services, the roles of DMK administrations in this regard have not been well defined, nor have concrete mechanisms been put in place. These limitations have not only undermined the roles of the DMK administrations but also the targeting and accountability around piped-water investment and service delivery.

2. STUDY OBJECTIVES

The research seeks to understand the current situation and possible future arrangements where local governments, especially the district/municipal (DM) administrations, can work closely with private water supply operators, with support from national level ministries to improve pipe-water services. The questions the research seeks to answer are:

- What are the current roles, institutional arrangements, and challenges of DM administrations in partnering with PWOs?
- What are the roles and challenges of PWOs in working with DM administrations?
- Moving forward, what should the stated roles, working arrangements, and mechanisms be to ensure effective partnerships between the two actors?

3. METHODOLOGY

This research was conducted in collaboration with three partners:

- Partner 1: Center for Sustainable Water (CSW), a local non-governmental organization (NGO) working on water, sanitation and hygiene. CSW was the lead partner responsible

for the literature review, quantitative data collection and analysis, field data analysis, report writing, and organizing the workshop.

- Partner 2: Secretariat of the National Committee for Sub-National Democratic Development (NCDD-S), Policy Division, responsible for administrative support regarding the key informant interview with stakeholders, as well as policy and report review, and co-organizing the consultation workshop.
- Partner 3: Young researchers, who are the youth volunteers of the Ministry of Education, Youth and Sport, joined our team as field data collectors.

Additionally, we collaborated with WaterAid Cambodia, which is an international organization working on clean water in Cambodia, to be our institutional advisor.

The research involved the following activities:

- Policy and document review:
Policy documents and literature on decentralization and clean water supply (piped water) were collected and reviewed to answer the questions posed above. Key documents include:
 - The National Program on Sub-National Democratic Development (NP-SNDD) Phase 2 (2021-2030), especially Component 5 (service delivery),
 - The sub-decrees #182, 183, and 184 on the new structure and roles of the DMK administrations, including that on clean water and how they should work with the private sector,
 - The recent study by WaterAid on fiscal decentralization and clean water (2022), and
 - The recent study by 3i on the need for private investment in piped water.
- Key informant interviews (KII): Interviews were conducted with seven categories of stakeholders: 1) Secretariat of the National Committee for Sub-National Democratic Development (NCDD-S), 2) Ministry of Interior (MOI), 3) Ministry of Industry, Science, Technology, and Innovation (MISTI), 4) Ministry of Planning (MOP), 5) Ministry of Rural Development (MRD), 6) Cambodian Water Supply Association (CWA), and 7) NGOs/development partners (DPs) working on Water and Sanitation Projects, such as WaterAid Cambodia and Cambodia Australia Partnership for Resilient Economic Development (CAPRED). The interviews aimed to get stakeholder perspectives on the progress, gaps, and upcoming initiatives for addressing the regulatory and implementation challenges with regard to piped water in urban and rural areas. The guiding questions for the key informant interviews were prepared based on the insights and hypotheses generated from the policy and document reviews.
- Quantitative data analysis: Quantitative data include the Cambodian Socio-Economic Survey (CSES) from 2014 to 2019/2020, and other administrative data on private water operators in Cambodia. Some additional data were obtained from key NGOs such as 3i and WaterAid who have recent data on PWOs in key areas.
- Field data collection:

Field-data collection was done in two rural districts and two urban municipalities in three provinces. The fieldwork survey covers:

- Provincial administration
- DMK administration
- Commune/Sangkat administration
- Private water operators in the districts and municipalities
- Households including those with poor household identity cards (ID-Poor cards) and marginalized groups. In total, 206 households were surveyed.
- Validation/Consultation Workshop: The findings from this study was presented and disseminated in the workshop in which 25 people from 15 relevant ministries, NGOs, DPs, and private companies participated and shared their insightful comments and feedbacks.

The three targeted provinces were: 1) Battambang, 2) Kandal, and 3) Kampot (Figure 1). The DMs (Sangkae, Rukhak Kiri, S'ang, and Chhuk) from the above three provinces were selected using the following criteria:

- Level of urbanization (as presented by the level of population and business activities),
- Coverage of piped-water by private operators (not public operators), and
- Number of piped water private operators in the areas.

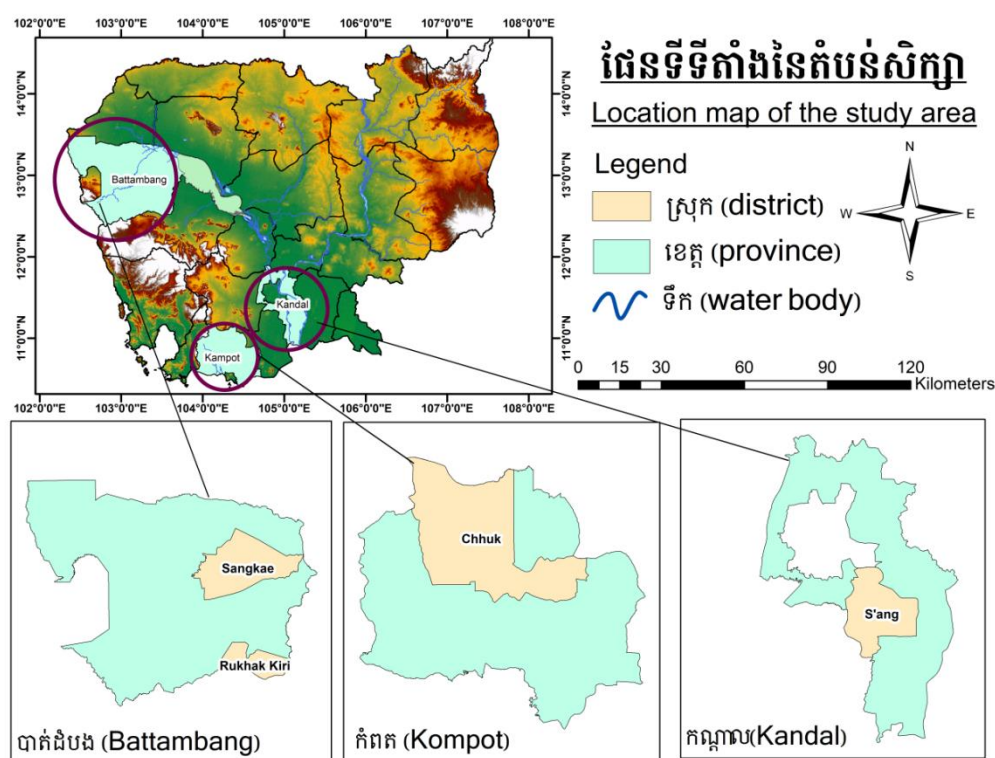


Figure 1: Location map of the study areas.

4. LIMITATIONS

The main limitation of the study is its small fieldwork sample. This is by design, due to the limited resources. However, the findings can be used as hypotheses which can be verified through a bigger sample should it be needed.

5. KEY FINDINGS

5.1. Clean Water Supply Sector Overview

Clean water supply in Cambodia is governed by two ministries – the Ministry of Industry, Science, Technology and Innovation (MISTI) and the Ministry of Rural Development (MRD). MISTI governs commercial piped water supply provided by PWOs and public water utilities with relatively clear rules, regulations, and standards regarding licenses, tariffs, technical requirements, and quality. MRD governs piped/clean water supply under community management, usually with lower technical requirements, lower tariffs, smaller infrastructure size, and high levels of grants.

Table 1: Main sources of drinking water by geographical domain in 2019/2020 (in %).⁶

Water sources	Cambodia	Phnom Penh	Other urban	Rural
Improved	79.7	94.5	83.9	74.7
Piped into dwelling	25.8	81.7	32.9	10.1
Piped into compound, yard or plot	3.7	2.6	6.4	3.0
Public tap/standpipe	1.0	0.1	1.9	0.8
Tubed/piped well or borehole	30.1	4.5	24.0	38.4
Protected well	4.1	1.3	2.7	5.4
Rainwater collection	5.8	0.0	4.4	7.7
Bottled water	9.1	4.3	11.6	9.4
Unimproved	20.3	5.5	16.1	25.3
Unprotected well	4.4	0.4	2.3	6.1
Unprotected spring	0.1	0.0	0.3	0.1
Tanker-truck	3.9	2.9	4.7	3.9
Cart with small tank/drum	2.9	0.1	3.4	3.5
Surface water (Pond, river, stream,...)	8.6	2.0	5.1	11.5
Other	0.3	0.1	0.4	0.3
Total	100	100	100	100
Number of households (in Thousand)	3,636.1	531.6	842.6	2,261.9

Access to improved drinking water sources⁵ in Cambodia has increased from 55% in 2014 to 80% in 2019/2020. However, disparities remain especially between urban and rural populations. About 82% of the households in Phnom Penh had piped water in their dwellings, while about 33% of the households in the other urban areas and only 10% of the

⁵ Improved drinking water sources include piped water in the dwelling, piped into compound, yard or plot, public tap/sandpipe, tube/piped well or borehole, protected well, protected spring, rainwater collection and bottled water.

households in the rural areas had access to piped water into their dwellings (Table 1). A commonly used improved drinking water source was tube/piped well or borehole for the households which accounts for about 38% in the rural areas, 24% in the other urban areas, but only 4.5% in Phnom Penh. Still many households in the rural areas fetched drinking water from the pond, river, or stream, at about 12%.⁶

a) Rural water supply

The RWSSH (2019-2023) has four main outputs: 1) enabling environment, 2) rural water supply, 3) sanitation, and 4) hygiene. The first two are relevant for this study. The key achievements of the enabling environment include strengthening the RWSSH Provincial Working Groups (PWGs) at sub-national level, establishing and strengthening the RWSSH Management Information System (MIS), and establishing and strengthening the technical coordination platform on rural water supply.¹

While more mechanisms have been put in place, financing is identified as the main challenge ahead. Based on a 2015 study supported by the World Bank, it was concluded that the RWSSH sector financing is insufficient to meet the nationally determined needs. To reach 100% coverage by 2025, the study indicates that some 302,000 people per year would need to gain access to an improved water source. This implied an average capital investment of USD 32 million per year, comprising USD 6.4 million in new investments to expand access and USD 25.4 million to replace existing facilities. It is expected that out of the USD 32.5 million, about USD 3.5 million would come from the national budget.⁷

Institutional capacity and coordination challenges have persisted. These include the capacity to conduct effective planning, budgeting, and management at the sub-national level and to engage the private sector. The decentralization process has yet to be taken to scale. And there is a lack of climate change and disaster risk integrated into the design and management. On the other hand, the coordination issues come from the fact that many government ministries, DPs, international and local NGOs, and private companies play many roles in the water and sanitation sector, but with insufficient integration and coordination.⁷

b) Urban water supply

MISTI is the leading ministry overseeing urban water supply in Cambodia. In the absence of an independent regulator, MISTI, through its Department of Portable Water Supply, has been put in charge of urban water supply policy, strategic planning, regulation, and sector oversight, including the licensing of PWOs.

⁶ Report of Cambodia Socio-Economic Survey 2019/2020

⁷ World Bank (2015) Water supply and sanitation in Cambodia: Turning finance into services for the future.

The responsibility for tariff setting has changed over time and still needs more legal clarity. While tariffs of public utilities require approval from the Prime Minister, in recent years, tariffs of private operators have primarily been determined through local negotiations with hands-off involvement from MISTI. According to the 2014 Prakas (No. 461), tariffs are to be stipulated in the licenses issued by MISTI, requiring consultation at the local level. Since 2015, several key Prakas have been issued, including:

- Prakas #461 (2014) on the procedures for issuing, changing, extending, suspending, and withdrawing licenses of private water supply operators
- Prakas #077 (2021) on the delegation to Provincial Department of Industry, Science, Technology, and Innovation (PDISTI) on regular inspection on PWOs
- Prakas #084 (2018) on minimum technical standard for small scale water supply system.
- Prakas #210 (2015) on the national water quality standard
- Prakas #069 (2016) on the clean water tariff that private operators can charge from users
- Guideline (2015) on clean water supply for urban areas.

Limited human resources and capacity have been challenges for MISTI in regulating urban water supply. The Department of Portable Water Supply reported not having enough staff to meet growing working demands. It manages its work through its provincial departments, where they too are said to have only a few staff to undertake growing working demands. This challenge was confirmed in key informant interviews with DM level representatives, which has been particularly true for responsibilities in provincial and small towns, including monitoring drinking water quality standards in piped systems and supporting the licensing of private operators.

Various kinds of assistance from development partners have been provided to support private operators. Despite the reform, small operators are not yet adequately regulated, have limited capabilities, and struggle to access capital for service improvement and expansion. As a response, development partners like AFD have focused on creating a more favorable environment to access financing through local banks, providing business services in developing bankable investment proposals, and experimenting with public-private partnership (PPP) arrangements. In 2012, the Cambodia Water Association (CWA) of private water operators was established, serving over 50 members in 2015.⁷

5.2. D&D Reform at DM level

In 2019, a major organizational restructuring was undertaken. The whole district administrative structure was significantly re-designed to incorporate all the line offices and their personnel (Figure 2). In addition, a new set of offices was established, combining two or more original line offices. For instance, the former line offices of rural development, agriculture, industry, and handicrafts, mining, and energy, and water resource management have been integrated into the

Office of Economic and Community Development. The transferred offices and personnel are to be accountable to the DMK administrations.

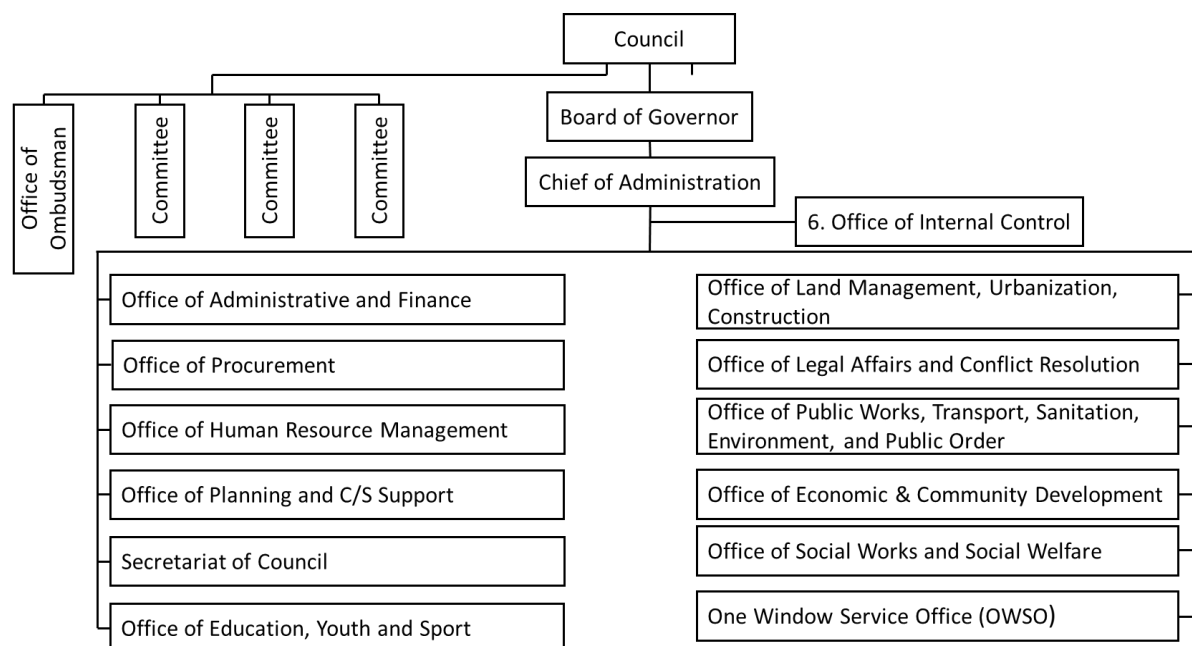


Figure 2: The new district administrative structure.⁸

According to the 2019 sub-decree, the Office of Economy and Community Development shall act as the primary agency for DM administration in economic development, public service delivery, and community development and shall have responsibilities in the areas of industry and handicraft, mines and energy, tourism; water resources, rural development, commerce, agriculture, forestry and fisheries, post and telecommunication, community development; and other tasks as assigned by the municipal governor. Moreover, all technical offices under DM administrations need to work in collaboration with line ministries, provincial line departments, provincial administration, CS administrations, the private sector, and non-state actors. However, the officials working in the office are not clear about their tasks and how they should interact with other stakeholders.

In the new organizational structure, the functions on clean water supply are placed under the Office of Economy and Community Development. This office is where the relevant functions under MRD and MISTI were transferred. For the MRD, the function transferred was ‘Construction, repair, maintenance of rural water supply system,’ whereas, for MISTI, it is ‘Management of pipe-water system management’ (after being licensed by MISTI). The 2019 sub-decrees do not provide more details on what those functions entail.

⁸ RGC (2019) Sub-decree #182, 183, 184 on the organizational structure and functions of DMK administrations.

a) MRD fiscal decentralization

DM administrations have been transferred one specific function on water supply from MRD. According to the 2019 Sub-decrees, four functions were transferred from MRD to DM administrations, including 1) development of rural roads, 2) management and provision of rural water supply, 3) management and provision of rural sanitation, and 4) management of community markets. For the water supply function, there is one sub-function, namely, the 'construction, repair and maintenance of rural water supply system'. Table 2 below summarizes key tasks, roles, and responsibilities transferred from MRD to DM administrations.

Table 2: The transfer of rural water supply functions to DMK, per PK161 (2017).

Key tasks of the function	- Small and big repair of rural water supply including small scale pipe-system - Water quality testing using a hand-held device - Support to the formation of water user groups - Build capacity of water user groups - Keep an updated inventory of all water supply systems in the locality
Tasks of DM administrations	- Regularly monitor rural water supply system in collaboration with commune and water user groups - Include into the DM investment plan activities relating to rural water supply system repair and maintenance and collaborate with PDRD - Manage the state budget allocated for rural water supply system repair and maintenance - Manage procurement activities relating to rural water supply system repair and maintenance - Conduct bi-annual water quality testing using appropriate devices and report to PDRD in case of any detected problems - Support the process of forming water user groups - Build capacity of water user groups in maintaining and repairing water supply systems - Control data and keep an inventory of all water supply systems in the localities - Collaborate with relevant stakeholders in monitoring the work of private operators who have received a contract to repair and maintain water supply systems - Hold annual public meetings to discuss plan and budget for next year for rural water supply system repair and maintenance - Prepare regular reports to MRD through PDRD
Technical and management procedures	- Rural water supply system repair and maintenance shall follow relevant technical and management procedures provided in MRD Prakas - PDRD shall assign technical staff to support DM in performing the functions
Financing	- Department of Rural Water Supply of MRD shall work with the Department of Supply and Finance and PDRD to determine the budget needed for rural water supply system repair and maintenance by using the program budget as determined by the MEF - The process of transferring the budget shall follow relevant rules and regulations - DM administrations shall use their funds for rural water supply system repair and maintenance depending on their financial availability and needs

b) MISTI fiscal decentralization

DM administrations have been transferred specific functions on water supply from MISTI. According to the 2019 Sub-decree, two functions were transferred from MISTI to DM administrations, including 1) clean water supply and 2) provision of specific administrative services. The first one is elaborated as ‘the management of pipe-water system management’ (after being licensed by MISTI). The second function refers to the licensing of small-scale businesses with low risks and the investment value of fewer than 80 million riels (20,000 USD).

Less information is known about MISTI functional transfer compared to MRD. This is because MISTI is a relatively new ministry. Unlike MRD, it has not had functional mapping and reviews nor pilot functional delegation undertaken. Hence, there is no existing reference as to what tasks DM administrations must perform concerning the management of pipe-water system management (after being licensed by MISTI). It is unclear what technical and management procedures DM administrations must follow, how much it might cost, and where the funding comes from.

Instead, the roles of DM are found in the MISTI Prakas and procedures for regulating private operators. Among all the Prakas and guidelines, Prakas #461 (2014) is the most relevant, with specific provisions on the roles of SNAs as listed in the table below.

Table 3: The transfer of rural water supply functions to DMK, per PK461 (2014).

Key regulations	Prakas #461 (2014) on the procedures for issuing, changing, extending, suspending, and withdrawing licenses of private water supply operators Prakas #077 (2021) on the delegation to PDISTI on the regular inspection on private water supply operators Prakas #084 (2018) on the adoption of the minimum technical standard for small scale water supply systems Prakas #210 (2015) on the national water quality standards Praks #069 (2016) on the clean water tariff that private operators can charge from users Guideline (2015) on clean water supply for urban areas
Key provisions on licensing process	Water supply in urban areas is defined as a water supply system that has less than 5,000 in-house connections, including those provided by public operators, public-private companies, and private operators whose operation is within the domain of MISTI (PK #084, Art 3) All water supply operators in urban areas need to be licensed by MISTI (PK461, Art 5). The license shall have an unlimited validity period for public and public-private operators and shall have a 20-year valid period for private operators Operators who are licensed shall have key rights, including 1) monopoly over the supply of water within the indicated areas, 2) the rights to set tariff rate in a transparent and reasonable manner, and 3) rights to request support from MISTI in meeting documentation required to apply for investment financing from financial institutions Interested private operators need to first request to MISTI to conduct a feasibility study. While performing the feasibility study, the private sector cannot start any

	investment activities The allowed period for feasibility is 6 months. During this period, other feasibility studies and investments in the areas shall not be made. Private operators can request to MISTI to extend the feasibility study for an additional 3 months After the feasibility study, private operators need to apply for licenses from the MISTI After obtaining the licenses, private operators need to start construction of water production and distribution system. If more time is needed for extending the construction time, the private sector shall seek approval from MISTI for such an extension
SNA roles in licensing process	Interested private operators need to submit their request to MISTI through SNAs and PDISTI at the feasibility study stage and licensing application stage Commune/sangkat shall clearly determine and assure that requested areas do not overlap with the areas under other private operators. Commune/Sangkat should hold an official meeting and produce official minutes on such decisions MISTI needs to carbon-copy relevant SNAs and PDISTI decisions on the feasibility request and licensing application SNAs and PDISTI need to publicly disseminate the information about the draft and final licenses
Key provisions on inspection	PDISTI is delegated from MISTI the roles to inspect the operation of private water supply operators. PDISTI shall conduct the inspections at least twice a year
SNA roles in licensing process	PDISTI shall perform the inspection in collaboration with relevant SNAs

5.3. Financial Reforms in Support of D&D

At national level it is not possible to clearly track if funds have been spent on water supply and sanitation, as broad categories are defined as infrastructure and social services. Hence, water and sanitation spending under this fund has not yet been included. Water and sanitation expenditure under the recently established district and municipal fund is unknown and could not be included.

In line with the ongoing decentralization reform, it is expected that more funding will become available at the discretion of sub-national authorities, including a sub-national investment fund from 2014 onwards, some of these funds might flow into the urban and rural water and sanitation sector. It will be important in the future to track and understand how such expenditure will (or will not) contribute to the sector. Hence, it will be critical to better monitor spending at sub-national level through the national Financial Management Information System on water and sanitation in the long-term. A first step is to implement national level program-based budgeting for water and sanitation and to routinely monitor resource flows to the sector that are not going through the government budgets.⁷

5.4. Roles, Institutional Arrangement, and Challenges of DM Administrations

a) Role and institutional arrangement of DM administrations

It was believed that the transfer of management functions of piped clean water supply to the DM administrations would promote the efficiency of administration management, public service delivery, and local development at the DM administrations. However, the actual performance of the local governments in improving the access of clean and safe piped water is very limited due to the following:

- The power transferred to the local government regarding piped clean water is too restrictive for the local government to perform the task effectively. The local governments feel powerless in overseeing the private business operators because they have a small task in the whole cycle of the piped clean water provision and can oversee only after the private operators have received the licenses from MISTI.
- The DM administrations are not equipped with the necessary means to implement the functions. The MISTI has not developed and disseminated clear instructions or guidelines to instruct the local governments on how to carry out this new responsibility.⁹ The task is very new to the local government, and it also involved technical aspects including how to test the water quality, how to engage or involve stakeholders, how to attract water supply operators, etc.
- The local governments still lack resources to implement the new functions successfully. Although the law on decentralization in Cambodia stated that any transfer of function to local governments must ensure the transfer of appropriate resources along with the function, the local government somehow carried out their tasks without resources or with limited resources such as human resources, financial resources, facilities, and technical equipment.

According to the interview with national and sub-national government representatives, the following are the tasks that have been carried out by the DM administration in clean water supply:

- Implement rectangular strategy of the government on using water and clean water in the communities
- Organize meetings related to clean water and sanitation in the communities
- Coordinate with PWOs when there is request from community members for clean water connections
- Facilitate and coordinate between PWOs and other parties when there are conflicts or damages to the pipe and other properties of the PWOs caused by those parties
- Establish the district technical working group (DWG) comprising of 5 members to work on WASH

⁹ NCDD. (2021). Annual Progress Report.

- Organize training courses to improve the capacity of the DWG members
- Uphold the right to suspend clean water supply operations if there is a water quality issue
- Provide advanced notice to the PWOs when there is any development in the areas that may affect the clean water supply network
- Encourage and convince people to connect and use clean piped water
- Urge PWOs to conduct water quality tests every day for some parameters

b) Challenges raised by DM administration

While coordinating and facilitating the development of clean water supply in their administrative areas, the DM administrations faced a number of challenges such as:

- Location to be connected to the pipe system is far from the main road
- House distance from one to another is far
- Out-migration of the local community members
- Lack of participation of the local community in the sector due to their traditional practices, lack of knowledge of water use, and economic conditions
- Limited dissemination and awareness raising regarding clean water and sanitation to local communities due to geographical condition such as remote and mountainous areas and budget constraints
- Lack of devices and technical skills for testing water quality locally at the clean water supply stations. Hence, some parameters need to be tested at PDISTIs
- Water supply capacity of the PWOs to the households is not sufficient (supply is less than demand). Sometimes, water quality becomes poor when they try to increase water supply capacity to meet the demand
- Water source used for clean water supply is not sustained and shortages occur in the dry season, particularly
- Technical working group of DM had been formed to lead and facilitate the WASH sector. However, their capacity is limited which requires more training
- Population increase due to in-migration of people has led to a bigger gap between water supply and demand (the case of S'ang district, Kandal province)

5.5. Role and Challenges of Private Water Operators in Clean Water Supply

a) Role and responsibility of PWOs

The private sector plays a significant role in the supply of piped clean water and has strong potential to leverage private water investment further and reduce the burden of public investment or funding. According to an Investing in Infrastructure Program (3i) report

(2020)¹⁰, 68% of households live in villages that have access to pipe treated water. Additionally, 52% of the total households living in non-covered villages are in the service areas of private piped water suppliers (either licensed or applying for license). The same report indicated that in 2020 there were 418 PWOs who had already obtained licenses or were applying for licenses to supply clean piped water, while there were only 13 public water utilities.

Most small-scale private water supply systems in Cambodia have largely been initiated by the private sector, rather than being solicited by SNAs or the national government, in response to unmet local demand. In scoping for suitable sites for water provisioning, private operators have typically focused on denser developments, largely along roads or in growth centers, with a view to optimize costs and increase the efficiency of investments. Proposed systems and service areas to be covered are required to be agreed upon with the commune(s), district, and provincial authorities before a license application for the relevant site may be submitted to MISTI.¹¹

While making a significant contribution, the private sector in water supply in Cambodia remains limited in its scale of operations. Most of them have typically undertaken full financing, design, construction, and operations of water supply schemes in service areas identified in discussions with communes. Areas that are not deemed viable on a stand-alone private investment basis have thus not, so far, attracted private operator interest. A recent study by the World Bank suggests that there is an opportunity for further enhancement of private sector engagement through public-private partnership (PPP), where risks are appropriately allocated among the public and private sectors in the provisioning of piped water supply services.

b) Challenges raised by PWOs

Despite their significant role in clean water supply, PWOs face many challenges such as:

- Destruction of piped water supply system: Lack of mechanism to inform developments and construction along the piped water supply network has often caused damage to the pipes and most of the time the PWOs receives no compensation.
- Insufficient investment fund: A complete installation of a piped water supply system requires a huge amount of money, while it takes a long time to generate profit. Usually, investors need to request loans from other sources. Although recently there are many financial institutions that provide various kinds of loans, loans for piped water supply

¹⁰ Report of Provincial Investment Plan for Piped Water Supply in Cambodia conducted by Investing in Infrastructure Program (3i) in collaboration with the Ministry of Industry, Science, Technology and Innovation (MISTI) 2020

¹¹ World Bank (2020) Scoping out the potential for delivering water services through public private partnership in small scale water supply systems in Cambodia.

investment are unavailable if the investor has no reasonable collateral besides the piped water supply system.

The roles and responsibilities of local authorities, water sources, geographic and demographic conditions, household density, and willingness of local people to use clean piped water are other challenges raised by the PWOs. These include:

- The role and responsibility of local authorities is unclear
- Water sources were not sustained
- People had limited understanding of clean water and sanitation, and did not want to connect to piped clean water
- The population increased at an unexpected rate causing a big gap between water supply and demand (the case of S'ang district, Kandal province)
- Low population density in some areas and the distance from one household to another was far, making it difficult to extend the pipe system because of high investment cost
- People were not happy with the water meter as they believed that the meter worked abnormally causing high water fees, even though they felt they had used less water. A PWO explained that sometimes the water fee included the fee of late payment fines which was why the fee was higher than expected.
- People did not have money to pay the water fee and delayed the payment.
- People did not understand how water fees are determined and tried to compare it with their neighboring areas.

5.6. Results of Households Survey (Water Users)

The survey was conducted in four districts located in three provinces: Chhuk District in Kampot Province, S'ang District in Kandal Province, and Sangkhae and Rukhak Kiri Districts in Battambang Province. A total of 206 households were surveyed in which 143 (about 70%) of the respondents were female, and 50 (about 25%) of the respondents were categorized as vulnerable groups such as ID poor family (20 females and 8 males), disable person or family with a member having disability (14 females and 5 males), and others (3 females and 0 male).

Approximately 17% (35 respondents) out of the 206 households did not have piped clean water supply connected to their households. The reasons given for not having clean water supply in their households (as shown in Figure 3) include: no interest from PWO to operate in their areas (46%); unknown reason (24%); villagers had no interest (19%); water source was not sustained (8%); and other (3%). About 83% used water from a well, 11% bought water from a water seller, and the other 6% used water from a pond, lake, or rainwater. Only one out of the 35 non-piped clean water access households, who bought water from a seller, had contacted the local authority to request a piped clean water supply connection.

This indicated that people who had their own sources of water, particularly wells, were not willing to have clean water supply connected to their households.

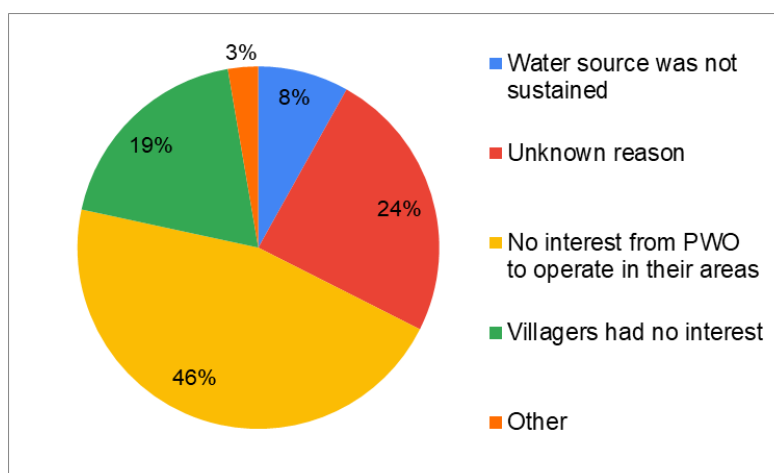


Figure 3: Surveyed households who did not have piped clean water supply connected.

Among the 206 survey households, 171 households had access to a piped clean water supply. To get piped clean water connected to their households, 8% of the respondents said they paid less than 100,000 riel, 45% said between 100,000 – 300,000 riel, 44% said between 300,000 – 600,000 riel, and the rest (3%) said they paid between 600,000 – 1,000,000 riel (see Figure 4). More than half of the surveyed households who have access to piped clean water supply mentioned that they paid water fees between 2,000 – 3,000 riel/m³, while the remaining households said that they paid less than 2,000 riel/m³. Those water tariff fees thought to be the same as the fees in the neighboring areas, as reported by more than 90% of the 171 households. However, about 43% of the 171 households thought that the water fees were high (66%) and the quality was not good at the price point (34%).

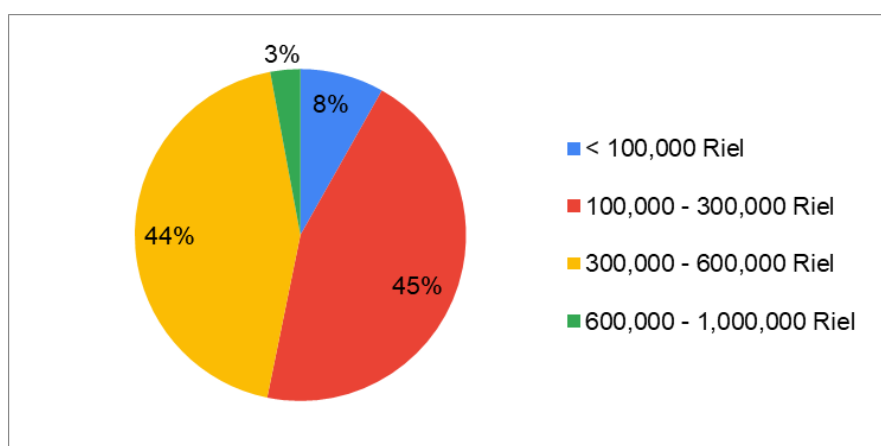


Figure 4: Piped clean water connection fee answered by the survey households.

Almost 50% of the surveyed households that have access to the piped clean water supply had made some kinds of complaint to the PWOs regarding their services and water supply fees. As presented in Figure 5, the complaint mentioned the most (65%) was the instability of water supply in term of both quality and quantity. The second and third most voted complaints were high water fees (20%) and less responsive customer services (9%), respectively. Additionally, a small number of respondents (6%) noted the difficulty in contacting PWOs when there is a problem.

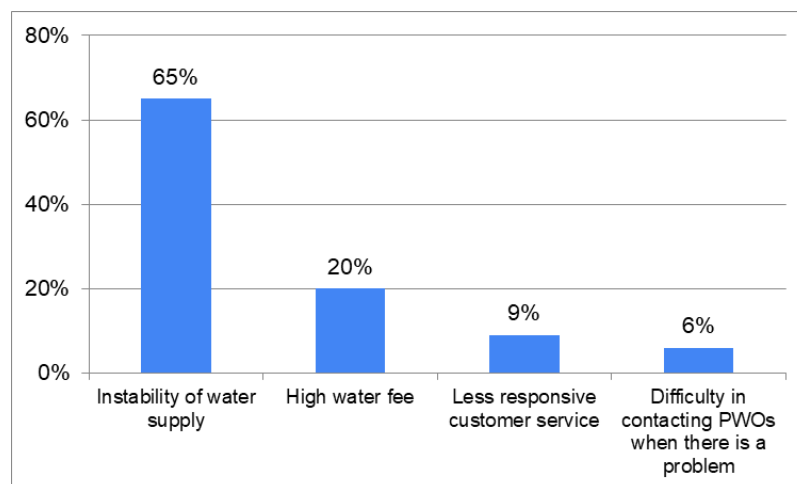


Figure 5: Complaints of water users to the PWOs regarding their services and water fees.

Among those who complained, only 3.7% and 39.51% received 'very satisfied' and 'satisfied' responses, respectively, from the PWOs as presented in Figure 6. Whereas 8.64% said they were 'unsatisfied' with their response, another 8.64% said they were 'very unsatisfied' with their response, and the other 39.51% said they did not receive any response at all from the PWOs.

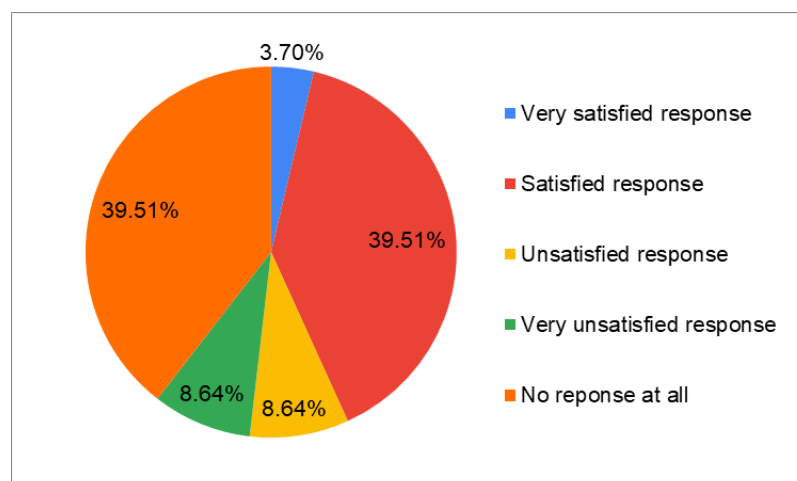


Figure 6: Response of PWOs to the water users' complaints.

About 20% of piped clean water connected households had contacted the local authorities to complain/inquire about water supply related problems (Figure 7). Water quality was the most reported issue (40.5%), following by pipe connection request (21.4%), and water meter problems/abnormalities (14.3%). Additionally, respondents noted contacting local authorities about pipe system damage (11.9%) and water fee issues (11.9%). However, 76.5% of those households said that the local authorities tried to coordinate/facilitate the problems but there was little/no improvement, while the other 23.5% said that the local authorities did not take any action.

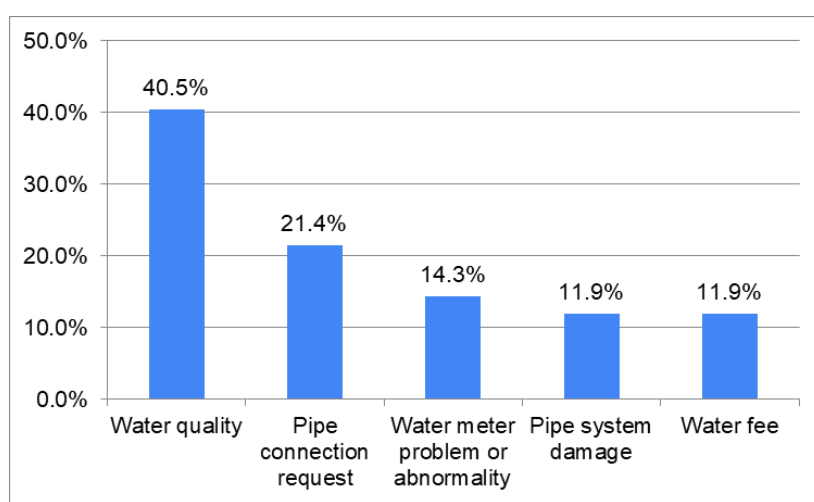


Figure 7: Problems that water users informed to the local authorities.

During the Covid-19 pandemic, nearly 40% of the households connected to piped clean water supply said that they encountered problems. These included no water (36.4%), low water pressure (27.3%), poor water quality (34.8%), and water fee increases (1.5%).

5.7. Impact of Covid-19

The negative impact on the GDP caused by Covid-19 coupled up with a large expenditure in containing the pandemic has resulted in the reduction of the government budget. The government budget cut has affected service delivery. The reduction in public expenditure negatively affects the implementing ministries/agencies to fully perform a wide range of activities including the clean water supply sector. Funding support from NGOs and the investment budget of the private sector were also reduced due to funding changes during this time.

Low access to water and sanitation in the rural area was further negatively impacted by Covid-19. Environmental challenges such as drought are compounding these risks and

highlighting the importance of climate-resilient recovery efforts. Prior to Covid-19, lack of access to water and sanitation, including handwashing with soap and water, was a challenge for some 3 million Cambodians. This disparity now compromises prevention of the spread of Covid-19, as it also continues to encourage the spread of gastrointestinal diseases and contributes to childhood mortality.

According to our interviews with the DM administrations and PWOs, the following are noted as the impacts of Covid-19 on the clean water supply sector.

- Clean water supply in some areas progressed slowly and disrupted plans for expansion into new coverage areas.
- Government officers could not fully perform their tasks. Some activities were suspended due to the postponement of meetings.
- Trainings or capacity building programs were conducted online which made them less effective.
- Income of the PWOs was affected due to the provision of clean water for free and/or delayed payment of water consumption because some locations were in lockdown and they were unable to collect the fees.
- PWOs' willingness of investment in clean water supply declined.

6. CONCLUSION

D&D reforms have been initiated with the aim of increasing the responsiveness of service delivery, improving efficiencies, and enhancing accountabilities by shifting responsibilities for providing government services to the sub-national administrations. Clean water supply, including piped water, is one of the essential services to be improved through the D&D reforms.

For rural areas, even though key achievements have been made by the government such as strengthening the RWSSH PWGs at sub-national level, establishing and strengthening the RWSSH MIS, and establishing and strengthening the technical coordination platform on rural water supply, financing is identified as the main challenge. Other challenges include capacity to conduct effective planning, budgeting, and management at the sub-national level and capacity to engage the private sector. Coordination is another challenge because there are many government ministries, development partners, NGOs, and private companies that play several roles in the water and sanitation sector, but with insufficient integration and coordination.

For urban water supply, besides expanding regulatory and support functions to small-scale PWOs which play a significant role in water supply provision, MISTI has transferred function of management of piped clean water supply business to the DM administrations in order to

promote the efficiency of administration management, public service delivery, and local development. However, many issues remain such as lack of clear guidelines, instruction and minimum standard, lack of actual power to perform the required task, lack of resources including human resources, financial resources, technical tools, equipment, facilities, and lack of capacity development. These have become key constraints that prevent DM administrations from performing their tasks effectively.

The private sector plays a significant role in the provision and investment of piped water supply, provided that 68% of households living in villages that have access to pipe treated water are in the service areas of PWOs. While making a huge contribution, PWOs in Cambodia remains limited in their scale of operations. Most have undertaken full financing, design, construction, and operations of water supply schemes in service areas. They also face a number of challenges such as destruction of piped water supply system, insufficient investment fund, and other issues such as unclear role and responsibility of local authorities, unsustainable water sources, unfavorable geographic and demographic conditions, low household density, and low willingness of local people to use clean piped water.

Results of the survey with 206 households indicated that about 17% did not have piped clean water supply connected to their households and most of these households used water from wells. They listed their key challenges to accessing clean water supply as lack of interest of PWOs in operating in their areas, no interest of villagers in using piped clean water, and unsustainable water sources. Almost 50% of the households that have access to the piped clean water supply had made some type of complaint to the PWOs regarding the instability of the water supply quality and quantity, high water fees, and about the responsiveness of customer services and difficulty in contacting them. About 17% of the complaints received unsatisfied or very unsatisfied responses, while nearly 40% of them received no response at all. Moreover, 20% of the households that have access to the piped clean water supply had contacted the local authorities to inform about water supply related problems as well. Yet, 76.5% of them said that the local authorities tried to address the problems raised but there was little/no improvement, while the other 23.5% said that the local authorities did not take any action.

To ensure the effective partnership between local government and PWOs, according to the findings the team has developed several recommendations:

- District and Commune:
 - Increase more budget at district and commune level
 - With the limited budget, an action plan should be developed by prioritizing key activities, looking for alternative options that require less/no budget such as using online platforms for meetings and/or trainings when possible, and improving areas that have less to do with budget such as building partnerships with private sector actors and working on arrangement and management of human resources

- Organize fund mobilization campaigns to raise fund from development partners, NGOs, and the private sector to implement priority/necessary activities and to support clean water supply development in challenging environment areas as well as vulnerable and marginalized communities
- Strengthen the relationship between PWOs and authorities through a regular meeting such as monthly or quarterly meeting
- Organize public forums and conduct regular monitoring
- Have local water and sanitation experts on a regular basis
- Build the capacity of the staffs, particularly in the Office of Economy and Community Development, on planning, management, monitoring, and coordination
- Integrate PWOs into district/commune development plan
- Provide more awareness-raising campaigns to local communities regarding the benefits of using clean water and the protection of water sources
- Private Water Operator:
 - Take responsibilities for every related problem that being raised by water users
 - Improve their staffs' capacity in operation and management in compliance with the regulations
 - Provide data to commune/district authorities including pipeline map
 - Cooperate with commune authorities and local road construction companies in order to minimize the destruction of pipe network
- Provincial Authorities:
 - Encourage water supply investment
 - Mobilize resource to invest in water supply
 - Facilitate investors in implementing their project
- Ministries:
 - Keep reviewing and improving licensing procedures
 - Speed up the development and issuance of detailed legal instructions, technical guidelines and operational manual on the relevant issues
 - Broadly disseminate to the local governments and relevant agencies in order for them to have a clear understanding about their tasks, roles, and responsibilities as well as other procedures
- Relevant Agencies:
 - Need to work closely together in an integration manner in order to eliminate overlapping areas of operation, as well as roles and tasks
 - Need to established an effective communication platform where relevant agencies and PWOs can communicate, coordinate, and share information better

7. APPENDIX



KII at Kampot Provincial Hall



KII at Kandal Provincial Hall



KII at Battambang Provincial Hall



KII at Krang Snay Commune, Chhuk District



KII at Prek Koy Commune, S'ang District



KII at Prek Chik Commune, Rukhak Kiri District



Household survey in Battambang



Household survey in Kampot



Household survey in Kandal



High turbidity of water from a household



Consultation Workshop