

# Participatory Community WASH Mapping and Action Planning: Guidelines

KOUK CHORK AND SLOGRAM COMMUNES, SIEM REAP

Prepared by



Supported by





## Table of Contents

1. Introduction .....	1
2. Objectives .....	2
3. Target population .....	2
4. Overview of WASH issues in the communities .....	3
Water challenges .....	3
Sanitation challenges.....	4
Hygiene challenges .....	5
5. WASH mapping .....	6
Steps and process of WASH mapping .....	7
Step 1: Assess the WASH situation in a community.....	7
Step 2: Training of CEDT's staff members on WASH mapping and documentation.....	8
Step 3: Training of the trainers for community representatives and local authorities .....	8
Step 4: Implementation of WASH mapping and documentation.....	9
Step 5: Community action planning .....	12
6. Outcomes of the WASH mapping exercise .....	13



# Introduction

The Community Empowerment and Development Team (CEDT) is a Cambodian non-government organisation established in May 2009, with the goal to strengthen poor communities in both urban and rural areas to improve their housing conditions, security of tenure and ultimately realise their housing rights.

In 2013, CEDT cooperated with local authorities and the Municipality of Siem Reap to assist five pilot communities to identify housing solutions, upgrade the communities, and improve their livelihood through application of Government mandate Circular 03: “Resolution of temporary settlements on illegally occupied land in the Capital, municipal, and urban areas.” Circular 03 provides a legal framework through which it is possible to pioneer new informal settlement regulations for people that occupy land illegally in urban areas, including possible tenure options such as renting contracts, usufruct rights, or land-ownership (after 10 years). This means that all parties can work together to include community action plans into commune and municipal planning, and discuss possible housing solutions for the future. Over the past three years, CEDT has been working with the communities to build trust and a strong working relationship with the Siem Reap local authorities at the village, Sangkat (commune), and municipal levels.

In 2014, CEDT partnered with Water Aid Cambodia to assist these communities to build their capacity and to explore ways to address WASH issues through the **Participatory Community WASH Mapping and Action Planning** project. In past experiences, many assessments have been conducted of the situation in informal settlements in Cambodia, by a range of different organizations. Most of these assessments partially cover WASH, however none have provided a clear and comprehensive picture of the WASH situation in these settlements. For example, some assessments use technical terminology relating to WASH incorrectly, and other assessments ask only a few questions providing an incomplete picture. This project would provide an opportunity to gain a deeper understanding of the situation in these communities.

The overall objective of this activity is to develop a methodology for mapping the WASH situation in informal settlements in Siem Reap that can be used by any organisation interested in working on this issue. The intention is to develop a methodology that is accurate and comprehensive, while at the same time simple to administer and use. The intention is that this assessment could be made as a stand-alone assessment, or integrated into existing assessment tools as a WASH module.

# Objectives

Under this project, there are three main objectives:

1. Build capacity to work on WASH issues in urban informal settlements in Siem Reap City;
2. Develop and disseminate approaches to WASH mapping and action planning in informal settlements; and
3. Explore how addressing WASH issues can support communities' application for resolution of their land tenure status.

The key activities that are undertaken to meet these objectives include:

1. Training and technical advisory support for CEDT staff on WASH;
2. WASH mapping and developing of action plans with communities and local authorities; and
3. Learning and documentation from the experience.

# Target population

CEDT is working with five existing urban poor communities and 119 informal settlements (not yet official communities) in two locations: KoukChork and Slogram Communes in Siem Reap City. The total population of the five official communities includes 214 houses, 305 households/families, and 1318 people, including 853 females. These communities were identified as the most vulnerable and marginalised by the Municipality of Siem Reap during the Convention and Introduction Workshop in March 2014.

Most of the community members are motorbike drivers, scavengers, vendors selling groceries at their own houses, construction workers, housekeepers and students; some are working as civil servants or staff members in tourism-related agencies such as restaurants, hotels, and souvenir shops; and the remaining members are former soldiers who repatriated to the area following the war. The majority of the families migrated to the town of Siem Reap in search of livelihood opportunities, as income from agriculture was not enough. Some migrated from refugee camps along the Thailand-Cambodia border after the war and others were relocated from their previous homes due to road upgrading projects.

# Overview of WASH issues in the communities

## Water challenges

The main sources of drinking water during dry and wet season in order of prevalence are: piped water from another household, hand pump, bottled water, and rainwater. In these five communes, 99% of families do not have access to government piped water supplies. The hand pumps themselves are not safe



Using water at Ruom Meth Chong Kao Su Khang Lech Community

due to the contamination with iron and other minerals, causing a discolouration of the water. However, the water from the pumps are still used for daily cleaning and washing.

For cooking and drinking water, community members buy bottled water, costing 1000 to 4000 Reil (\$0.25-\$1) per bottle. Each family will spend approximately \$5-\$20 per month (400L) depending on whether it's the dry or wet season. One bottle contains 20L of water. If we compare villages, neighbours who have access to state water supplies, spend approximately \$7 per month (1,500L) for all needs, including washing, cleaning, and drinking. However, buying bottled water from the market doesn't guarantee water quality. Cheaper brands bottle water from unknown sources, which may increase the risk of contamination. Furthermore, only 25% of respondents across the five communities said that they boil their water before drinking it.



Using water at Ruom Meth Chong Kao Su Khang Lech Community

## Sanitation challenges

A number of community members, including children and adults, who don't own a latrine, practice open defecation (11.7%). Almost 1.2% of latrine owners would also defecate near their houses, on other private property, and into a river body. 6.2% used another latrine (shared latrine). Using a shared latrine owned by a neighbour is a common practice in these communities. 57.2% have their own latrines with a pour-flush, connected to a septic tank and 0.8% have a pour-flush connected to a sewer.

Current practices for the disposal of faeces are usually that they are disposed into a latrine. In households that do not have their own latrines, faeces are disposed into an open field (11.7%) or buried (13%).

For those owner latrines, they usually empty the septic tank from 20-36 months by hiring a vacuum suck out truck. The fee for emptying is \$45. The solid wastes are connected to



Using toilet in Ruom Meth Chong Kao Su Khang Lech Community, Siem Reap



# Hygiene Situation

## Reported hand washing

Reported handwashing 87% report washing hands after using the toilet, 93% when dirty, 85% before cooking, 91% before eating, 29% reported washing hands with soap, 61% with detergent, and 9% with liquid dish soap.



Hygiene in Ruom Meth Chong Kao Su Khang Lech Community, Siem Reap

## Observed hardware

70% had a handwashing station, 63% had water, 67% had soap, 58% had both soap and water Reported illness in the past 2 weeks: 40% reported diarrhea, 47% stomach ache.

# WASH mapping

## What is WASH mapping?

WASH mapping is a unique, participatory tool that enables community members and WASH service providers to understand the current WASH situation in a community; the community desired situation and the volume of development investments in terms of finance, human resources and timeframe. The result of WASH mapping can also be used to advocate for WASH services, and for measuring changes at community level, after the project intentions made.



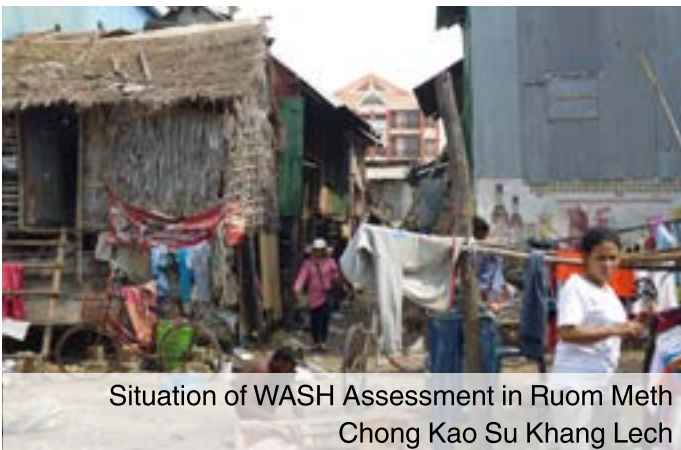
WASH Mapping Participation in Sangkat Samki Chong Kao Su Khang Kert, Siem Reap

# Steps and process of WASH mapping

## Step 1: Assess the WASH situation in a community

In this step, we aim to get an in-depth understanding of the WASH situation in each community, its current community system for access to state water, community sewerage, toilet facilities, and sanitation practices.

This step allows us to get the full picture of the community's WASH situation: to understand the various actors involved; their geographic location; their challenges; and also to understand the community's potential for solidarity.



At the beginning of this stage, it is important to have focus group discussion with community representatives and members (these members represent the core leadership group, business men and women, community activists, old and young, men and women), local authorities

and stakeholders to understand the community perspectives and their challenges on WASH.

Focus group questions include:

- What is WASH mean to communities? What are general practices of WASH in each family? (knowledge, behaviour, and practice of WASH)
- What are challenges of the communities regarding to WASH? (families, communities, and society)
- Do they have any activity related to environmental cleaning among community members? Do they have any join activities/program on environmental cleaning with local authorities?
- What do they think on how to make better WASH in their communities?

# Steps and process of WASH mapping

## Step 2: Training of CEDT's staff members on WASH mapping and documentation

As WASH is a new area of work for CEDT, it is important at this stage to develop the capacity and knowledge of project staff on general WASH as well as technical WASH mapping and documentation. WaterAid collaborated with an expert WASH trainer to provide training to 10 staff over three days at the WaterAid office in Phnom Penh. The training included the following six components:

1. General situation of water supply in Cambodia
2. WASH-associated diseases and economic effects in family and society
3. Values of fresh water
4. Hygiene
5. Mobilisation and awareness-raising for WASH
6. WASH mapping in an informal settlement

## Step 3: Training of the trainers for community representatives and local authorities

WASH mapping and documentation is an important participatory planning tool used by CEDT to engage and empower poor communities on land and housing issues connected with WASH. It involves the creation of comprehensive hand drawn (and subsequently GIS) maps and WASH profiles by the communities, with support from CEDT's technical team.

CEDT worked with consultant from Asian Professional Experience Consultant (APEC) to develop detailed lesson plans on WASH, and then provide a four-day Train the Trainer (TOT) workshop to community representatives and local authorities. The workshop was conducted at CEDT with 15 Participants from five communities (six women) and one local authorities (village and commune councils). The components of the workshop were:

1. Introduction and definition of WASH
2. Dynamic Nature of Water and Sanitation
3. Reaching full potential of good latrine
4. Participatory Hygiene and Sanitation Transformation (PHAST)
5. WASH mapping and survey
6. Possible WASH solutions and Community action plans



Activities of WASH TOT Training to Community and Local Authority in Siem Reap

## Step 4: Implementation of WASH mapping and documentation

Following the completion of the TOT workshop, the participants that became ‘trainers’ were mobilised to carry out community hand drawn mapping, GIS mapping and documentation work in their individual communities.

The implementation of WASH mapping was done in a number of steps:

### Activity 1: Awareness Raising on WASH

CEDT worked with community trainers to conduct awareness-raising on WASH to community members in each community. This awareness-raising was very important in that we not only trained community members on general WASH, but also had the chance to listen to family members



Activities of WASH Training to Community Members in Samki Community, Siem Reap

explain their situation related to accessing drinking water, types of toilets used, waste management, and hygiene practices in their families.

This activity also provided the opportunity to hear about the families' desires for future sanitation and water improvement in their families, as well as in their communities.

### Activity 2: Participatory WASH mapping

CEDT and the trainers facilitated the WASH mapping exercise, supporting the community members to map WASH facilities in their communities. Different facilities, such as drinking water sources, toilets and sanitation facilities, waste management and electricity were drawn onto paper maps using colour-coded symbols.

After the initial mapping, the facilitators assisted the community members to review the information that they had captured on their maps. This included checking details such as functionality of taps in the community, and double-checking the number of toilets available.

An example of a finished WASH map is shown below:



### Activity 3: Household data collection

Eleven trainers, including approximately five community representatives and one local authority representative, worked together to conduct interviews in each household on population, occupations, incomes and expenses, access to health, access to drinking water (sources based on seasons, cost each month, amount of using water, cost of buying water or access to private company), access to sanitation (types of latrines, common practice without own latrines, and ways of disposal), and hygiene (common of practice of hygiene, type of hygiene). The household data was compiled and analysed to produce a situational analysis of access to WASH in each of the five communities. The data and analysis is presented in individual community reports.



Activities of Data Collecting in each household in Samki Chong Kao Su Khang Kert, Siem Reap

### Activity 4: Data encoding and analysis

Student volunteers worked with CEDT staff to enter household data and scan each questionnaire as an attachment to the data. CEDT led the data analysis of each community, then collated all data across the five communities to produce an overall analysis. This analysis can be used as a baseline from which to measure WASH improvements in the community.

### Activity 5: Feedback from the community and reporting results

Once the analysis and the hand drawn maps were completed, the trainers publically displayed the maps and collected information for the community members and local authorities for discussion and feedback. They were displayed for over 7 days in each community. CEDT then combined all feedback and recommendations and incorporated them into the first draft of the WASH situational analysis in each community.



WASH Display in Public in Chong Kao Su Khang Kert, Siem Reap

The WASH profiles were then reviewed by WaterAid for recommendations on procedures, content of the profiles, translation and graphs, and consistency of Khmer and English translation. Finally, the profiles were printed as an analysis of WASH in each community and one combined all communities' profile.

## Step 5: Community action planning

Following the development of the community hand-drawn maps and WASH analyses, CEDT worked with community representatives and members to reflect on the results of the WASH mapping process, asking the following questions:

- What were their impression of the results from the hand drawn maps and WASH analysis?
- In what way have they been challenged in relation to their ideas about WASH?
- What were major issues?
- What could they do to make the situation better?
- Who are the stakeholders that should be involved to improve WASH in the community?

Community members and their representatives discussed and identified WASH problems linked with informal settlements (land/housing issues), and formulated what their dream communities should look like, priorities for WASH improvement and subsequently developed a concrete Community Action Plan (CAP).

The CAP identified the following priorities for action in the community:

1. Communities will promote WASH at the monthly meeting with their member
2. Communities will work together to ensure a clean environment
3. Two of the five communities plan to find support from the Sangkat to do temporary sewage and road building to avoid contact with waste water
4. Communities will present on the importance of WASH to their local authority
5. Communities will find a partner to assist with water quality testing for water pumps
6. Communities will discuss the cleaning of the water supply with the Sangkat

CEDT provided technical support for a cost estimation of small scale WASH infrastructure improvements. CEDT also assisted communities to do a stocktake of their resources (financial and labour contribution), and the potential amount of external support from other stakeholders and local authorities through interlink with Commune Investment Plan (government program to support development in village).



# Outcomes of the WASH mapping exercise

Since CEDT implemented this project, there have been positive impacts observed among community members.

- Community members had removed waste from throughout the community. Rubbish was removed from underneath houses, along dirt roads, in the grass and from canals. Local authorities and wealthier neighbouring families also supported the community to construct two hand pump wells, one big rubbish bin, and small rubbish bin.
- Community representatives that had received the training on WASH, went on to raise awareness of WASH issues with other community members and the local authorities.
- Community members better understand WASH issues in their communities through actively participating in the WASH mapping and data collection activities.



Souvenir Photograph with Local Authorities and Community Members at the Hand Pump in Ruom Meth Chong Kao Su Khang Lech.

- Communities worked together to develop alternative solutions to WASH challenges and prepared proposals to submit to local authorities to integrate with commune investment planning.
- Community members set up a regular cleaning day, once every three months to clear all rubbish in each house as well as throughout the community.
- Community members changed their attitude towards maintaining the community, recognising that a clean environment is everyone's responsibility not just that of the representatives.

There are some remaining challenges for these communities in relation to the attitude of the municipality and some local authorities. The local authorities still believe that these communities are informal settlements; so they don't allow a connection to state services such as water, electricity, and sewerage. Some local authorities allow the communities to construct or upgrade their sanitation facilities, but this is not supported by the municipality as they think that the communities will relocate. The communities are now working as network to continue to seek solutions on how to advocate to the municipality to change their perspective on the informal settlements. Regardless of potential relocation in the future; the community has the right to access the basic requirements of safe water, sanitation and hygiene.



**Community Empowerment and Development Team (CEDT)  
Organization**

Address: No 5, St 260 Sangkat Veal Vong Kann 7 Makara,  
Phnom Penh.

Email: [yara@cedtcambodia.org](mailto:yara@cedtcambodia.org)

Contact: (+855) 16 544 331/12 466 629

Website: [www.cedtcambodia.org](http://www.cedtcambodia.org)

Facebook: Community Empowerment and Development Team