

Resettlement Due Diligence Report

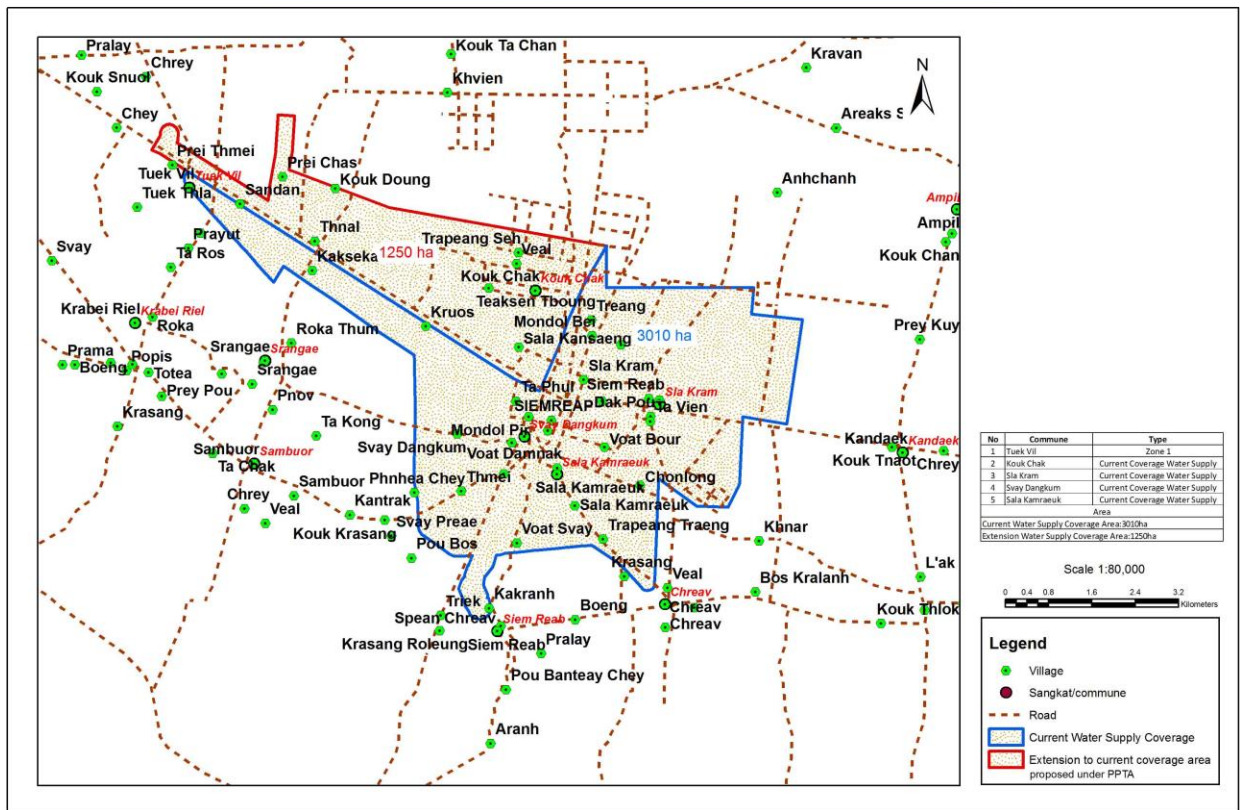
September 2014

CAM: Urban Water Supply Project – Siem Reap Subproject

Prepared by the Ministry of Industry and Handicraft for the Asian Development Bank.

This Due Diligence Report is a document of the borrower. The views expressed herein do not represent those of ADB's Board of Directors, Management, or Staff and may be preliminary in nature.

CURRENT AND PROPOSED WATER SUPPLY COVERAGE OF SIEM REAP PROVINCE



ACRONYMS AND ABBREVIATIONS

ADB	-	Asian Development Bank
APs	-	Affected Persons
DPWS	-	Department of Potable Water Supply
EA	-	Executing Agency
HDPE	-	High-density polyethylene
in	-	inch
JICA	-	Japan International Cooperation Agency
km	-	kilometer
m	-	meter
mm	-	millimeter
NR6	-	National Road № 6
para	-	paragraph
PIACs	-	Project Implementation Assistance Consultants
PIB	-	Project Information Brochure
PIU	-	Project Implementation Unit
PMU	-	Project Management Unit
PPTA	-	Project Preparatory Technical Assistance
Project	-	Urban Water Supply and Sanitation Project
PSMO	-	PMU Safeguards Management Officer
RGC	-	Royal Government of Cambodia
ROWs	-	Rights-of-Way
SRWSA	-	Siem Reap Water Supply Authority
UWSP	-	Urban Water Supply Project
WTP	-	Water Treatment Plant

TABLE OF CONTENTS

	Page
ACRONYMS AND ABBREVIATIONS	
I. INTRODUCTION.....	1
A. Overview	1
B. Current Status.....	1
C. Rationale for Due Diligence.....	1
II. PROPOSED SUBPROJECT INVESTMENT.....	2
III. APPROACH TO DUE DILIGENCE.....	2
IV. FINDINGS OF THE DUE DILIGENCE.....	2
A. The 6.5-km Main Pipe.....	2
B. The Distribution Networks in Zone 1 and APSARA Area.....	3
C. Installation of Domestic Meters and Household Connections.....	4
V. PROJECT DISCLOSURE AND CONSULTATION.....	4
VI. IMPLEMENTATION ARRANGEMENT.....	5
A. Institutional Arrangement.....	5

Attachments:

- Attachment 1: Attendance in Public Consultation
Attachment 2: Project Information Brochure (English)

I. INTRODUCTION

A. Overview

1. The Siem Reap Water Supply Authority (SRWSA) in Siem Reap Province has proposed the expansion of its water supply coverage under the Urban Water Supply Project (UWSP, or the Project). UWSP shall be implemented in nine (9) selected provincial towns¹ in Cambodia, including Siem Reap City. The City's water supply system was commissioned in 1930 to serve the needs of Angkor Hotel. It was designed to have a capacity of 200 m³/day, using Siem Reap stream as its source of raw water. Donor countries have also been involved in water distribution system development such as USA in 1960 and France in 1998. The Japan International Cooperation Agency (JICA) has had the largest involvement in potable water distribution in Siem Reap.

2. Siem Reap City is a major tourist destination, although it experiences severe water shortage during the peak season. Hotels have built their own boreholes and treat the water for their guests, but there are villages that remain unserved by the water system. These villages are the focus of the proposed investment by SRWSA under UWSP.

B. Current Status

3. SRWSA has to address the water shortage in the city's 108 villages in 13 communes. Siem Reap has a resident population of 236,659 (23,859 households) and also receives around 2,000,000 visitors annually. Some 6,338 households, or 26.7% of the total, are connected to the water system. SRWSA has disclosed that current production of the water system is at 20,000 m³ per day and is sourced from ground water, but current demand ranges from 25,000 m³ - 30,000 m³ per day². This has led to the construction of unregulated boreholes, which are used to extract water around the area. The use of these boreholes, however, has lowered the water table to the extent of damaging the nearby Angkor temples.

4. The service area in Siem Reap is divided into seven (7) zones. JICA will finance the development in zones 2 – 7, and the ADB through UWSSP will be involved in Zone 1 and the adjacent APSARA³ area. This will cover eight (8) villages, namely: (a) Boeung Doun Pa, (b) Mondal 3, (c) Krouse, (d) Sala Kanseng, (e) Tropeang Ses, (f) Teaksen Tboung, (g) Veal, and (h) Kuok Doung. As of 2012, Zone 1 had a population of 53,396 (10,594 households).

C. Rationale for Due Diligence

5. A full feasibility study has been prepared for Siem Reap UWSP with three (3) major components proposed to extend water distribution services in Zone 1 and in the APSARA area. Since preparation and submission of adequate social safeguards documents is a condition for ADB's approval of subproject loan, each component has been carefully reviewed in terms of its involuntary resettlement and indigenous peoples (IP) impacts. In accordance with the ADB's 2009 Safeguard Policy Statement (SPS), and the Bank's OM Section F1/OP (January 2010) field validation and due diligence has confirmed that the Siem Reap subproject has no land acquisition and hence does not trigger the involuntary resettlement (IR) safeguard, and Indigenous People safeguards.

II. PROPOSED SUBPROJECT INVESTMENT

6. The three (3) subproject investments in Zone 1 and the adjacent APSARA area are as follows⁴:

¹ The other provincial towns are Kampong Cham, Kampong Thom, Kampot, Sihanoukville, Pursat, Stung Treng, Stoung, and Svay Rieng.

² The Phnom Penh Post, 31 May 2013.

³ The acronym refers to Authority for the Protection and Management of Angkor and the Region of Siem Reap.

⁴ The list of proposed infrastructure is based on Version 13 prepared by the PPTA Consultants.

- (a) Installation of main pipe, 6.5 km from treatment plant to Zone 1, including road reinstatement.
- (b) Installation of distribution network in Zone 1 (up to 250 mm diameter) and in APSARA zone for houses in the same commune in Zone 1.
- (c) Installation of domestic meters and household connections.

III. APPROACH TO DUE DILIGENCE

7. The first activity in the due diligence was the review of documents obtained from the Department of Potable Water Supply (DPWS) and the progress reports and inception report prepared by the international consultants of the Project Preparatory Technical Assistance (PPTA). Chapter 3 of the PPTA Inception Report⁵ contained relevant information on the subproject, including: (i) current status, subproject priorities agreed between the Executing Agency (EA) and ADB, review of Japan International Cooperation Agency's (JICA) current projects and future project funding relevant to water services, site visits and initial public consultation; (ii) sector analysis; (iii) environmental and social safeguards screening; and, (iv) subproject prioritization. The review also referred to the March 2013 PPTA Progress Report and the Site Visit Report (22nd April – 2nd May) prepared by the Water Engineering Consultants of the PPTA.

8. Since the proposed investments shall be established outside the existing treatment plant, the PPTA Consultants requested the assistance of SRWSA staff in visiting the routes of the main pipes and the water distribution networks. Photographs were taken as part of the documentation for the due diligence report.

IV. FINDINGS OF THE DUE DILIGENCE

A. The 6.5-km Main Pipe

9. The proposed 6.5-km main shall start from the 1.03 ha water treatment plant (WTP) in Sordane Village, where the 600 mm (23.6 in) diameter high-density polyethylene (HDPE) pipe is planned for installation along the easement of National Road No. 6 (NR6). As a major thoroughfare, NR6 has wider right-of-way (ROW) than other roads in the City. The ROW of said roads range from 20.0 m to 40.0 m, including the shoulders and the easements. Existing ROWs⁶ can accommodate the digging of the trenches, which only require a working width of 1.2 m. Given that there is enough space on the road ROW, land acquisition is not required. The digging of the trenches for the main pipe will neither cause temporary impacts on private lands, structures or business shops, nor temporarily hamper peoples' access to common resources or public amenities (see photo below). The concrete portion of the road that will be affected by excavation will be restored to at least pre-project condition by the contractor after laying down of the pipes has been completed.

⁵ This refers to the final list (Version 14).

⁶ 1.5 m width of each shoulder, with wider easements on both sides of the road



The photo was taken a few kilometers from the WTP and shows that there is enough space for the trenches of the 6.5 – km main pipe. Similar conditions can be observed on the other side and along the entire stretch of NR 6.

B. The Distribution Network in Zone 1 and APSARA Area

10. HDPE pipes with diameters ranging from 250 mm – 315 mm (9.8 in – 12.4 in) shall be installed for the transmission network in Zone 1 and the adjacent APSARA area. These pipes will be connected to the main transmission in Road No. 6. As with the 6.5-km main pipe, land acquisition will not be required for installation of the distribution network pipes, as the working width for excavation is only 0.6 m. Even if the route passes built-up areas, existing ROW is enough to accommodate the digging of the trenches. Thus, installation of the pipes will not result in any involuntary resettlement impacts on private land, structures or businesses. Intervals of spaces or planks will be provided for pedestrians during construction in order to maintain peoples' access to common resources or public amenities (see photo). These measures will be incorporated in the contractor's documents. Prior to excavation works, the Project Implementation Unit (PIU) will send representatives to give advance notice for people in built-up areas to clear movable obstructions along road shoulders. These will be returned to their original locations after the soil has been leveled following completion of installation works.



The water transmission network will pass in this section of the road beside the public market in the unserved area in Zone 1.

C. Installation of Domestic Meters and Household Connections

11. SRWSA officials confirmed during field validation that installation of domestic meters and household connections will benefit more than 8,000 households⁷ in Zone 1 and the adjacent APSARA zone. Various sizes of HDPE pipes shall be connected to the transmission networks for water distribution to these households. As itemized in the technical specifications, the diameters of the pipes vary from 63 mm to 200 mm, which is much smaller than the diameter of pipes for the transmission networks. Installation of the distribution pipes will only require a narrow working width of 0.4 m – 0.6 m.

12. Land acquisition is not required and no houses, shops, or other structures will be affected, permanently or temporarily. Land excavation for installation of household connections will not obstruct access to common properties and public amenities, such as the public market. The contractor will be required to restore the land immediately after the pipes are laid on the ground. If any unanticipated social impacts become apparent during project implementation, (i) the EA will assess the significance of such impacts, (ii) evaluate the options available to address them; (iii) prepare the documents in accordance with ADB's SPS.

V. PROJECT DISCLOSURE AND CONSULTATION

13. On 7 June 2013, the joint subproject disclosure and public consultation was held at the office of the SRWSA Director. The meeting was initiated by the Director, in compliance with the provision of the *Law on Expropriation of 2009* of the Royal Government of Cambodia (RGC) and ADB's *Public Communication Policy (2011)* and *Accountability Mechanism Policy (2012)*. The SRWSA Director explained the purpose of the meeting and introduced the PPTA Safeguards Consultants. 19 people (16 men and 3 women) attended and actively participated in the public meeting (refer to Attendance Sheet in **Attachment 1**). The participants included village officials and residents of the villages in Zone 1 and were given the Project Information Brochure (PIB) written in Khmer (see the English version in **Attachment 2**).



Participants in the joint subproject disclosure and consultation, which was held in the afternoon of 7 June 2013 at the Office of the SRWSA Director in Siem Reap.

14. During the joint subproject disclosure and consultation, PPTA Social Safeguards Specialists discussed the involuntary resettlement policy of ADB. They disclosed that the subproject has no

⁷ Socioeconomic characteristics of beneficiary households are described in a separate report.

adverse social impacts on the villages that will be served by the water pipelines, based on field investigations conducted prior to the public meeting. All participants were given the chance to express their thoughts during the open forum but not a single issue related to social safeguards was raised. The discussions instead focused on environmental concerns⁸ and treasures that might be discovered during the diggings of the trenches, as Siem Reap was declared as a UNESCO national heritage site in Cambodia.

VI. IMPLEMENTATION ARRANGEMENT

A. Institutional Arrangement

15. The DPWS under the Ministry of Industry and Handicrafts (MIH) is the Project EA. It will establish the Project Management Unit (PMU) to assume overall management and supervision of UWSP. The PMU will hire the services of the Project Implementation Assistance Consultants (PIACs) in accordance with RGC's *Standard Operating Procedures* (updated May 2012). The PMU will be supported by staff from MIME and will include one (1) Safeguards Management Officer⁹ (PSMO) who will be assigned on a full time basis to monitor social safeguards compliance through his/her provincial counterpart. At the subproject level, SRWSA management will create the Project Implementation Unit (PIU), which will work closely with the PMU on social safeguards issues and monitoring. One of the PIU personnel shall be assigned as counterpart of the PSMO. The PMU, with assistance from PIACs, will submit **quarterly** Project progress reports to the EA and ADB. Said progress reports will include discussions on social safeguards monitoring activities and findings.

⁸ The SRWSA Director has recommended formulation of relevant guidelines prior to subproject implementation

⁹ The PSMO will cover both Environmental and Social Safeguards for the Project.



រដ្ឋាករទឹកស្វយ័តសៀមរាប

ព្រះរាជាណាចក្រកម្ពុជា
ជាតិ សាសនា ព្រះមហាក្សត្រ

០១/០១/២០២០

គាត់បញ្ជីបញ្ជី
ចុះបញ្ជីប្រជាជនសង្កាត់គោកចក និងសង្កាត់ជីកចល
ស្តីពីការប្រើប្រាស់ប័ណ្ណបញ្ជីប្រជាជនសង្កាត់គោកចក និងសង្កាត់ជីកចល
ក្រោមឥណទានរបស់មន្ទីរពេទ្យ ADB

ល.រ	ឈ្មោះ	សង្កាត់	លេខទូរស័ព្ទ	ផ្សេងៗ
១	ហ៊ុន ហួន	ជីកចល	០១២ ២៨ ៣២៣	
២	ហ៊ុន ហួន	គោកចក	០១២ ៣០ ១៧២៤	
៣	ហ៊ុន ហួន	គោកចក	០១២ ៣៤ ២៦១៣	
៤	ហ៊ុន ហួន	គោកចក	០១២ ៥៥ ០៤៤២	
៥	ហ៊ុន ហួន	គោកចក	០១២ ៤៣ ៦៤៩២	
៦	ហ៊ុន ហួន	គោកចក	០១២ ២៨ ៧០៥៥	
៧	ហ៊ុន ហួន	គោកចក	០១២ ៧៥ ៧៤៦	
៨	ហ៊ុន ហួន	គោកចក	០១២ ៧០ ៣៩២៣	
៩	ហ៊ុន ហួន	គោកចក	០១២ ៥៣ ៣៨៣	
១០	ហ៊ុន ហួន	គោកចក	០១៧ ៩២ ៦៥៦	
១១	ហ៊ុន ហួន	គោកចក	០៨៩ ៨៦២ ០៤២	
១២	ហ៊ុន ហួន	គោកចក	០១២ ៩៩៨ ៦០៧	
១៣	ហ៊ុន ហួន	គោកចក	០១២ ៤៣ ២៧២៣	
១៤	ហ៊ុន ហួន	គោកចក	០១១ ៦១ ១១៤	
១៥	ហ៊ុន ហួន	គោកចក	០១២ ៩០ ១៣៥	
១៦	Southern You Environmental Spelt		០១២ ៤៩ ៦៩២	
១៧	Angelito N. Corpuz Social Safeguards		០៩៥ ៦៧ ១៩៣	
១៨	Tim Whittington ENV. Spec.		០៩៦ ២២ ០២៧៤៦	
១៩	ហ៊ុន ហួន	គោកចក	០១៧ ៩៥ ៣៣៦	
២០	ហ៊ុន ហួន	គោកចក		
២១	ហ៊ុន ហួន	គោកចក	០១៧ ៩៤ ០០៧២	
២២	ហ៊ុន ហួន	គោកចក	០១២ ២៥ ៦៤៩	
២៣				
២៤				
២៥				
២៦				

សៀមរាប ថ្ងៃទី ០៧ ខែ មិថុនា ឆ្នាំ ២០២០

អគ្គនាយក

[Signature]
គង់ ហ៊ុន

**SIEM REAP URBAN WATER SUPPLY
AND SANITATION PROJECT**
(Project Information Brochure)

ACCRONYMS AND ABBREVIATIONS

ADB	-	Asian Development Bank
DPWS	-	Department of Potable Water Supply
MIH	-	Ministry of Industry and Handicrafts
RGC	-	Royal Government of Cambodia
WTP	-	Water Treatment Plant
UWSP	-	Urban Water Supply Project

Good day to everybody. Our office highly appreciates your meaningful participation in this public meeting.

The Department of Potable Water Supply (DPWS) sent us to consult with you on the proposed government project here in your place.



1. What is the objective of consultation?

The objective of the DPWS, under the Ministry of Industry and Handicrafts (MIH), is to disclose to you the proposed Project of the Royal Government of Cambodia (RGC) for the improvement of water supply services in your area. The RGC shall request the Asian Development Bank (ADB) for funding the Project. This consultation complies with the regulation of RGC and the Public Communication Policy (2011) of ADB.



2. What is the Project?

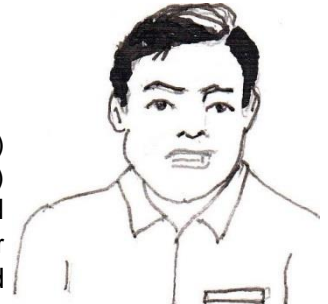
The Project is known as Urban Water Supply Project (UWSP) which shall be located in Cambodia's 9 provinces, including Siem Reap. The UWSASP has four components, such as: (a) provision of or improvement of water treatments plants, (b) improvement and increased coverage of water distribution systems, (c) rehabilitation of existing pumping stations and (d) strengthening the institutional capacity and regulatory system of MIME. The impact of the Project will be expanded access to sustainable and safe water supply services for the urban population in Cambodia that included the people of Siem Reap.





3. What infrastructure components are involved here in Siem Reap?

Under UWSP, the Siem Reap Water Supply Authority is proposing for three (3) infrastructure components in Zone 1 and the adjacent APSARA area, such as: (a) the installation of 6.5 km HDPE main pipe with 600 mm diameter and road reinstatement, (b) installation of distribution networks of up to 250 mm diameter HDPE pipes, and (c) installation of domestic meters and household connections.



4. Will there be land acquisition for the subproject in our village?

Permanent acquisition of private lands is not expected to happen in any of the three (3) infrastructure components of the subproject because the pipes will be laid down on road shoulders or easements which are government properties being maintained and managed by the Ministry of Public Works and Transportation. Neither the subproject will create temporary impacts on any private properties in your village. But rest assured that as soon as the installations of the pipes in front of your houses and business shops are completed, the Project contractor will return the lands to their original condition, or better.



5. What if public properties or common resources shall be affected?

Public properties or common resources are subject to rehabilitation and restoration. However, it should be noted that not any of this kind shall be affected during the implementation of the subproject.





6. *What benefit can the Project provide to the people in our village?*

Aside from expanded access to sustainable supply of safe potable water, the Project can provide employment to the people in your village during construction. Overall, the Project will provide a better environment in your locality and improved infrastructure for healthy living through safe potable water.



7. *Which office should we communicate in case we have other questions or suggestions?*

You can send your written communications to any of the following offices:

1. Project Implementation Unit
Urban Water Supply Project
Department of Potable Water Supply
_____ St, Stung Treng
Telephone: _____

Attention: Mr. Som Kunthea

2. Project Management Unit
Urban Water Supply Project
Department of Potable Water Supply
_____ St, Phnom Penh
Telephone: _____

Attention: Mr./Ms. _____





8. Can also ADB be of help in the resolution of complaint?

Yes, the AHs/ APs can also ask for assistance from ADB's responsible Project Officer, consistent with the provision of the Bank's *Accountability Mechanism* (2012). They can submit their concerns through the ADB Resident Mission in Phnom Penh for transmittal to the Bank's headquarters in the Philippines. The Accountability Mechanism has two functions, i.e. the problem solving function that will be led by the Special Project Facilitator, and the compliance review function that will be handled by the Compliance Review Panel.

