Technical Assistance Consultant's Report

Project Number: 50101-001
March 2019

CAM: Third Rural Water Supply and Sanitation Services Sector Development Program

Final Report

Prepared by
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For the Asian Development Bank

Asian Development Bank

Proposed Third Rural Water Supply and Sanitation Sector Project – Final Report

March 2019

TA-9199 CAM: Design Study for the Third Rural Water Supply and Sanitation Sector Project (50101-001)

FCG

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PROPOSED THIRD RURAL WATER SUPPLY AND SANITATION SECTOR PROJECT – FINAL REPORT

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Abbreviations

ADB	Asian Development Bank
BCC	behavior change communication
CBO	community based organization
CC	Commune Council
CDHS	Cambodia demographic health survey
CDTA	capacity development technical assistance
CLTS	community led total sanitation
COBP	country operations business plan
CSO	civil society organization
CSES	Cambodia Socioeconomic Survey
CCWC	commune committee for women and children
D&D	decentralization and de-concentration
DMC	developing member country
DMF	design and monitoring framework
DMS	detailed measurement survey
DPSFM	Decentralized Public Sector Services and Financial Sector Development Program
DP	development partner
DRHC	Department of Rural Health Care
DRWS	Department of Rural Water Supply
EA	executing agency
EARF	environmental assessment and review framework
ECCD	early childhood care and development
EMP	environmental management plan
EU	European Union
FRWSS	functionality of rural water supply services
GAP	gender action plan
GDCC	Government Donor Coordination Committee
GDP	gross domestic product
GIZ	Gesellschaft Für Internationale Zusammenabeit (German International Cooperation Agency)
GRM	grievance redress mechanism
CR-SHIP	Cambodia rural sanitation and hygiene improvement program
GSF	Global Sanitation Fund
IP3	3-year implementation plan (D&D)
IDE	International Development Enterprise (International NGO)
IEC	Information education communication
IEE	initial environmental examinations
IRC	International Reference Centre for Water Supply and Sanitation (in the Netherlands)
JMI	joint monitoring indicator
JTWG	Joint Technical Working Group
LAR	land acquisition and resettlement
LFFM	loan fact finding mission
MDG	millennium development goal
MEF	Ministry of Economy and Finance
MIH	Ministry of Industry and Handicraft
MIS	management information system
MOE	Ministry of Environment
MRD	Ministry of Rural Development
NAP	National Action Plan

NAP-ORMF	National Action Plan – Operational Results Monitoring Framework
NCDD	National Committee for Sub-National Democratic Development
NCDD-S	National Committee for Sub-National Democratic Development, Secretariat
NGO	non-governmental organization
NSDP	National Strategic Development Plan 2014-2018
NSFSN	National Strategy for Food Security and Nutrition
NS-RWSS	National Rural Water and Sanitation Strategy 2011 - 2025
NSP	National Strategic Development Plan
ODF	open defecation free
O&M	operations and maintenance
PAP	provincial action plan
PBL	policy-based loan
PDRD	Provincial Departments of Rural Development
PHAST	participatory hygiene and sanitation transformation
PIC	project implementation consultants
PPT	provincial project team
PRSC	provincial resettlement committee
PSA	poverty and social assessment
PPTA	project preparation technical assistance
PWG-RWSSH	project working group-rural water supply, sanitation and hygiene
RC	rectangular strategy
REA	rapid environmental assessment
RGC	Royal Government of Cambodia
RS III	Government Rectangular Strategy for Growth, Employment, Equity and Efficiency, Phase III
RuSH	rural sanitation and hygiene
RWS	rural water supply
RWSS	rural water supply and sanitation
RWSSH	rural water supply, sanitation and hygiene
RWSSP2	Second Rural Water Supply and Sanitation Sector Project
RWSSSP3	Third Rural Water Supply and Sanitation Sector Project
SDG	sustainable development goal
SIDA	Swedish International Development Agency
SMSU	sanitation marketing scale-up
SNA	sub-national administration
SNIF	sub-national investment fund
SNV	SNV Netherlands Development Organisation
SPS	safeguard policy statement
SSH4A	sustainable sanitation and hygiene for all
SWS	sustainable WASH systems
TA	technical assistance
TOR	terms of reference
TWG - RWSSH	technical working group
VDC	village development committee
WASH	water, sanitation and hygiene
WSP	Water and Sanitation Program of the World Bank's Water Global Practice
WSSCC	water supply and sanitation collaborative council
WSUG	water and sanitation user group

EXECUTIVE SUMMARY

Executive Summary – English

Project Description

The Royal Government of Cambodia, recognizing the urgency of the rural water supply and sanitation situation, has set an ambitious target to achieve universal access to safe water supply and sanitation services in Cambodia by 2025. The proposed Third Rural Water Supply and Sanitation Sector Project (RWSSSP3), with the budget of US$ $75.58 million, is expected to make a significant, critically needed, contribution to the achievement of the national target.

Building on the experience and lessons learnt in the previous investments supported by ADB and other donors in implementation of rural water supply and sanitation sector projects in Cambodia, the proposed RWSSSP3 will support the development of rural infrastructure and basic services, institutions, and human capacities. The project will support inclusive growth by (i) reducing inequalities; (ii) improving health, gender, and living conditions; and (iii) reducing vulnerability and targeting solutions for the poorest and vulnerable households.

The RWSSSP3 will build on the results and key learnings in the six provinces around Tonle Sap Lake, where the on-going Second Rural Water Supply and Sanitation Sector Project (RWSSP2) is currently being implemented, and will scale up the support to two additional provinces of Kampong Speu and Kampot.

Rationale

In 2016 the population of Cambodia reached 15.6 million and nearly 70% of the people are still living in rural areas. Cambodia has made considerable progress to increase access to improved rural water supply and sanitation services. However, despite of the promising progress and innovations in the sector during the recent years, 47% of the rural population in Cambodia still live without access to improved water supply and 33% without access to safe, sanitary toilet. Nearly 3,5 million people in the rural areas of Cambodia are still practicing open defecation.

From health impacts to economic losses, the costs of inadequate water supply and sanitation are staggering. The economic losses associated with the poor water and sanitation situation is estimated to be over seven percent of Cambodia's gross domestic product (GDP), or US$32 per person. Incidence of diarrhea is the second-largest cause of infant and under-5 mortality in Cambodia, and among the highest in the region. The economic value of savings due to improved Disability-Adjusted Life Years (DALY) – using the World Health Organization's assessments for Cambodia and applying a 16% saving due to safer water supply and sanitation - amounts to around $12 million per annum after the project has been implemented.

Impact, Outcome and Outputs

The expected impact of RWSSSP3 aligns with the National Strategic Plan for Rural Water Supply, Sanitation and Hygiene for 2014-2025 and will significantly contribute to the achievement of the national

target for having universal access to rural water supply and sanitation in Cambodia by 2025.

The 5-year sector project will improve the health and quality of life for 640,000 people through improved access to safe water supply, elimination of open defecation and equitable and sustained access to improved sanitation and hygiene practices. The project will target 65 rural communes, including 647 villages and aims to achieve 100% access to safe and sustainable water supply and sanitation services in all the target villages.

The proposed project has three outputs:

(i) Rural water supply infrastructure and services improved and expanded
(ii) Rural sanitation infrastructure and services improved and expanded
(iii) Rural water supply and sanitation sector institutions strengthened and management capacity improved and developed

Cost Estimates and Financing Plan

The investment cost for the sector project is estimated at $75.58 million, including a $36.8 million loan from the Concessional Ordinary Capital Resources of the Asian Development Bank (ADB), a loan of $8.8 million from the ADB's Disaster Risk and Climate Resilience Fund, a grant of $4.4 million from the same fund and a $1.0 million grant from ADB's High-Level Technology Fund. The base cost for the project, including duties and taxes is $64.9 million, physical contingencies are $5.0 million, price contingencies are $5.4 million, giving a total investment of $65.3 million before financing charges.

Overall Project Investment Plan

Source	**Amount** ($ million)	**Share of total** (%)
Asian Development Bank	51.00	67.5%
Government of Cambodia	6.19	8.2%
Beneficiaries	18.39	24.3%
Total	75.58	100%

Implementation Arrangements

The Ministry of Rural Development will be the Executing Agency for the project. The Project Coordination Unit (PCU) established for the on-going RWSSP2 will continue to be responsible for the overall planning, implementation and coordination of the RWSSSP3 with new additional resources. The established project steering committee will continue to be chaired by the MRD Secretary of State, with members from MRD departments (Rural Water Supply, Rural Health Care, Community Development, Training, Planning, and Administration) and the eight PDRD directors of the target provinces. Representatives from Ministry of Economy and Finance (MEF), MOH, Ministry of Education, Youth and Sport, and the Council for Agriculture and Rural Development will be invited, as needed. The steering committee will provide guidance to the project implementation.

The project will use the provincial RWSSH working groups, chaired by the Provincial Governor, to coordinate the project activities across line departments at the provincial level. The PDRD in each of the eight project target provinces will establish a team of experienced staff members under the direction of the PDRD director as provincial project teams (PPTs).

Procurement

Procurement of goods, works, and related services will be undertaken in accordance with ADB's Procurement Policy for Goods, Works, Non-consulting and Consulting Services 2017, (as amended from time to time). The full Procurement Plan is presented in the Project Administration Manual (PAM).

Safeguards

Environmental Safeguards. The overall project is classified as Category B, although the sub-projects designed for batch 1 fall under Category C. The project design team has prepared an Initial Environmental Examination (IEE), which is presented in Appendix 10, Environmental Assessment and Review Framework (EARF) in Appendix 11 and Climate Risk and Vulnerability Assessment (CRVA) in Appendix 12. The IEE is focusing on the potential environmental impacts of the batch 1 sub-projects. The EARF provides a framework for future sub-projects and the CRVA identifies climate risks and their adaptation and mitigation measures.

Involuntary Resettlement. The project is classified as Category C. The batch-1 sub-project designs are confirmed to have no involuntary resettlement impact. The project is designed to avoid involuntary resettlement and to minimize land acquisition and resettlement impacts by exploring project design alternatives. The Social Safeguard Due Diligence Report is presented in Appendix 9. Involuntary resettlement screening checklists have been completed for all the batch 1 sub-projects and are attached to the sub-project feasibility study reports.

Indigenous people. The project is classified as Category B. There are no indigenous people, as defined by the Government of Cambodia within the batch-1 target communes, however there are very small numbers of ethnic minority households who are well assimilated into local communities, fluent in Khmer language and are pursuing the same livelihood activities as the mainstream Khmer. Indigenous peoples screening checklists have been completed for all the batch 1 sub-projects and are attached to the sub-project feasibility study reports. An Indigenous Peoples Planning Framework (IPPF) has been prepared to guide the design process (for the sub-projects under batches 2 to 5) and to involve ethnic minorities and indigenous people in the consultation and decision-making process on the sub-project design, implementation and monitoring.

សង្ខេបពិស្តារ

ការពិពណ៌នាអំពីកម្មវិធី

រាជរដ្ឋាភិបាលកម្ពុជា បានទទួលស្គាល់នូវតម្រូវការបន្ទាន់នៃសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទ ដោយបានដាក់ចេញនូវគោលដៅដ៏ទូលំទូលាយដើម្បីសម្រេចផ្តល់សេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទ ជូនប្រជាពលរដ្ឋជនបទឲ្យបាន ១០០ ភាគរយ នាឆ្នាំ ២០២៥។ ដូច្នេះ គម្រោងអភិវឌ្ឍន៍វិស័យសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទជំហានទី៣ ដែលមានថវិកាសរុបចំនួន ៧៥.៥៨ លានដុល្លារអាមេរិក គឺរំពឹងថា នឹងជាការចូលរួមចំណែកដ៏សំខាន់មួយ ដែលមិនអាចខ្វះបានដើម្បីសម្រេចបាននូវគោលដៅថ្នាក់ជាតិនេះ។

ផ្អែកតាមបទពិសោធន៍ និងការរៀនសូត្រនានាស្តីពីការវិនិយោគដែលបានជួយគាំទ្រដោយធនាគារអភិវឌ្ឍន៍អាស៊ីនិងម្ចាស់ជំនួយផ្សេងៗកន្លងមកក្នុងការអនុវត្តគម្រោងវិស័យផ្គត់ផ្គង់ទឹកស្អាតនិងអនាម័យជនបទនៅប្រទេសកម្ពុជា ដូច្នេះគម្រោងអភិវឌ្ឍន៍វិស័យសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទជំហានទី៣ នឹងជួយគាំទ្រដល់ការអភិវឌ្ឍន៍ហេដ្ឋារចនាសម្ព័ន្ធជនបទ សេវាកម្មជាមូលដ្ឋាន ស្ថាប័ននានានិងធនធានមនុស្ស។ គម្រោងនេះ នឹងជួយគាំទ្រឲ្យមានការរីកចម្រើនគ្រប់ជ្រុងជ្រោយតាមរយៈ៖(១)ការកាត់បន្ថយអសមភាព (២)ការកែលម្អសុខភាព យេនឌ័រនិងលក្ខខណ្ឌជីវិត និង(៣)ការកាត់បន្ថយភាពងាយរងគ្រោះ និងការកំណត់បានជំណោះស្រាយនានាសម្រាប់គ្រួសារក្រីក្របំផុត និងងាយរងគ្រោះ។

គម្រោងអភិវឌ្ឍន៍វិស័យសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទជំហានទី ៣ នឹងរៀបចំឡើងផ្អែកតាមលទ្ធផលនិងបទពិសោធន៍នានាដែលមានក្នុងខេត្តទាំង៦ជុំវិញបឹងទន្លេសាប ដែលគម្រោងផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទជំហានទី ២ បាននឹងកំពុងអនុវត្តមកដល់សព្វថ្ងៃនេះ ហើយនឹងពង្រីកការគាំទ្រដល់ខេត្តថ្មីចំនួន ២ បន្ថែមទៀត គឺខេត្តកំពត និងខេត្តកំពង់ស្ពឺ។

សនិទានភាព

នៅឆ្នាំ ២០១៦ ប្រជាពលរដ្ឋសរុបចំនួន១៥.៦ លាននាក់ ដែលក្នុងនោះប្រជាពលរដ្ឋចំនួន៧០ភាគរយ រស់នៅក្នុងតំបន់ជនបទ។ ប្រទេសកម្ពុជា បានធ្វើឲ្យមានការរីកចម្រើនគួរឲ្យកត់សម្គាល់ស្តីពីការបង្កើនការទទួលបានសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទ។ ក៏ប៉ុន្តែ ទោះបីជាមានការរីកចម្រើនរួមទាំងមានបច្ចេកទេសថ្មីៗដែលប្រើប្រាស់ក្នុងវិស័យនាយៈពេលប៉ុន្មានឆ្នាំចុងក្រោយនេះក៏ដោយ ក៏ប្រជាពលរដ្ឋជនបទចំនួន ៤៧ភាគរយ ក្នុងប្រទេសកម្ពុជា នៅតែរស់នៅដោយគ្មានសេវាទឹកស្អាតប្រើប្រាស់ និងប្រជាពលរដ្ឋចំនួន ៣៣ភាគរយ នៅតែរស់នៅមិនមានបង្គន់អនាម័យប្រើប្រាស់នៅឡើយ។ ប្រជាពលរដ្ឋជនបទនៅកម្ពុជា ប្រមាណ ៣.៥ លាននាក់ នៅតែកំពុងបន្ទោរបង់ពាសវាលពាសកាលនៅឡើយ។

ចាប់ពីផលប៉ះពាល់សុខភាពដល់ការខាតបង់ផ្នែកសេដ្ឋកិច្ច តម្លៃសេវាផ្គត់ផ្គង់ទឹកនិងអនាម័យ ក៏នៅតែខាតបង់ដែរ។ ដូច្នេះ ការបាត់បង់ផ្នែកសេដ្ឋកិច្ចនានាពាក់ព័ន្ធនឹងជំណោះស្រាយលើកង្វះខាតផ្នែកសេវាទឹកស្អាត និងអនាម័យ គឺប្រមាណជា ៧ ភាគរយនៃផលិតផលក្នុងស្រុកសរុបនៃកម្ពុជា ឬ៣២ដុល្លារសម្រាប់មនុស្សម្នាក់។ ការរងគ្រោះពីជម្ងឺរាគរូស គឺជាមូលហេតុធំបំផុតទី២នៃការស្លាប់របស់កុមារក្រោមអាយុ ៥ ឆ្នាំនៅកម្ពុជា ហើយនេះ ក៏ជាអត្រាដែលខ្ពស់បំផុតក្នុងតំបន់។ តម្លៃប្រាក់

សន្សំបែបសេដ្ឋកិច្ច បានមកពីការបង្កើនរយៈពេលនៃការរស់នៅបែបអសមត្ថភាព – ផ្អែកតាមការវាយតម្លៃរបស់អង្គការសុខភាពពិភពលោកសម្រាប់កម្ពុជា បញ្ជាក់ថា ពួកគេ អាចសន្សំប្រាក់បាន ១៦ភាគរយ ដោយសារមានសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យប្រើប្រាស់ ដោយគិតជាទឹកប្រាក់ចំនួនប្រមាណ១២លានដុល្លារអាមេរិក ក្នុងមួយឆ្នាំក្រោយពីគម្រោងនេះ បានត្រូវអនុវត្ត។

ផលប៉ះពាល់ លទ្ធផល និងធាតុចេញ

ផលប៉ះពាល់ដែលរំពឹងទុកពីគម្រោងអភិវឌ្ឍន៍វិស័យសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទជំហានទី៣ គឺស្របទៅនឹងផែនការយុទ្ធសាស្ត្រថ្នាក់ជាតិសម្រាប់វិស័យផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទសម្រាប់ ២០១៤-២០២៥ ហើយនឹងចូលរួមចំណែកយ៉ាងសំខាន់ក្នុងការសម្រេចបាននូវគោលដៅជាតិ ដើម្បីការទទួលបាននូវសេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទ ១០០ភាគរយ ក្នុងប្រទេសកម្ពុជានៅឆ្នាំ ២០២៥។ គម្រោងអភិវឌ្ឍន៍រយៈពេល ៥ឆ្នាំ នឹងលើកកម្ពស់សុខភាព និងគុណភាពជីវិតដល់ប្រជាពលរដ្ឋចំនួន ៦៤០ ០០០នាក់ តាមរយៈការទទួលបានសេវាផ្គត់ផ្គង់ទឹកស្អាត ការលុបបំបាត់ការបន្ទោបង់ពាសវាលពាសកាល និងការទទួលបានសេវាអនាម័យជនបទ និងការប្រព្រឹត្តអនាម័យជាក់ស្តែងដោយស្មើភាព និងប្រកបដោយនិរន្តរភាព។ គម្រោងអភិវឌ្ឍន៍វិស័យនេះ នឹងធ្វើការក្នុងឃុំចំនួន ៦៥ ឃុំ ដែលមានភូមិចំនួន ៦៤៧ ភូមិ ព្រមទាំងមានបំណងសម្រេចផ្តល់សេវាផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទឲ្យបាន ១០០ភាគរយក្នុងភូមិគោលដៅទាំងអស់។

គម្រោងអភិវឌ្ឍន៍វិស័យ ដែលបានស្នើឡើង មានធាតុចេញចំនួន ៤សំខាន់ៗ៖

(១) ហេដ្ឋារចនាសម្ព័ន្ធ និងសេវាផ្គត់ផ្គង់ទឹកស្អាតជនបទ ត្រូវបានពង្រីក និងកែលម្អ

(២) ហេដ្ឋារចនាសម្ព័ន្ធ និងសេវាអនាម័យជនបទ ត្រូវបានពង្រីក និងកែលម្អ

(៣) ស្ថាប័នវិស័យផ្គត់ផ្គង់ទឹកស្អាត និងសេវាអនាម័យជនបទ ត្រូវបានពង្រីក និងកែលម្អ

តម្លៃប៉ាន់ស្មាននិង ផែនការហិរញ្ញវត្ថុ

តម្លៃនិយោគសរុបសម្រាប់គម្រោងអភិវឌ្ឍន៍វិស័យនេះ គឺ**៧៥.៥៨**លានដុល្លារអាមេរិកដែលរួមមានកម្ចីចំនួន៣៦.៨០លានដុល្លារអាមេរិកកម្ចីពីធនធានទុនវិនិយោគសម្បទានរបស់ធនាគារអភិវឌ្ឍន៍អាស៊ី កម្ចីចំនួន ៨.៨លានដុល្លារអាមេរិកពីមូលនិធិស្តីពីភាពធន់ទ្រាំនឹងអាកាសធាតុ និងហានីភ័យគ្រោះធម្មជាតិរបស់ធនាគារអភិវឌ្ឍន៍អាស៊ី ជំនួយឥតសំណងចំនួន ៤.៤លានដុល្លារអាមេរិកពីមូលនិធិដូចគ្នា និងទឹកចំនួន ១.០លានដុល្លារអាមេរិកពីមូលនិធិបច្ចេកវិទ្យាកម្រិតខ្ពស់របស់ធនាគារអភិវឌ្ឍន៍អាស៊ី។ តម្លៃមូលដ្ឋានសម្រាប់គម្រោងអភិវឌ្ឍន៍នេះរួមមានតម្លៃជាប់កាតព្វកិច្ចពន្ធ គឺ៦៤.៩០លានដុល្លារអាមេរិក ចំណាយផ្សេងៗជារូបវន្ត គឺ៥.០លានដុល្លារអាមេរិក តម្លៃចំណាយផ្សេងៗ គឺ ៥.៤លានដុល្លារអាមេរិក។ ដូច្នេះតម្លៃនិយោគសរុប គឺ **៦៥.៣០** លានដុល្លារអាមេរិកមុននឹងការប្រែប្រួលហិរញ្ញប្បទាន។

ផែនការនិយោគរបស់គម្រោងខ្ទៅ

ធនាគារអភិវឌ្ឍន៍អាស៊ី	៥១.០០	៦៧.៥០%
រាជរដ្ឋាភិបាលកម្ពុជា	៦.១៩	៨.២០%
អ្នកទទួលផលពីកម្មវិធី	១៨.៣៩	២៤.៣០%
សរុប	**៧៥.៥៨**	**១០០%**

ការរៀបចំ ក្នុងការអនុវត្តគម្រោង	ក្រសួងអភិវឌ្ឍន៍ជនបទ នឹងជាស្ថាប័នអនុវត្តគម្រោងដែលបានស្នើឡើង។ អង្គភាពសម្របសម្រួលគម្រោង ដែលបានបង្កើតសម្រាប់អនុវត្តគម្រោងផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជំហានទី២ ដែលកំពុងដំណើរការ នឹងបន្តការទទួលខុសត្រូវសម្រាប់ការធ្វើផែនការរួម ការអនុវត្តនិងការសម្របសម្រួលគម្រោងអភិវឌ្ឍន៍វិស័យសោភផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទជាមួយនឹងធនធានថ្មីៗបន្ថែមទៀត។ គណៈកម្មាធិការដឹកនាំកម្មវិធីដែលបានបង្កើតឡើង នឹងបន្តដឹកនាំដោយផ្ទៀលខាធិការម្នាក់នៃក្រសួងអភិវឌ្ឍន៍ជនបទ ដែលមានសមាជិកមកពីនាយកដ្ឋាននានារបស់ក្រសួងអភិវឌ្ឍន៍ជនបទ (នាយកដ្ឋានផ្គត់ផ្គង់ទឹកជនបទ សុខភាពបឋម អភិវឌ្ឍន៍សហគមន៍ បណ្តុះបណ្តាល ផែនការនិងនាយកដ្ឋានរដ្ឋបាល) និងប្រធានមន្ទីរអភិវឌ្ឍន៍ជនបទនៃខេត្តគោលដៅទាំង ៨។ តំណាងមកពីក្រសួងសេដ្ឋកិច្ចនិងហិរញ្ញវត្ថុ ក្រសួងសុខាភិបាល ក្រសួងអប់រំ យុវជន និងកីឡា និងក្រុមប្រឹក្សាស្តារកសិកម្ម និងអភិវឌ្ឍន៍ជនបទ នឹងត្រូវបានអញ្ជើញឲ្យចូលរួមនៅពេលចាំបាច់។ គណកម្មាធិការដឹកនាំនេះ នឹងផ្តល់ការត្រួតពិនិត្យរួមលើការងារអនុវត្តគម្រោងអភិវឌ្ឍន៍វិស័យនេះ។ គម្រោងអភិវឌ្ឍន៍វិស័យនេះ នឹងប្រើប្រាស់ក្រុមការងារបច្ចេកទេសវិស័យផ្គត់ផ្គង់ទឹកស្អាត និងអនាម័យជនបទថ្នាក់ខេត្ត ដែលដឹកនាំដោយអភិបាលខេត្តដើម្បីសម្របសម្រួលរាល់សកម្មភាពរបស់គម្រោងអភិវឌ្ឍន៍វិស័យនេះរវាងមន្ទីរពាក់ព័ន្ធនៅថ្នាក់ខេត្ត។ មន្ទីរអភិវឌ្ឍន៍ជនបទនៅក្នុងខេត្តគោលដៅរបស់កម្មវិធីទាំងអស់ នឹងបង្កើតជាក្រុមមួយដែលមានសមាជិក ឬមន្ត្រីដែលមានបទពិសោធន៍ ក្រោមការដឹកនាំដោយប្រធានមន្ទីរអភិវឌ្ឍន៍ជនបទ ដែលមានឈ្មោះថា ក្រុមអនុវត្តគម្រោងថ្នាក់ខេត្ត។
ការងារលទ្ធកម្ម	លទ្ធកម្មទំនិញ ការងារនិងសេវាដែលពាក់ព័ន្ធ នឹងត្រូវបានអនុវត្តយោងតាមគោលនយោបាយលទ្ធកម្មរបស់ធនាគារអភិវឌ្ឍន៍អាស៊ីសម្រាប់ទំនិញការងារ និងសេវាកម្មទីប្រឹក្សា និងសេវាកម្មមិនមែនទីប្រឹក្សា ឆ្នាំ ២០១៧ (ដោយបានកែសម្រួលជាប្រចាំ)។ ផែនការលទ្ធកម្មពេញលេញមួយ ត្រូវបានបង្ហាញនៅក្នុងសៀវភៅស្តីពីការងារដ្ឋបាលរបស់គម្រោង។
កិច្ចការពារសុវត្ថិភាព	**កិច្ចការពារសុវត្ថិភាពបរិស្ថាន៖** គម្រោងអភិវឌ្ឍន៍វិស័យនេះ ជាទូទៅ គឺត្រូវបានចាត់ចូលក្នុងប្រភេទ ខ ទោះបី អនុគម្រោងទាំងអស់ ដែលបានរៀបចំឡើងដល់ពេលនេះ គឺស្ថិតនៅក្នុងប្រភេទ គ ក៏ដោយ។ ក្រុមសិក្សារៀបចំគម្រោងអភិវឌ្ឍន៍វិស័យនេះ បានរៀបចំការវាយតម្លៃបរិស្ថានបឋម ដែលមានបង្ហាញនៅក្នុងឧបសម្ព័ន្ធទី១០ និងក្របខណ្ឌត្រួតពិនិត្យ និងវាយតម្លៃបរិស្ថានក្នុងឧបសម្ព័ន្ធទី១១ និងការវាយតម្លៃអំពីហានីភ័យអាកាសធាតុ និងភាពងាយរងគ្រោះ ក្នុងឧបសម្ព័ន្ធទី១២។ ការវាយតម្លៃបរិស្ថានបឋម គឺផ្តោតលើផលប៉ះពាល់បរិស្ថាន ដែលជាសក្តានុពលសម្រាប់អនុគម្រោងទាំងអស់ក្នុងកញ្ចប់ទី១។ ក្របខណ្ឌត្រួតពិនិត្យ និងវាយតម្លៃបរិស្ថាន ផ្តល់ក្របខណ្ឌមួយ សម្រាប់រៀបចំអនុគម្រោងក្រោយៗទៀត ហើយចំណែកឯ ការវាយ

តម្លៃអំពីហានីភ័យអាកាសធាតុ និងភាពងាយរងគ្រោះ បង្ហាញអំពីហានីភ័យអាកាសធាតុ និងការបន្សាំរបស់ខ្លួនព្រមទាំងវិធានការណ៍កាត់បន្ថយនានា។

ការតាំងលំនៅដ្ឋានដោយមិនស្ម័គ្រចិត្ត៖ កម្មវិធីអភិវឌ្ឍន៍វិស័យនេះ គឺត្រូវបានចាត់ចូលក្នុងប្រភេទ គ។ ការសិក្សារៀបចំអនុគម្រោងកញ្ចប់ទី១ទាំងអស់ បានបញ្ជាក់ថាមិនមានផលប៉ះពាល់ដល់ការរុះរើ និងតាំងលំនៅដ្ឋានដោយមិនស្ម័គ្រចិត្តនោះទេ។ គម្រោងអភិវឌ្ឍន៍នេះ ត្រូវបានរៀបចំឡើងដើម្បីបញ្ចៀសការរុះរើ ឬតាំងលំនៅដ្ឋានដោយមិនស្ម័គ្រចិត្ត និងដើម្បីកាត់បន្ថយការទម្លុះយកដី និងផលប៉ះពាល់នៃការរុះរើ ឬតាំងលំនៅដ្ឋានតាមរយៈជម្រើសផ្សេងៗនៃការរៀបចំគម្រោង។ របាយការណ៍ស្តីពីការធ្វើបញ្ជាំងកិច្ចការពារសុវត្ថិភាពសង្គម ត្រូវបានបង្ហាញក្នុងឧបសម្ព័ន្ធទី ៩។ បញ្ជីសម្រាំងស្តីពីការរុះរើ ឬតាំងលំនៅដ្ឋានដោយមិនស្ម័គ្រចិត្ត ត្រូវបានបំពេញចំពោះអនុគម្រោងកញ្ចប់ទី១ ទាំងអស់ និងមានជូនភ្ជាប់មកក្នុងរបាយការណ៍ស្តីពីការសិក្សាលទ្ធភាពអនុគម្រោងទាំងអស់។

ជនជាតិដើមភាគតិច៖ គម្រោងអភិវឌ្ឍន៍វិស័យនេះ ត្រូវបានចាត់ចូលក្នុងប្រភេទខ។ គ្មានជនជាតិដើមភាគតិច ដូចបានកំណត់ដោយរដ្ឋាភិបាលកម្ពុជា នៅក្នុងតំបន់គោលដៅរបស់អនុគម្រោងកញ្ចប់ទី១ទាំងអស់ ក៏ប៉ុន្តែ មានគ្រួសារជនជាតិភាគតិចមួយចំនួនតូច ដែលបានរស់នៅលាយឡំគ្នាក្នុងសហគមន៍មូលដ្ឋាន អាចនិយាយភាសាខ្មែរបានស្ទាត់ជំនាញ និងធ្វើរាល់សកម្មភាពប៉ះពាល់ជីវិតដូចជនជាតិខ្មែរដែរ។ បញ្ជីសម្រាំងស្តីពីជនជាតិដើមភាគតិច ត្រូវបានបំពេញសម្រាប់អនុគម្រោងកញ្ចប់ទី ១ និងមានជូនភ្ជាប់ក្នុងរបាយការណ៍ស្តីពីការសិក្សាលទ្ធភាពអនុគម្រោងទាំអអស់។ ក្របខណ្ឌផែនការជនជាតិដើមភាគតិចមួយ ត្រូវបានរៀបចំដើម្បីជាមាគ៌ាក្នុងដំណើរការរៀបចំគម្រោង (សម្រាប់អនុគម្រោងក្នុងកញ្ចប់ទី២ដល់ទី៥) និងដើម្បីឲ្យជនជាតិភាគតិច និងជនជាតិដើមភាគតិចទាំងនោះចូលរួមក្នុងដំណើរការពិគ្រោះយោបល់ និងការសម្រេចចិត្តស្តីពីការសិក្សារៀបចំ ការអនុវត្ត និងការត្រួតពិនិត្តអនុគម្រោង។

INTRODUCTION

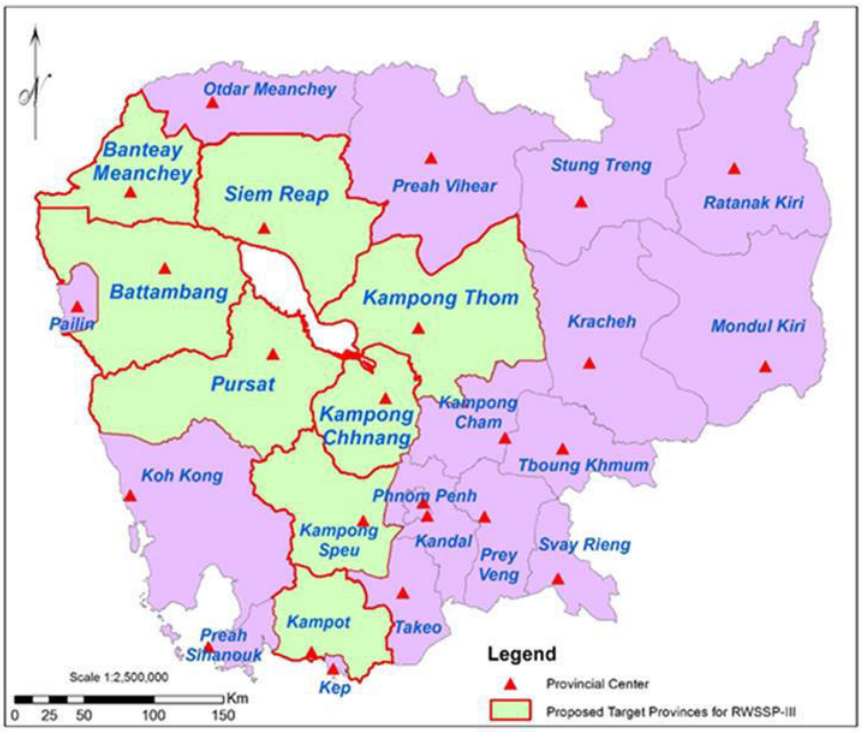
1. Cambodia has made considerable progress to increase access to improved rural water supply and sanitation services. However, despite of the promising progress and innovations in the sector during the recent years, nearly half of the rural population in Cambodia still live without access to improved water supply and 33% without access to safe, sanitary toilet.[1]

2. The Royal Government of Cambodia, recognizing the urgency of the rural water supply and sanitation situation, has set an ambitious target to achieve universal access to safe water supply and sanitation services in Cambodia by 2025. The proposed Third Rural Water Supply and Sanitation Sector Project (RWSSSP3), with the budget of US$ 75.58 million, is expected to make a significant, critically needed, contribution to the achievement of the national target.

3. Building on the experience and lessons learnt in the previous investments supported by ADB and other donors in implementation of rural water supply and sanitation sector projects in Cambodia, the proposed RWSSSP3 will support the development of rural infrastructure and basic services, institutions, and human capacities. The project will support inclusive growth by (i) reducing inequalities; (ii) improving health, gender, and living conditions; and (iii) reducing vulnerability and targeting solutions for the poorest and vulnerable households.

4. The RWSSSP3 will build on the results and key learnings in the six provinces around Tonle Sap Lake, where the on-going Second Rural Water Supply and Sanitation Sector Project (RWSSP2) is currently being implemented, and will scale up the support to two additional provinces of Kampong Speu and Kampot (see Figure 1).[2]

Figure 1: RWSSSP3 Target Provinces



[1] Cambodia Socio-economic Survey (CSES) 2016

[2] In the final workshop organized in 30 November 2018, proposal was made by MRD to add two more provinces, namely Oddar Meanchey and Preah Vihear into the project. ADB Loan Fact Finding Mission organized in 5-19 Feb 2019 recommended that the two provinces could be included in the project from the second batch onwards. Confirmation will be required from MEF.

5. FCG International Ltd (FCG) signed the contract with the Asian Development Bank (ADB) on 4 September 2017 to provide consulting services for the TA 9199 CAM: Design Study for the Third Rural Water Supply and Sanitation Sector Project in Cambodia. The project design has been conducted by FCG International in partnership with Finnish Consulting Group Asia, Fraser Thomas Partners and CamConsult. The project design team officially commenced the assignment on 25 September 2017. In the meeting with the ADB project officer in Phnom Penh on 26 June 2018 it was agreed to extend the duration of TA 9199-CAM for 6 months, until 25 February 2019, and the contract variation was officially approved by ADB on 19 September 2018.

6. The proposed project is included in the 2019 pipeline in the ADB country operations business plan (COBP), 2019–2021 with a total budget of $50 million.[3] At the project concept stage, inclusion of a policy based loan (PBL) component was considered to support the government's commitment to expanding RWSS access while leveraging the difficult and crucial D&D reforms necessary to ensure that the proposed sector investment loan (and other RWSS investments) is sustainable and meets it's objectives. The ADB preparation mission to Cambodia in early October 2017 sought the MEF and MRD's views on whether the PBL component should be proposed for further study and consideration under the PPTA. Arising from these discussions it was agreed that the PPTA team should study the inclusion of PBL component for further discussion.[4]

7. The Rural Water Supply and Sanitation Sector Assessment Report (deliverable for Component 1) was developed and submitted to ADB, MRD and MEF on 1 February 2018. The report covers government national level strategies and plans, institutional, legal and regulatory frameworks, analysis of RWSS sector stakeholders, key lessons learned in the sector and sustainability of RWSS sector investments. It also includes an institutional assessment of the national and sub-national agencies involved in the provision of RWSS, progress in the decentralization of rural water supply O&M and sanitation and hygiene promotion to the district administrations and a draft Policy Based Loan (PBL) matrix.

8. Rural Water Supply and Sanitation Sector Assessment workshop was organized on 22 February 2018 with the main objective to present and facilitate discussions on the sector assessment for the policy based loan and draft policy matrix to inform the decision to be taken by the Government and ADB on the inclusion of a policy-based loan component in the proposed project. Following careful considerations of the proposed policy based loan and in-depth discussions between ADB and the Government, the project design team was instructed to move ahead with the design of the $50 million sector project with only the investment loan component.

9. Sustainability is about permanent beneficial change in infrastructure, services and practices - whether the infrastructure and services continue to function, continue to deliver benefits and whether good sanitation and hygiene behaviours are practised over time. The design for the RWSSSP3 will ensure that in the drive to increase results, the sustainability of water supply and sanitation infrastructure and services and sanitation and hygiene behaviour is not compromised. The design of the RWSSSP3 has been developed based on FIETS Sustainability Framework[5]. The framework includes five elements of sustainability that need to be in place for the government agencies to be able to sustain the improved water supply and sanitation infrastructure, services and practices. Refer to Figure 8, in page 26.

[3] ADB Country Operations Business Plan (COBP) for Cambodia, 2019-2021
[4] Aide Memoire for the Preparation Mission in 9-12 October 2017
[5] The FIEST Sustainability Framework has been developed by WASH Alliance International, which is a multi-national consortium of over 100 partners worldwide, aiming to achieve increased sustainable access to and use of safe water and sanitation services.

10. Capacity development has been an integral part of the project design process. Many of the key PPTA activities have been implemented in close collaboration with the government agencies at the national, provincial, district and commune level, providing an opportunity for coaching, mentoring and on the job training throughout the project design. Throughout the project design, PPTA team has been working both at sub-national level, strengthening capacities among provincial, district and commune level government partners for sustainable rural water supply and sanitation service delivery and at national level, working with government and development partners to support sector reform. Presence at different levels of government not only creates synergies, but also facilitates learning with the ultimate aim of improving the overall performance of the RWSSH sector.

11. In March 2018 the project design team was informed that the Batch 7 sub-projects (7 communes) of RWSSP2 will be carried over into the RWSSSP3, because the current RWSSP2 is running out of funds. The design of the sub-projects and the development of the feasibility study reports for these seven communes (including all the environmental and social safeguards assessments) are managed by the RWSSP2 team. The information on the batch-7 sub-projects, provided by the RWSSP2 team, has been integrated into this final report.

12. The design study (TA 9199 CAM) has been structured differently than a typical ADB project preparation technical assistance (PPTA). Instead of an interim report, the key deliverables for the assignment include three separate reports for the project components and then a consolidated final report. In addition, many of the Report and Recommendation of the President to the Board of Directors (RRP) linked documents required for the loan processing are not included in the TOR for the design study. Following the discussions on the reporting requirements with the ADB project officer, it was agreed to develop a draft final report following the structure for the RRP[6].

13. Participatory Technical Forum on the Design of the RWSSSP3 was organized in Phnom Penh on 27 June 2018 with the main objective to present and facilitate discussions on

- Expansion of Rural Water Supply and Sanitation Infrastructure and Services Report (Deliverable for Component 2), submitted on 22 June 2018
- Strengthening Human Resources and Management Capacity Report (Deliverable for Component 3), submitted on 22 June 2018

14. The draft final report was developed taking into account all the comments and feedback received on the three component reports and all the discussions at the Rural Water Supply and Sanitation Sector Assessment workshop held in February 2018 and the Participatory Technical Forum organized in June 2018. The draft final report was submitted to ADB and MRD on 26 November 2019. Final workshop on the Design of the RWSSSP3 was organized in Phnom Penh on 30 November 2018 to ensure that all the comments and feedback from ADB, MRD, MEF and other key sector stakeholders will be incorporated into the final report.

15. ADB loan fact finding mission (LFFM) was organized in Cambodia on 5 -19 February 2019. This final report has been developed based on the discussions during the LFFM and all the comments and feedback received on the draft final report.

[6] The proposed structure for the draft final report was sent to the ADB project officer in 2 May 2018

PROPOSED PROJECT

A. Rationale

16. **Access to Rural Water Supply and Sanitation**. In 2016 the population of Cambodia reached 15.6 million and nearly 70% of the people are still living in rural areas[7]. Cambodia has made considerable progress to increase access to improved rural water supply and sanitation services. However, despite of the promising progress and innovations in the sector during the recent years, 47% of the rural population in Cambodia still live without access to improved water supply and 33% without access to safe, sanitary toilet. Nearly 3.5 million people in the rural areas of Cambodia are still practicing open defecation.[8]

17. **Alignment with Government's National RWSSH Strategy**. The Royal Government of Cambodia, recognizing the urgency of the rural water supply and sanitation situation, has officially adopted the National Strategic Plan (NSP) for Rural Water Supply, Sanitation and Hygiene for 2014-2025. The NSP-RWSSH provides a national target for Cambodia to achieve universal access to safe water supply and sanitation services by 2025. The NSP-RWSSH emphasizes certain key principles, including the focus on sustainability, demand-responsive approach to service delivery, cost-sharing principles for investments and maintenance of water supply schemes, sustained behavior change at household level and decentralization of functions for RWSSH. Underlying the NSP-RWSSH is the recognition that public funding should be used to improve the enabling environment for creating demand for sanitation in the communities and for facilitating and strengthening the private market. The proposed RWSSSP3, with the budget of US$ 75.58 million, has been designed to make a significant, critically needed, contribution to the achievement of the national target in alignment with the key principles of the Government's National Strategy for the RWSS sector.

18. **Alignment with the Sustainable Development Goals**. In September 2015, the United Nations General Assembly adopted the 2030 Agenda for Sustainable Development, including 17 Sustainable Development Goals and 169 targets, which are designed to be universally relevant and applicable to all countries. Sustainable Development Goal (SDG) 6 aims to 'Ensure availability and sustainable management of water and sanitation for all'. The Goal 6 targets for water and sanitation are highly ambitious, but consistent with the overarching ambition of the 2030 Agenda to "end poverty in all its forms" and "leave no one behind."

19. SDG target 6.1. emphasizes that simply increasing access to improved water supply is no longer sufficient. Instead, progress in the area of water supply and drinking water must consider accessibility, reliability, affordability and meeting water quality standards while addressing inequalities. SDG target 6.2 highlights that simply increasing access to improved sanitation is no longer adequate. Instead, progress in the area of sanitation and hygiene must consider the suitability of the sanitation facilities for all and safe management of faecal sludge, while addressing inequalities and paying special attention to the needs of women, girls and those in vulnerable situation.

20. **Safe and Sustainable Water Supply and Sanitation for Health Centres and Schools**. The new global indicators for SDGs prioritize improved water supply and sanitation for the institutional settings, including schools and health care facilities, where lack of access to water supply and sanitation infrastructure and services significantly impacts on the health, welfare and productivity of the communities. Adequate water supply, sanitation and hygiene facilities in health centres help to ensure quality and safe care and minimizes the risk of infection for patients, caregivers, healthcare workers and surrounding communities. Poor and limited WASH facilities in health centres increase the risk of healthcare acquired infections and

[7] Cambodia Socio-economic Survey (CSES) 2016
[8] Cambodia Socio-economic Survey (CSES) 2016

undermines the national efforts to improve maternal, neonatal and child health. Access to improved water supply and sanitation facilities at schools improves access to education and learning outcomes, particularly for girls, by providing a safe, inclusive and equitable learning environment for all. WASH interventions at schools also provide an important entry point for raising awareness and promoting the behaviour change necessary to end open defecation and achieve universal access to water supply and sanitation in the rural communities.

21. **Health Impacts and Economic Benefits**. From health impacts to economic losses, the costs of inadequate water supply and sanitation are staggering. The economic losses associated with the poor water and sanitation situation is estimated to be over seven percent of Cambodia's gross domestic product (GDP), or US$32 per person. Incidence of diarrhoea is the second-largest cause of infant and under-5 mortality in Cambodia, and among the highest in the region. One out of three (32.4%) children under the age of five in Cambodia are stunted. The prevalence of stunting is 10% higher among children born to mothers from the lowest wealth quintile (42%).[9] Each new, improved sanitation facility in the community provides both public and private benefits, and reinforcing this concept with local leadership is very important. Sanitation services that fail to deliver improved sanitation to poor households are likely to have less optimal outcomes, with fewer health and economic benefits than those that succeed in reaching the poor, given that the open defecation and lack of access to sanitary toilets impacts beyond the household level.

22. The World Bank study in 2013[10] demonstrated the association between stunting and open defecation in the rural communities in Cambodia. Open defecation within a community harms the physical and cognitive development of children, even if children are living in households that use toilets themselves. Frequently ingesting faecal matter due to poor sanitation can cause diarrhoea, malnutrition, and stunted growth-and thus impact negatively on a child's cognitive development. To sustainably improve health outcomes in the rural Cambodian communities, requires an area-wide comprehensive approach to eliminate the practice of open defecation and ensure access to safe water supply and improved sanitation and hygiene practices for all.

23. **Climate Change and Disaster Risk Management**. Recognizing Cambodia's susceptibility to climate change and natural disasters, evidenced by the increasing intensity of storms and floods along with extended periods of drought in rural areas, it is utmost important to protect the water sources and construct water supply and sanitation infrastructure and facilities in a sustainable manner. To mitigate climate change and disaster risks the structures need to be designed above likely predicted flood levels. For drought adaptation, the ponds and wells need to be made deep enough and water storage jars well sealed to reduce evaporation. Water and sanitation safety plans play an important role in the management of climate risks.

24. **Weak Governance and Institutional Capacity**. The underlying problem of inadequate rural water supply and sanitation infrastructure and services lies in a weak regulatory framework and institutional capacity, limited human resources and a lack of adequate funding for capital expenditures and the operation and maintenance of assets. This results in inadequate quality, availability and accessibility of services, particularly for the poor and other vulnerable groups, especially in the remote and isolated rural areas. Many barriers for accelerating progress and effective up-scaling in Cambodia are found in having competing or contradictory RWSS projects and approaches implemented within the same area. The government aims to achieve universal coverage of rural water supply and sanitation by 2025

[9] Cambodian Demographic and Health Survey, 2014: Key Indicators Report, 2015
[10] World Bank/WSP, 2013: Investing in the Next Generation: Growing Tall and Smart with Toilets

- an ambitious target, which can only be achieved through well-coordinated efforts between the Government and all the sector partners and adequate financial and human resources.

25. The long-term strategic framework of Asian Development Bank (ADB)—Strategy 2020—prioritizes capacity development alongside good governance as "drivers of change" and puts them deeper into the mainstream of ADB operations. The Midterm Review of Strategy 2020 observed that weak governance and institutional capacities continue to constrain the development prospects of many developing member countries (DMCs). The key principles of ADB Medium Term Framework and Action Plan for Capacity Development include country ownership and leadership, results orientation, focus on different entry points for capacity development, attention to the enabling environment and political economy for reform, and change management issues.[11]

26. One of the strategic objectives of the National Strategic Plan (NSP) for Rural Water Supply, Sanitation and Hygiene is to improve the institutional capacity for RWSSH service delivery. The National Action Plans for Rural Water Supply, Sanitation and Hygiene (NAP) have been developed to translate the Strategic Objectives of the NSP into specific activities, indicators, targets and implementation timeframes. The main reason for the development of the NAP was to accelerate progress in the RWSSH sector by improving efficiency, strengthening institutional capacity and increasing investment.[12] It's recognized that without adequate institutional capacity, development efforts are unlikely to succeed, even with substantially enhanced funding. In alignment with the ADB Strategy 2020 and NSP-RWSSH, the RWSSSP3 has been designed to strengthen the rural water supply and sanitation sector institutions, human resources and management capacity at national and sub-national levels in the project target provinces.

27. **Institutional Arrangements**. Responsibility for the RWSS sector in Cambodia is fragmented, requiring enhanced cooperation among ministries and overcoming structural and organizational weaknesses. The government institution responsible for rural water supply and sanitation is the Ministry of Rural Development (MRD), through the Department of Rural Health Care (DRHC) for rural sanitation and hygiene promotion and the Department of Rural Water Supply (DRWS) for rural water supply. The latter is related to the community-based, non-commercial rural water supply schemes. The roles and responsibilities of the government agencies are complex, not only between the department of rural water supply (DRWS) and department of rural health care (DRHC) within MRD, but also with other ministries. MRD is only responsible for community-based, non-commercial rural water supply schemes. Ministry of Economy and Finance (MEF) requested TA 9199-CAM to assess how the private sector can play an increased role in the provision of rural water supply in the RWSSSP3, and there is an immediate constraint to overcome, knowing that the private sector managed rural water supply schemes are the responsibility of the Ministry of Industry and Handicraft (MIH). The situation is more complex regarding the responsibilities for water supply and sanitation in public institutions in rural areas, such as schools and health centers. Various efforts and sector initiatives have been developed to improve the sector coordination, but additional support is needed. The implementation arrangements for the RWSSSP3 have been developed with an aim to improve the sector coordination at national and sub-national level. The need to strengthen leadership and sector coordination has also been addressed in the capacity development and training plan for the proposed project.

28. **Rural Water Supply and Sanitation Sector Monitoring**. National Strategic Plan for RWSSH calls for a unified government-owned Management Information System (MIS) for

[11] ADB 2016, Capacity Development in ADB Operations – Review of the Medium Term Framework and Action Plan for Capacity Development
[12] Ministry of Rural Development, 2016, National Action Plan for Rural Water Supply, Sanitation and Hygiene for 2014-2018

monitoring sector performance. The MIS would enhance transparency, accountability and report on results and progress for rural water supply and sanitation. Although some progress has been made in the development of MIS with the support of the development partners and sector stakeholders, a number of issues in terms of quality and delivery have caused delays in completion of meaningful system development. A critical limitation of the current sector monitoring is that data tends to be collected only from externally-funded projects and the data is currently not aggregated and reported against the NAP results framework. The RWSSSP3 will continue to support the Government in the development of the MIS and ensures that the project performance monitoring system (PPMS) will be fully aligned and contributes to the Government's MIS and achievement of the performance targets for the sector.

29. Strengthening performance monitoring is a key investment in improving local governance. This includes monitoring processes supported by capacity building of local authorities in data collection and analysis of results, alongside ensuring the information is used to review progress, identify issues and support results based planning. The experience in rural water supply and sanitation programs in Cambodia has shown that by engaging sub-national government agencies in the regular monitoring of progress and results using simple monitoring tools and data collection processes, they develop a stronger commitment to both the quality of reporting and ownership of the results. Strengthening the local monitoring processes allows a continuous focus on progress and results across the project target areas.

30. **ADB's long-term commitment to support the RWSS Sector in Cambodia**. ADB has actively supported the rural water supply and sanitation sector in Cambodia since the early 2000s and continues to be one of the main development partners in the sector. Since 2006, ADB has provided over $50 million funding for rural water supply and sanitation improvements in the provinces around Tonle Sap Lake. As a result of the ADB funding over 800,000 people in the rural areas of Cambodia have gained access to improved water supply and over 400,000 people have gained access to sanitation.[13] ADB is continuing the long-term support to the sector based on the recognition that significant investment and capacity development is required to support the government to meet its 2025 national target and the Sustainable Development Goals. The proposed RWSSSP3 will build on the results and key learnings in the ADB funded rural water supply and sanitation projects in the Tonle Sap basin and will scale up the support to two additional provinces of Kampong Speu and Kampot.

[13] ADB's Past, Ongoing and Future Support to the Water and Sanitation Sector in Cambodia – presentation at the Inception Workshop in Phnom Penh in 8 Nov 2017

B. Impact and Outcome

31. The expected impact of the RWSSSP3 aligns with the National Strategic Plan for Rural Water Supply, Sanitation and Hygiene for 2014-2025 and will significantly contribute to the achievement of the national target for having universal access to rural water supply and sanitation in Cambodia by 2025.

32. The 5-year sector project will improve the health and quality of life for 640,000 people through improved access to safe water supply, elimination of open defecation and equitable and sustained access to improved sanitation and hygiene practices. The project will target 65 rural communes, including 647 villages and aims to achieve 100% access to safe and sustainable water supply and sanitation services in all the target villages.

Figure 2 Impact, Outcome and Outputs for RWSSSP3

<table>
<tr><td colspan="3">Impact of the project is aligned with the RGC National Target
UNIVERSAL ACCESS TO SAFE WATER SUPPLY AND SANITATION SERVICES IN CAMBODIA BY 2025</td></tr>
<tr><td colspan="3">Expected Outcome
Sustainable and equitable access to safe drinking water, sanitation and hygiene in the for rural areas in eight target provinces</td></tr>
<tr><td>Output 1: Rural water supply infrastructure and services improved and expanded</td><td>Output 2: Rural sanitation infrastructure and services improved and expanded</td><td>Output 3: Rural water supply and sanitation sector institutions strengthened, and management capacity improved and developed</td></tr>
</table>

33. The updated Design and Monitoring Framework (DMF) for the sector project is presented in the Appendix 1.

C. Outputs

34. **Output 1 - Rural water supply infrastructure and services improved and expanded.** The project will support the construction of new improved water supply infrastructure and facilities and rehabilitation of existing water supply infrastructure in 647 target villages. The design of the water supply improvements for each commune is developed following a participatory process to jointly assess the current water supply and sanitation situation in all the target villages and to identify the needs, priorities, potential options and solutions.

35. The sub-project designs for the batch 1 target communes have been developed through on-going consultation with the commune councils, district administrations, PDRDs and MRD. The proposed sub-projects presented in the feasibility study reports reflect the needs and priorities of the communities and the objective to reach 100% access to safe and sustainable water supply services in all the target villages. The design for the sub-projects for batches 2-5 will be developed during the project implementation stage following the participatory process. It's expected that as a result of the RWSSSP3 400,000 additional people will gain access to improved water supply infrastructure and services in the project target communes by 2024.

36. The project will support the construction and rehabilitation of water supply facilities for schools and health centers in the project target communes, aiming to ensure that all the schools and health centers in the target communes have access to safe and sustainable water supply.

37. The output 1 will be delivered through following key actions

(i) Existing water supply infrastructure and facilities rehabilitated
(ii) New improved water supply infrastructure and facilities constructed
(iii) Water and sanitation safety planning process and tools implemented in project target communes and villages
(iv) Water point mapping and functionality assessment of water supply infrastructure conducted in the target communes
(v) Water quality testing conducted regularly in all the target communes
(vi) Climate change adaptation and disaster risk management integrated into the design of the sub-projects

38. **Output 3 - Rural sanitation infrastructure and services improved and expanded.** Sanitation and hygiene is first and foremost about behavioral change. Therefore, sanitation demand creation activities should always start first. However, once demand is created, affordable hardware solutions needs to be in place so that people are able to act upon their newly defined priority. The RWSSSP3 builds upon best practices in sanitation demand creation, strengthening of sanitation markets and sanitation and hygiene behavioral change communication. The project implementation will follow proven and tested procedures established by MRD/ Department of Rural Health Care in the national guidelines for behavior change communication and community-led total sanitation. Innovative sanitation and hygiene behavior change communication campaigns will be implemented in all the target communes and schools.

39. Developing capacities for effective long-term water, sanitation and hygiene behavioral change communication will be an important part of the RWSSSP3. Key desired behavior changes are ending open defecation in all the target villages, encouraging people to build, use, upgrade and maintain toilet, hand washing with soap and drinking safe water. In alignment with Sustainable Development Goals, the project will also introduce innovative BCC interventions related emptying and re-using waste from the toilet.

40. Behavior change communication promotes positive behaviors among individuals or communities. The focus is on the causes of behavior: what motivates people to change, and what are the barriers. The goal is to move people from their current practice to adopt a desired behavior. A key aspect is understanding motivations and barriers from the perspective of a target group, guided by formative research. It differs from more traditional information education and communication (IEC) approaches and health education messages, which are based on the belief that increased awareness of an issue will result in behavior change.

41. The project will support all the target communes to develop their own sanitation and hygiene plans with clearly defined objective, annual and quarterly targets and action plans. Through the capacity building the commune councils will be enabled to take ownership and be accountable for the results and progress in promoting sanitation and hygiene in their commune. At least 60,000 improved household latrines need to be constructed in the project target areas to ensure that all the target communes will be declared open defecation free by 2024. It's expected that as a result of the RWSSSP3 280,000 additional people will gain access to improved sanitation in the project target communes by 2024.

42. The RWSSSP3 will address the challenge of sustaining services to ensure lasting benefits. Without proper waste management, longer term sustainability of improved sanitation and hygiene is at risk and requires a focus on developing post-ODF strategies that address the growing challenges relating to safe management of human waste. All the target communes of the RWSSSP3 will be supported to develop their own post-ODF action plans. Technical solutions are only a part of the problem. The primary challenge is the behavior change of households, local government agencies and the private sector actors involved. All the lessons learnt from the USD 1.5 million grant provided by the Sanitation Financing Partnership Trust Fund to pilot innovative solutions to fecal sludge management under the RWSSP2 will be carefully reviewed.

43. In accordance with the National Strategy for Rural Water Supply, Sanitation and Hygiene for 2011-2025, *"For sanitation, public finance should mainly be used to stimulate demand and develop the enabling environment (including affordable products) so that households can pay for their own toilets. While targeted hardware subsidies may be provided to poor households to buy toilets, and to reach the vision of 100% coverage, direct hardware subsidies should be used with caution and only as a last option, and alternative mechanisms should be prioritized*." The sanitation financing support mechanisms for the poor households under the RWSSSP3 has been developed in accordance with the principles described in the National Strategy for Rural Water Supply, Sanitation and Hygiene for 2011-2025 and the Sub-decree no. 291 on Identification of Poor Households in Cambodia.[14]

44. The project will support the construction and rehabilitation of public latrines for schools and health centers in the project target communes, aiming to ensure that all the schools and health centers in the project target communes have access to safe and sustainable sanitation facilities.

45. The output 2 will be delivered through following key actions

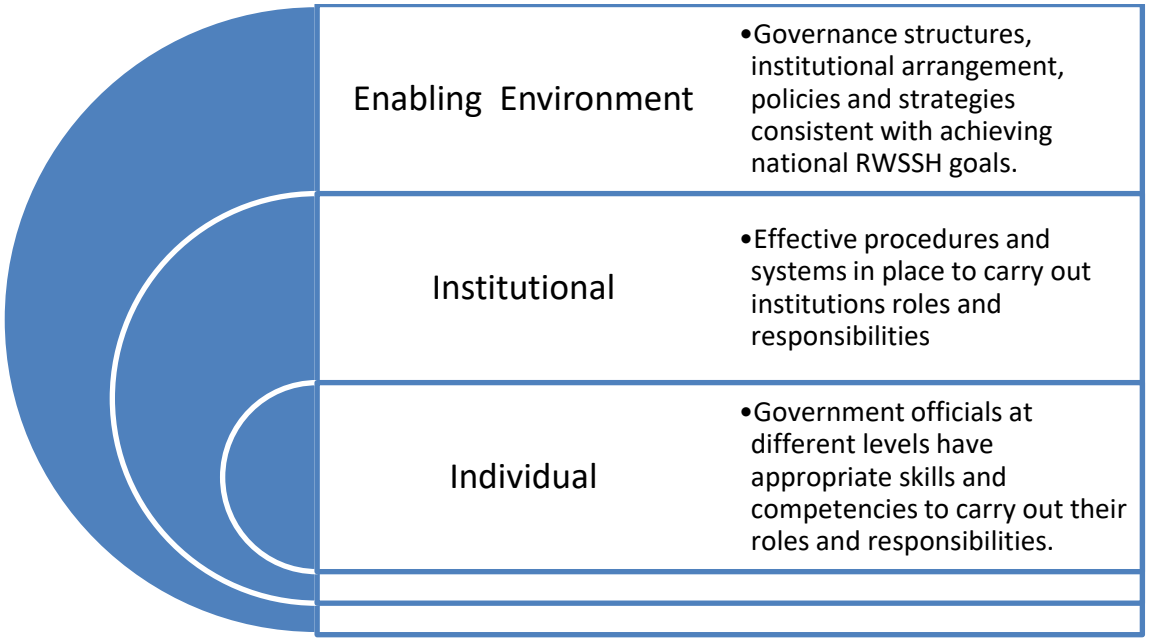
(i) Sanitation demand creation activities implemented in the target communes
(ii) Innovative behavior change communication initiatives on sanitation and hygiene implemented in the target communes
(iii) Public latrines constructed for schools or health centers
(iv) Water, sanitation and hygiene promotion mainstreamed through pagodas and health centers
(v) Innovative behavior change communication initiatives on sanitation and hygiene implemented in the schools
(vi) Sanitation supply chain analysis conducted in the project target areas
(vii) Capacity building and training to local private sector actors to engage or expand their businesses into WASH related products and services
(viii) Training and technical guidance on informed choice technology options for sanitary latrines
(ix) Capacity development and on-going technical support for MFIs on management and promotion of micro-credits for household toilet construction
(x) Saving groups for sanitation established and capacity development provided
(xi) Sanitation financing support mechanism for the poor households established and implemented
(xii) External ODF verification conducted and ODF ceremonies organized and in the target communes

[14] The Royal Government of Cambodia. Sub-decree no 291 on the Identification of Poor Households

(xiii) Post-ODF action plans developed for all the target communes

46. **Output 3 - Rural water supply and sanitation sector institutions strengthened, and management capacity improved and developed.** Comprehensive capacity development framework for RWSSSP3 focuses on three levels: (i) Developing a supportive enabling environment consistent with achieving the national goals for rural water supply and sanitation sector; (ii) Strengthening the capacity of institutions to ensure that effective procedures and systems are in place; and (iii) Building capacity of government officials at different levels to carry out their roles and responsibilities. Within this framework, the capacity at each level needs to be addressed by cohesive, comprehensive and results-oriented plans.

Figure 3 Capacity Development Framework[15]



47. The result based capacity development program has been designed to ensure that the capacity of RWSS institutions is strengthened and effective procedures and systems are in place to achieve accelerated progress to reach universal access to rural water supply and sanitation in Cambodia and sustain the improved infrastructure, services and practices.[16]

48. Limited capacity at different levels of the government is a major bottleneck that hinders progress in achieving universal access to rural water supply and sanitation in Cambodia. Capacity development program for the RWSSSP3 has been designed to empower and enable the MRD, PDRDs and local government agencies to successfully plan, implement, monitor and manage the project interventions. Particular attention has been given to ensure the quality and effectiveness of capacity development interventions. It is recognized that capacity development is a long term, continuous process and the use of various methods and interventions is essential to achieve optimal results.

[15] Adapted from the Framework for Evaluating Capacity Development Performance in ADB Special Evaluation Study. 2008. Effectiveness of ADB's Capacity Development Assistance: How to Get Institutions Right
[16] TA 9199 CAM: Component 3 Report - Strengthening Human Resources and Management Capacity

49. The result based capacity development program has been designed to ensure that the Government officials at different levels have improved skills, competencies and management capacity to achieve the expected outputs and performance targets included in the Design and Monitoring Framework (DMF) for the RWSSSP3 and the national, provincial, district and commune level rural water supply, sanitation and hygiene action plans for the period of 2019-2025.[17]

50. The 5-year Capacity Development and Training Plan[18] is designed based on the findings and results of the capacity needs assessment conducted at provincial, district and commune level in the project target areas. The capacity development interventions are divided into five core areas of capabilities that are essential for the sub-national government agencies to successfully plan, implement, monitor and manage the program interventions. These include:

- Planning and Budgeting for Rural Water Supply and Sanitation
- RWSS Service Delivery
- Monitoring the RWSS Service Delivery
- Leadership and Coordination
- Management of Resources

51. The project will continue to support the Government in the development of the unified government-owned management information system (MIS) for monitoring sector performance and ensures that the Project Performance Monitoring System (PPMS) will be fully aligned and contributes to the Government's MIS and achievement of the performance targets for the sector. Strengthening performance monitoring is a key investment in improving local governance, transparency and accountability.

52. The project will introduce the concept of results based planning for RWSS in all the project target districts and communes. All the target districts and communes will be supported to develop their own water, sanitation and hygiene plans with clearly defined objective, annual targets and action plans. Through the capacity building the commune councils and district governments will be enabled to take ownership and be accountable for the results and progress in promoting water, sanitation and hygiene in their communes and districts.

53. The output 3 will be delivered through following key actions

(i) District, commune and village level RWSS teams established and orientation on the roles and responsibilities provided
(ii) 5-year capacity development and training plan implemented and monitored
(iii) Project Performance Monitoring System (PPMS) in alignment with the national MIS established
(iv) Results based rural water supply and sanitation action plan (in alignment with NAP and PAPs) developed for all the target districts and communes
(v) Capacity development on results based rural water supply and sanitation planning provided for all the target districts and communes
(vi) Functions and job descriptions developed and performance management process managed for the project staff at national and provincial level
(vii) Functions and job descriptions developed and performance management process managed for the members of district and commune RWSS teams

[17] TA 9199 CAM: Component 3 Report - Strengthening Human Resources and Management Capacity
[18] TA 9199 CAM: Component 3 Report - Strengthening Human Resources and Management Capacity

D. Summary Cost Estimates and Financing Plan

54. The investment cost for the sector project is estimated at $75.6 million, including a $36.8 million loan from the Concessional Ordinary Capital Resources of the Asian Development Bank (ADB), a loan of $8.8 million from the ADB's Disaster Risk and Climate Resilience Fund, a grant of $4.4 million from the same fund and a $1.0 million grant from ADB's High-Level Technology Fund. The base cost for the project, including duties and taxes is $64.9 million, physical contingencies are $5.0 million, price contingencies are $5.4 million, giving a total investment of $65.3 million before financing charges.

Table 1: Summary of Cost Estimates by Expenditure Category

($ million)

	Item	Foreign Exchange	Local Currency	Total Cost	% of Total Base Cost
A.	**Investment Costs**				
1	Civil Works	11.0	36.3	47.2	72.8%
	a. Rural Water Supply	7.3	18.2	25.5	39.3%
	b. Sanitation	0.3	18.7	19.1	29.4%
	c. Public Amenities	1.1	1.6	2.7	4.2%
2	Consulting Services	2.3	3.5	5.8	9.0%
	a. International	2.3	-	2.3	3.6%
	b. National	-	3.5	3.5	5.4%
3	Capacity Development	-	2.6	2.6	4.0%
4	Project Management	0.4	2.6	3.0	4.6%
5	Taxes & Duties	1.2	2.7	3.9	6.0%
	Subtotal (A)	**14.8**	**47.7**	**62.6**	**96.5%**
B.	**Recurrent Costs**	-	-	-	
1	Salaries	-	2.1	2.1	3.2%
2	Equipment Operation and Maintenance	-	0.2	0.2	0.3%
	Subtotal (B)	**-**	2.3	2.3	3.5%
	Total Base Cost	**14.8**	**50.0**	**64.9**	**100.0%**
C.	**Contingencies**	-	-	-	0.0%
1	Physical	1.2	3.8	5.0	7.7%
2	Price	0.6	4.7	5.4	8.3%
	Subtotal (C)	**1.8**	**8.6**	**10.4**	**16.0%**
D.	**Financing Charges During Implementation**	-	-	-	0.0%
1	Interest During Implementation	0.3	-	0.3	0.5%
	Subtotal (D)	**0.3**	**-**	**0.3**	**0.5%**
Total Project Cost (A+B+C+D)		**17.0**	**58.6**	**75.6**	**116.5%**

55. The government requested loan and grants in various currencies equivalent to US$51.00 from ADB's Concessionary Ordinary Capital resources, the Disaster Risk and Climate Resilience Fund and ADB's High-Level Technology Fund. The loans will have a 32-year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the draft loan agreement. The project investment plan is presented in the Table 2 below and the financing plan in the Table 3.

Table 2: Project Investment Plan

Item[a]				Total Cost[b]
A	**Base Costs[c]**			
1	Expansion of Rural Water Supply Infrastructure and services			43.98
2	Expansion of Rural Sanitation Infrastructure and services			9.03
3	Strengthening of RWSS Institutions and Management Capacity			11.87
		Sub-total (A)		**64.87**
B	**Contingencies**			
1	Physical			5.02
2	Price			5.35
		Sub-total (B)		**10.37**
C	**Interest Charges**			
	Interest During Implementation			0.33
		Sub-total (C)		**0.33**
		Total (A+B+C)		**75.58**
RWSS = Rural Water Supply and Sanitation				
a	Detailed cost estimates			
b	In mid 2018 prices			
c	Base Cost including duties and taxes			

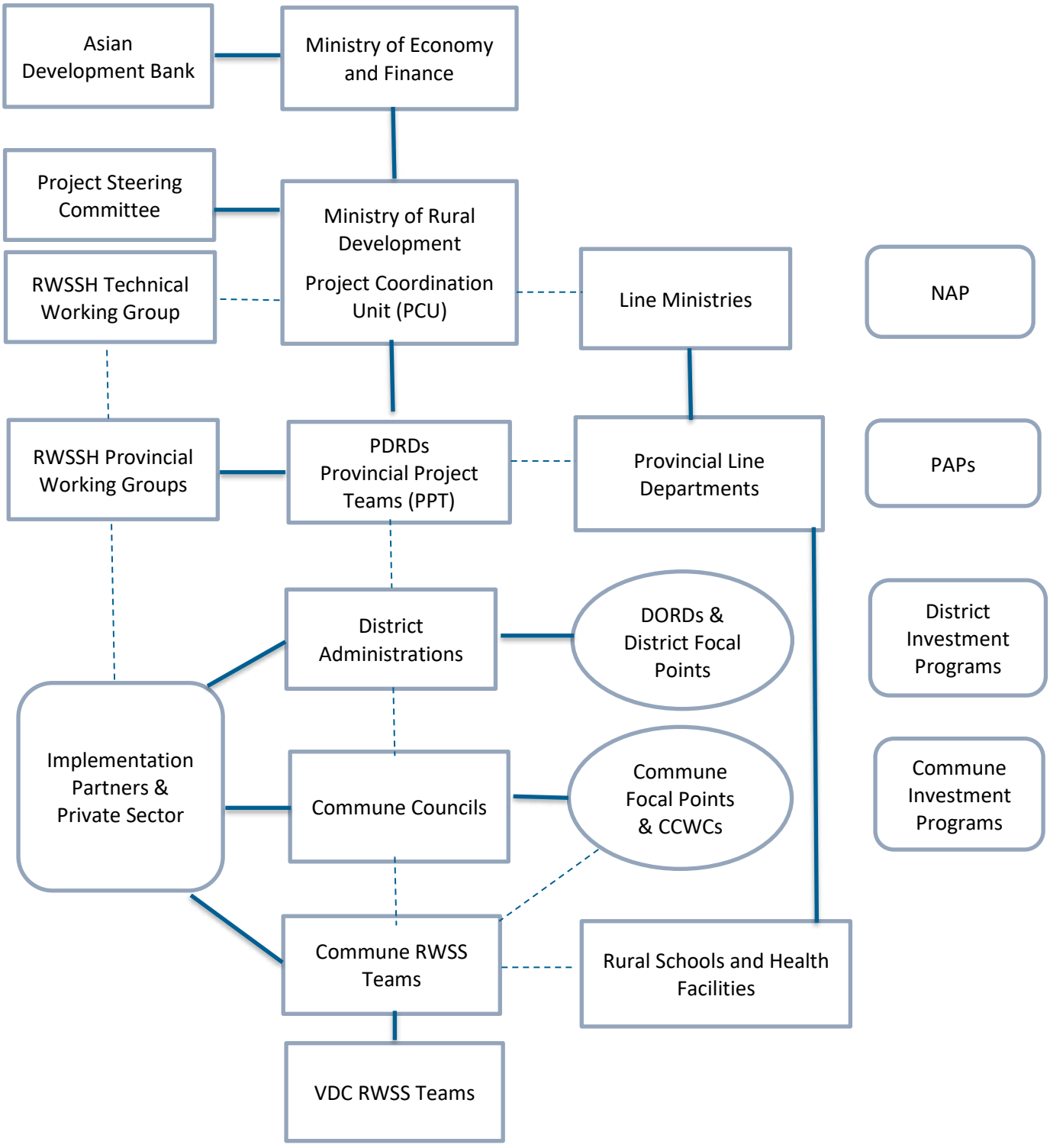
Table 3: Financing Plan

Source		Amount ($ million)	Share of Total (%)
Asian Development Bank			
Concessionary Ordinary Capital Reserves (COCR)		36.83	48.73%
Disaster Risk Management & Climate Resilience Fund - Loan		8.78	11.62%
Disaster Risk Management & Climate Resilience Fund - Grant		4.39	5.81%
Higher Technology Fund		1.00	1.32%
	Sub-total	51.00	67.48%
Government		6.19	8.20%
Beneficiaries		18.39	24.33%
Total		75.58	100.00%

E. Implementation Arrangements

56. Ministry of Rural Development will be the Executing Agency for the project. The Project Coordination Unit (PCU) established for the on-going RWSSP2 will continue to be responsible for the overall planning, implementation and coordination of the RWSSSP3 with new additional resources. The project implementation structure is presented in the Figure 4 below.

Figure 4 RWSSSP3 Implementation Structure



57. The PCU will be responsible for

(i) policy and implementation coordination between MRD and other national agencies, provincial agencies, international development agencies and NGOs, the private sector, and ADB;
(ii) ensuring that the project implementation will fully comply with the government's and ADB's policies, guidelines and operational requirements in terms of detailed designs, procurement, construction supervision, disbursement, financial management, monitoring and evaluation, social and environmental safeguards policy, climate change adaptation, pro-poor support strategies, gender and social inclusion, and civil society participation;
(iii) implementation, monitoring and management of the capacity development and training program
(iv) participatory design process for the sub-projects in batch 2-5 communes and the development of the feasibility study reports and detailed designs.
(v) ensuring that climate change adaptation and disaster risk management considerations are integrated into the design of the sub-projects
(vi) manage the procurement of the civil works and goods packages as specified in the procurement plan and
(vii) develop quarterly progress reports, consolidated annual reports and a project completion report

58. The project steering committee will continue to be chaired by the MRD secretary of state. The steering committee includes members from MRD departments (Rural Water Supply, Rural Health Care, Community Development, Training, Planning, and Administration) and eight PDRD directors. Representatives from Ministry of Economy and Finance (MEF), MOH, Ministry of Education, Youth and Sport, and the Council for Agriculture and Rural Development will be invited, as needed.

59. The steering committee will provide guidance to the project implementation. It will meet every three months and handle specific project-related issues, while the TWG-RWSSH handles broader sector issues at the national level. The project will use the provincial RWSSH working groups, chaired by the Provincial Governor, to coordinate the project activities across line departments at the provincial level.

60. The PDRD in each of the eight project target provinces will establish a team of experienced staff members under the direction of the PDRD director. These teams are called provincial project teams (PPTs). The provincial project teams will be responsible for: (i) liaising with the district administrations, and commune councils, (ii) preparing provincial project implementation plans, (iii) supporting the target districts and communes in developing results based rural water supply and sanitation action plans, (iv) Conducting participatory design process for the sub-projects in batch 2-5 communes and the development of the feasibility study reports, (v) providing technical advice to communities for selection and rehabilitation, improvement, or development of water supply and sanitation facilities and their subsequent O&M; (vi) providing technical advice and support to the target communes in the implementation of the water, sanitation and hygiene BCC initiatives (vii) monitoring and reporting monthly to PCU on project progress; (viii) contract supervision; (ix) liaison with the project implementation consultant and PCU in implementation of capacity development plan and training programs; (x) coordinating with other provincial agencies.

61. The project will be implemented over the period of 5 years, commencing in October 2019 and continuing until September 2024. The overall implementation plan is presented in the Figure 5 below.

Figure 5 Overall Implementation Plan for the RWSSSP3

KEY ACTIONS		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1.	***Output 1: Rural water supply infrastructure and services improved and expanded***																				
1.1	Existing water supply infrastructure rehabilitated																				
1.2	New improved water supply infrastructure and facilities constructed																				
1.3	Water and sanitation safety planning process and tools implemented in project target communes and villages																				
1.4	Water point mapping and functionality assessment of water supply infrastructure conducted in the target communes																				
1.5	Water quality testing conducted regularly in all the target communes																				
1.6	Capacity development and training on operation and maintenance of the water supply infrastructure																				
1.7	Climate change adaptation and disaster risk management integrated into the design of the sub-projects																				
2.	***Output 2: Rural sanitation infrastructure and services improved and expanded***																				
2.1	Sanitation demand creation activities implemented in the target communes																				
2.2	Innovative behavior change communication initiatives on sanitation and hygiene implemented in the target communes																				
2.3	Public latrines constructed for schools or health centers																				
2.4	Water, sanitation and hygiene promotion mainstreamed through pagodas and health centers																				

2.5	Innovative behavior change communication initiatives on sanitation and hygiene implemented in the schools	
2.6	Sanitation supply chain analysis conducted in the project target districts	
2.7	Capacity building and training to local private sector actors to engage or expand their businesses into WASH related products and services	
2.8	Training and technical guidance on informed choice technology options for sanitary latrines	
2.9	Capacity development and on-going technical support for MFIs on management and promotion of micro-credits for household toilet construction	
2.10	Saving groups for sanitation established and capacity development provided	
2.11	Sanitation financing support mechanism for the poor households established and implemented	
2.12	External ODF verification and Commune ODF Ceremonies	
2.13	Post-ODF action plans developed for all the target communes	
3	***Output 3: Rural water supply and sanitation sector institutions strengthened, and management capacity improved and developed***	
3.1	District, commune and village level RWSS teams established and orientation on the roles and responsibilities provided	
3.2	MIS at national, provincial and district levels designed and rolled out	
3.3	Project Performance Monitoring System (PPMS) in alignment with the national MIS established	
3.4	Results based RWSS action plan developed for all the target districts and communes	
3.5	5-year capacity development and training plan implemented and monitored	

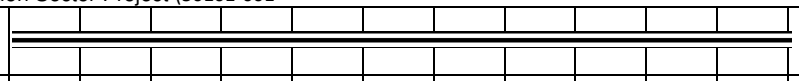
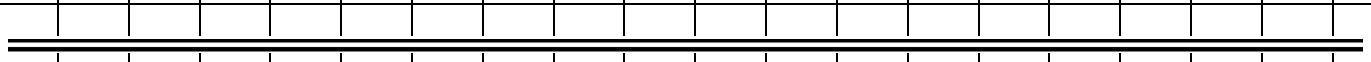
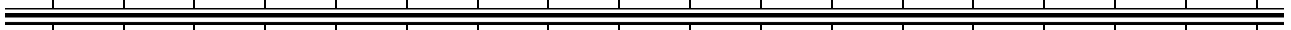
3.6	Capacity development on results based rural water supply and sanitation planning provided	
3.7	Functions and job descriptions developed and performance management process managed for the project staff at national and provincial level	
3.8	Functions and job descriptions developed and performance management process managed for the members of district and commune RWSS teams	

Table 4: Implementation Arrangements

Aspects	Arrangements	
Implementation Period	October 2019 – September 2024	
Estimated completion date	September 2024	
Management		
(i) Oversight body	Project Steering Committee	
(ii) Executing Agency	Ministry of Rural Development	
(iii) Implementation Agency	Department of Rural Water Supply at MRD	
(iv) Implementation Units	Provincial Department of Rural Development (PDRD) in eight target provinces	
Consulting Services	International consultants: 99 person-months National consultants: 410 person-months Local project implementation support officers: 1260 person-months	$5.8 million
Advance Contracting	Advance actions to procure consulting services and goods and civil works for batch-1 sub-projects. Awarding of contracts immediately after loan effectiveness.	
Disbursement	The loan proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2017, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.	

62. **Procurement Arrangements**. Procurement of goods, works, and related services will be undertaken in accordance with ADB's Procurement Guidelines for Goods, Works, Non-consulting and Consulting Services 2017, (as amended from time to time). Under the guidelines there are no stipulated thresholds for procurement. The Procurement Plan will determine what the packages will be and what method will be used for each package, taking into consideration the capacity of the Executing Agency (and PCU) and the likely procurement risks. Given that national shopping (NS) for works and goods and community participation in procurement (CPP) will involve the provincial, district and commune agencies with some inherent risks the previous levels for NS and CPP used during RWSSP2 have been retained. Except as the Asian Development Bank (ADB) may otherwise agree, the process thresholds displayed in the following table shall apply to procurement of goods and works.

Table 5: Procurement of Goods and Works

Method	Threshold
Open Competitive Bidding for Goods	Above US$ 100,000
Shopping for Goods	Up to US$ 99,999
Community Participation in Procurement for Goods	Up to US$ 29,999
Open Competitive Bidding for Works	Above US$ 100,000
Shopping for Works	Up to US$ 99,999
Community Participation in Procurement for Works	Up to US$ 29,999

63. The full procurement plan is presented in the Project Administration Manual (PAM). The provisional packaging of the contracts is summarised in the following Table 6 with the proposed scheduling of the timelines for the contract packages depicted in the Figure 6. The decision for advance action on the contract packages has been determined by the availability of MRD and PDRD personnel during 2018 and 2019 to manage the preparation of the bidding documents and the bid processes.

Table 6: Provisional Contract Packages

Item	Contract No.	Description	Type
1.	Consulting services	Consulting Services for Project Implementation Consultants – International Firm.	QCBS (90:10), Advance Action. Full Technical Proposal
2.	Project Auditor	MEF/MRD recruitment of firm for project period for five years.	Simplified Proposal
3.	NCB XX-XX	RWSSSP3 Batch 1a: Well drilling, well rehabilitation and community ponds.	OCB (07 packages). Advance action, combined small projects.
4.	NCB XX-XX	RWSSSP3 Batch 1a: Small piped water systems.	OCB (01 packages). Advance action, combined small projects;
5.	NCB XX-XX	RWSSP3 Batch 1b (carried forward from RWSSP2): Well drilling, well rehabilitation and community ponds.	OCB (03 packages). Advance action, combined small projects.
6.	SCW XX-XX	RWSSSP3 Batch 1a: Well drilling, well rehabilitation and community ponds.	National Shopping (08 packages). Advance action, combined small projects.
7.	SCW XX-XX	RWSSP3 Batch 1b (carried forward from RWSSP2): Well drilling, well rehabilitation and community water supply facilities and small water supply systems.	National Shopping (04 packages). Advance action, combined small projects.
8.	SPL XX-XX	RWSSSP3 Batch 1a: Public latrines and water tanks.	National Shopping (08 packages). Advance action, combined small projects.
9.	SPL XX-XX	RWSSP3 Batch 1b (carried forward from RWSSP2): Public latrines and water tanks.	National Shopping (05 packages). Advance action, combined small projects.
10.	CPP XX-XX	RWSSSP3 Batch 1a: Household (HH) latrines and water jars.	CPP contract arrangements (50 packages estimated). Advance action.
11.	CPP XX-XX	RWSSP3 Batch 1b (carried forward from RWSSP2): Household (HH) latrines and water jars.	CPP contract arrangements (56 packages estimated). Advance action.
12.	E1	Computers, printers, copiers, etc.	OCB (1 package). Advance action.
13.	E2	Resistivity test equipment and software.	OCB (1 package). Advance action.
14.	E3	Digital cameras, hand hale GPS units.	National Shopping (1 package). Advance action.
15.	E4	Water test kits for PCU and PPTs.	National Shopping (1 package). Advance action.

16.	E5	Office furniture for PCU and PPTs.	National Shopping (1 package). Advance action.
17.	V1	Supply and delivery of 4wd Pick-ups	OCB (1 package). Advance action.
18	V2	Supply and delivery of motorcycles	OCB (1 package). Advance action.

64. **Consulting Services**. The recruitment of consulting services will comply with ADB's Procurement Policy for Goods, Works, Non-consulting and Consulting Services 2017 (as amended from time to time). The consulting services for project implementation consultants include 99 person-months of international consultants and 410 person-months of national consultants. Furthermore, local project implementation support officers will be based in the PDRD/PPT offices in the target provinces (3 officers in each province), utilizing 1260 person-months[19].

65. In accordance with ADB's Midterm Review of Strategy 2020, ADB will continue to strengthen partnerships with civil society organizations and CSOs will be more involved in the design and implementation of projects, and in the monitoring of project activities and outputs.[20] An experienced international consulting firm in partnership with an NGO/ CSO (or consortium of firms and NGOs/ CSOs) with extensive experience in managing large scale sector development programs, technical advisory services and capacity development in rural water supply, sanitation and hygiene in Cambodia and/or other countries in Southeast Asia will be contracted following the quality- and cost-based selection method, with a quality–cost ratio of 90:10, using full technical proposal procedures.

66. The RWSSSP3 has been designed to empower and enable the MRD, PDRDs and local government agencies to lead and accelerate progress towards improved rural water supply and sanitation coverage with a focus on inclusive sector development and institutional sustainability. The consultant team will support the executing agency and implementation units in eight target provinces in implementation, results based management and monitoring of the sector project.

67. MRD has requested advance recruitment of the consulting services, allowing the mobilisation of the consultants soon after the loan effectiveness in October 2019. The request for expression of interests for the consulting services was advertised in the ADB's Consultant Management System (CMS) in 21 February 2019. The consulting services will continue for the duration of the five-year sector project until 2024.

[19] The budget for the local project implementation support officers was revised during the ADB Loan Fact Finding mission, based on the assumption that the project will be scaled up to two additional provinces of Oddar Meanchey and Preah Vihear.

[20] ADB, 2014, Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific

Figure 6 Procurement, Implementation Schedule, Consulting Services, Goods and Civil Works (initial 18 months)

Item	Description	Year	2018	2019				2020				2021	
		Quarter	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
I	**Loan Processing**												
a	PPTA final report March 2019			▼									
b	ADB fact finding Jan 2019			▼									
c	Loan Effectiveness Oct 2019						▼						
II	**Consultant Services**												
a	Project Implementation Consultants												
b	Project Audit												
III	**Procurement of Goods**												
a	Project vehicles (4WD)												
b	Project motorcycles (125cc)												
c	Office equipment												
d	WS test kits and resistivity												
e	Other equipment GPS, etc.												
IV	**Civil Engineering Works, Batch 1a**												
a	**CPP:** HH latrines and rainwater jars												
b	**OCB:** Well drilling, well rehab, public water tanks/latrines, and community ponds												
c	**NS:** Well drilling, well rehab, community ponds												

	and communal water supply facilities - small piped water supply (bore water and irrigation reservoir)	
d	**NS:** Public latrines and water tanks	
V	**Civil Engineering Works, Batch 1b (carried forward from RWSSP2)**	
a	**CPP:** HH latrines and rainwater jars	
b	**OCB:** Well drilling, well rehab, public water tanks/latrines, and community ponds	
c	**NS:** Well drilling, well rehab, community ponds and communal water supply facilities - small piped water supply (bore water and irrigation reservoir)	
d	**NS:** Public latrines and water tanks	
	Legend	
	Bid preparation	
	Bidding and procurement	
	Implementation, further bidding	
	Continuing project support	

DUE DILIGENCE

A. Technical

68. The approach to the design of the RWSSSP3 recognizes the following key principles:

69. **Alignment with the National Policy and National Strategic Plan for Rural Water Supply, Sanitation and Hygiene for 2014-2025**. The process for the design of the RWSSSP3 has placed high importance to ensure that the design for the sub-projects, and the whole sector project, fully aligns with the strategic objectives and principles of the National Strategic Plan for RWSSH. The NSP-RWSSH emphasizes certain key principles, including the focus on sustainability, demand-responsive approach to service delivery, cost-sharing principles for investments and maintenance of water supply schemes, sustained behaviour change at household level and decentralization of functions for RWSSH. Underlying the NSP-RWSSH is the recognition that public funding should be used to improve the enabling environment for creating demand for sanitation in the communities and for facilitating and strengthening the private market.

70. **Evidence Based Innovative Approaches**. Based on the in-depth understanding of the rural water supply and sanitation challenges in the selected target districts and communes it is ensured that the design for the sub-projects provides innovative solutions that are technically sound, cost effective, sustainable and practical to implement. Particular attention has been given to the design of the result based planning process, strengthening of the localized monitoring systems, pro-poor support strategies and innovative sanitation and hygiene behaviour change communication initiatives.

71. **Communication and Consultation**. The process for the design of the RWSSSP3 has placed high importance on communication and consultation. Successful development of an innovative sector project will demand a high degree of communication and consultation throughout the design process. Participatory consultation has occurred at the communes and villages, to ensure that the sub-project designs reflect local needs and priorities. Monthly progress reports have provided regular updates to ADB and EA on the progress made in the implementation of the design activities, achievements against the key milestones, and any challenges encountered. Regular meetings have been held to review progress and agree on work arrangements.

72. **Elements of Sustainability**. Sustainability is about permanent beneficial change in infrastructure, services and practices - whether the infrastructure and services continue to function, continue to deliver benefits and whether good sanitation and hygiene behaviours are practised over time. The design for the RWSSSP3 will ensure that in the drive to increase results, the sustainability of water supply and sanitation infrastructure and services and sanitation and hygiene behaviour is not compromised. The design of the RWSSSP3 has been developed based on FIETS Sustainability Framework[21]. The framework includes five elements of sustainability that need to be in place for the government agencies to be able to sustain the improved water supply and sanitation infrastructure, services and practices. See Figure 7 below.

[21] The FIEST Sustainability Framework has been developed by WASH Alliance International, which is a multi-national consortium of over 100 partners worldwide, aiming to achieve increased sustainable access to and use of safe water and sanitation services.

Figure 7 FIETS Sustainability Framework

	**Financial sustainability** means that continuity in the delivery of products and services related to water, sanitation and hygiene is assured, because the activities are locally financed (e.g. taxes, local fees, local financing) and do not depend on external (foreign) subsidies.
	**Institutional sustainability** in the rural water supply and sanitation sector means that the systems, institutions, policies and procedures at the local level are functional and meet the demand of users of RWSS services. Households and other RWSS service users, authorities and service providers at the local and the national level are clear on their own roles, tasks and responsibilities, are capable of fulfilling these roles effectively and are transparent to each other.
	The element of **environmental sustainability** implies placing RWSS interventions in the wider context of the natural environment and implementing an approach of integrated and sustainable management of water and waste (-water) flows and resources. RWSS interventions connect to and affect the natural environment and hence people's livelihood.
	**Technological sustainability** of RWSS services is reached when the technology or hardware needed for the services continues to function is maintained, repaired and replaced by local people and it is not depleting the (natural) resources on which it depends for its functioning.
	**Social sustainability** refers to ensuring that the appropriate social conditions and prerequisites are realised and sustained so the current and future society is able to create healthy and liveable communities. Social sustainable intervention is demand-driven, inclusive (equity), gender equal, culturally sensitive and needs-based.

73. To ensure that the RWSSSP3 designs meet the needs of the rural communities and the expectations of MRD and ADB, the design process has moved through various phases:

74. **Review of the relevant documents**: All the relevant documents, studies and plans were collated from various sources, reviewed and analysed in preparation for the participatory sub-project design process in the batch-1 target communes

75. **Introductory meetings with all target provinces**: occurred during November 2017 and involved key stakeholders through the presence of the PPTA team, MRD project manager and the project directors and managers of the eight target provinces. The PPTA consultant team was introduced and the criteria for the selection of the target communes and the participatory design process for the sub-projects were explained. The cooperation of the provincial administrations was requested and this has been forthcoming throughout the project design activities.

76. **Application of lessons learned**: In line with the terms of reference for the design of the RWSSSP3 the PPTA team reviewed progress, results and lessons learnt in the sub-project implementation in 15 RWSSP2 target communes around the Tonle Sap area. The main

objective was to identify lessons learnt, best practices and challenges encountered to inform the design of the RWSSSP3.[22]

77. **Review of success factors and challenges to reach universal RWSS coverage**: learning and exchange visit to Banteay Meas District, the first Open Defecation Free (ODF) District in Cambodia, was organized in February 2018 for the PDRDs and local authorities from the RWSSSP3 target districts and communes to provide the opportunity to share learnings and exchange experiences as a part of the process to design the RWSSSP3 sub-projects for the batch 1 target communes. The main objective of the learning and exchange visit was to jointly review the key learnings from Banteay Meas District and exchange experiences on success factors and challenges on how to accelerate the progress to reach universal access to rural water supply and sanitation in the selected target districts and communes of the RWSSSP3. The findings and discussions from the learning and exchange visit have been taken into account to inform the design of the sub-projects for the batch 1 target communes.

78. **Participatory sub-project design process in the batch-1 communes:** Two teams consisting of the PPTA consultants' national water supply and sanitation engineers, environmental, social safeguard and capacity development specialists, MRD officers, PDRD officers and district officers travelled to all the batch-1 target communes to facilitate the participatory sub-project design process together with the commune and village authorities and local communities. Community consultation meetings were organized in the commune council office to jointly assess the current water supply and sanitation situation in all the target villages and to explore the needs, priorities, potential options and solutions. The village investigations and assessments were conducted to identify the villagers' needs in terms of rural water supply and sanitation services towards the 100 percent service coverage and the gap between the existing rural water supply and sanitation services and the desired service levels.

79. **Development of draft feasibility study reports:** Based on the consultations and field assessments in the batch-1 target communes and villages the PPTA team developed draft sub-project designs and feasibility study reports that have been refined through on-going consultation with the commune councils, district administrations, PDRDs and MRD. The draft feasibility study reports were submitted to ADB and MRD as a part of the Component 2 report in June 2018.

80. **Participatory Technical Forum in Phnom Penh:** Participatory Technical Forum was organized in Phnom Penh in 27 June 2018 to present and facilitate discussions with ADB, MRD, MEF and the PDRD Directors on the design of the RWSSSP3, including the sub-projects for the batch-1 target communes. All the comments and suggestions have been taken into account to finalize the feasibility study reports.

81. **Presentation of the final sub-project design and the endorsement of the Commune Council:** Following the National Elections in September 2018, the PPTA team traveled back to all the batch-1 target communes to present the sub-project design to Commune Council and village authorities and ensure that all the final comments and feedback are taken into account in the final endorsed sub-project feasibility study reports.

[22] Refer to Component 2 Report: Expansion of Rural Water Supply and Sanitation Infrastructure and Services

B. Economic and Financial

82. **Financial Analysis** was carried out based on feasibility study reports for the batch-1 sub-projects in eight communes across eight target provinces, prepared by the project design consultants. The basis for cost estimates were the cost norms developed under the Second Rural Water Supply and Sanitation Project (RWSSP2), updated to 2018 prices. In consultation with the RWSSP2 team and MRD it appears there was a misunderstanding regarding costs increases and cost overruns, we are reassured that the price norms would only experience a small price escalation due to inflation and that the market has remained fairly stable. Increased costs of RWSSP2 were caused by variations in physical implementation rather than price variations. These physical variations came about due to a drawdown of the water table resulting in a more robust engineering solution which obviously costs more, or simply the households choosing a higher costing technical solution to their needs – not outside of the scope of the project just simply a preference by the households. The project design includes a price escalation calculation for the term of the project, but it may also explore higher physical contingencies where there are alternatives for the households to choose. Contingencies are estimated at; civil works 10%, project management 5% and consulting services at 2%.

83. A formula has been designed to extrapolate the cost estimates for batch 1 sub-projects to estimate the costs of batches 2-5. The total cost of batch 1 is divided by the number of households serviced, then for each of the labor, traded and non-traded elements the resultant ratio is deduced from batch 1 households, this is then applied to the number of households in each of the batches 2 to 5

84. Batch 1b sub-projects are carried over from RWSSP2 and the design of these sub-projects and the development of the feasibility study reports (including the costings) are prepared by the RWSSP2 team. The project design team has taken the costs provided by RWSSP2 team with a review to ensure costs are within the normal range.

85. **Economic Analysis** was undertaken in accordance with ADB Guidelines for Economic Analysis of Projects (2017); ADB Guidelines of the Economic Analysis of Water Supply Projects (1998); ADB Economic Analysis of Policy-Based Operations: Key Dimensions (2004); and ADB Guidelines on the Financial Management and Analysis of Projects (2005).

86. The economic benefits for the rural water supply and sanitation project was quantified in terms of health benefits. The health benefits were measured using the disability-adjusted-life-year (DALY) approach. The DALY approach measures overall disease burden and expresses it as the number of years lost due to ill health, disability, or early death. The World Health Organization (WHO) estimated the total DALYs in Cambodia at 24,774 per 100,000 population [23]. The WHO also estimated that 6.5% of the total DALYs in Cambodia were related to water, sanitation, and hygiene issues, whilst 6.0% were due to environmental factors. For this analysis the environmental factors are taken at full value on the assumption that detrimental human environment is caused substantially by water, sanitation and hygiene issues. Following the WHO approach, the analysis calculated the annual economic value of a DALY as equivalent to the country's per capita gross national income (GNI) in a given year. Cambodia's estimated per capita GNI in 2017 was US$3,409, based on purchasing power parity[24]. Real GNI growth was assumed at 5% per annum. Savings in DALYs attributable to RWSSSP3 was assumed at 16% of the calculated economic value of DALYs[25].

[23] Source: WHO, Geneva - 2018 Monitoring Health for the SDGs - Target 3.9.2
[24] World Bank World Development Indicators 2017
[25] 32% being the absolute benefit accruing to the ID Poor in the project, divided by 2 to ensure there is no double counting of benefits where households get both water supply and sanitation improvements.

87. The proposed project is economically viable in the base case scenario and the project's economic performances are most sensitive to decrease in benefits and increases in capital cost, the performances meet the required threshold levels of ADB's 6% for economic internal rate of return for social development projects.

88. The project is viable giving an EIRR of 11.4% for the base case.

89. Sensitivity Analysis

EIRRs:	% Change	NPV	EIRR	SI (IRR)	SV (IRR)	SI (NPV)	SV (NPV)
Base Case		8,414,911	11.95%				
Case 1 - Increase in Capital Costs	10.00%	3,756,525	10.53%	125.32%	79.80%	553.59%	18.06%
Case 2 - Increase in O&M Costs	10.00%	3,709,146	10.63%	116.30%	85.99%	559.22%	17.88%
Case 3 - Decrease in Benefits	10.00%	(1,790,730)	9.06%	254.73%	39.26%	1212.80%	8.25%
Case 4 - Benefits Delayed by One Year		(849,240)	9.37%	22.73%	110.09%	110.09%	90.83%

SI = sensitivity indicator (ratio of percentage change in IRR above the cut-off rate to percentage change in selected variable).
SV = switching value (percentage change in selected variable to reduce the IRR to cut-off rate).

90. The EIRR is robust to all sensitivity analysis and is only slightly vulnerable to a decrease in benefits.

C. Governance

91. **Anticorruption Policy**. ADB's Anticorruption Policy (1998, as amended from time to time) was explained to and discussed with the Government and MRD. Consistent with its commitment to good governance, accountability, and transparency, ADB reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive, or coercive practices relating to the Project. To support these efforts, relevant provisions of ADB's policy are included in the loan regulations and the bidding documents for the project. In particular, all contracts financed by ADB in connection with the project will include provisions specifying the right of ADB to audit and examine the records and accounts of the Executing Agency and all contractors, suppliers, consultants, and other service providers as they relate to the project. The specific anticorruption policy requirements and supplementary measures will be described in the PAM.

92. To encourage greater stakeholder participation, transparency, and accountability, the project will (i) strengthen the capacity within MRD to comply with the project administration manual; (ii) establish a website for the RWSSSP3 to disclose information about project-related issues, including procurement (e.g., contracts, bidding procedures, contract awards, and list of goods and services procured), and grievance redressal procedures; (iii) establish or use the existing system on information disclosure at commune council offices (e.g., notice board that displays information on contracts, list of participating bidders, name of the winning bidder, basic details on bidding procedures, contract awards, and list of goods and services procured); (iv) notify communities of the date and location of selected events in the procurement process (e.g., public bid openings, progress reviews, and handover ceremonies); and (v) establish a grievance redress mechanism at the PCU and PDRD levels in each project target province to receive complaints from communities or contractors. The PCU or PPT will provide a formal reply within 20 working days, and report all grievances in their progress reports to the Government and ADB.

93. The financial management risk is substantial. The financial management capacity of staff at the provincial level requires strengthening. The external audit oversight functions also need improvement. To mitigate the capacity risks, project implementation consultants will conduct training on ADB procurement and disbursement guidelines, project accounting, and reporting. Financial Management Assessment Report is presented in the Appendix 5.

D. Poverty, Social and Gender

94. The proposed project will improve the health and quality of life for 640,000 people through improved access to safe water supply, elimination of open defecation and equitable and sustained access to improved sanitation and hygiene practices. In alignment with the SDGs, the RWSSSP3 is designed to reduce inequalities and vulnerability and the consideration of gender and social inclusion is mainstreamed throughout the project design. Addressing disparities, inclusion and advancing gender equality are critical steps in ensuring the success of the project. The project design process has ensured that the needs of women and men from a range of social groups (including those typically marginalised) are taken into account, that effective participation is promoted at all levels and that gender equality is advanced.

95. Poverty, Social Impact and Gender Analysis (PSA) has been conducted to (i) assess poverty, social and gender issues for the proposed project as a whole and for the batch 1 sub-projects; (ii) generate evidence to inform social development design measures and targets; (iii) assess the potential poverty and social impacts – positive or negative; and (iv) identify possible actions or specific project activities, to maximize the positive impacts of RWSSSP3 and to minimize or mitigate any negative impacts. Essentially, the PSA is aimed to assess the ways in which the RWSSSP3 could best promote inclusive growth and avoid or mitigate social risks and vulnerabilities, consistent with its technical and economic viability. The PSA report is presented in the Appendix 6.

96. The Project is classified as effective gender mainstreaming (EGM) /gender equity theme (GEN). The main benefit will be a reduction in time poverty and improvements in family health and quality of life. Through improved access to safe water supply, sanitation and hygiene, households will realize reductions in the time and money needed to collect and buy water, reduced incidence of water borne illnesses and the time needed for caring for sick family members, and reduced expenditure on medicines. The water supply and sanitation improvements provide the women and girls in the project target areas convenience, safety, dignity and more time for participation in other private, public and leisure activities.

97. The purpose of the Gender Action Plan (GAP), presented in the Appendix 7, is to ensure that women and vulnerable groups will benefit from the proposed rural water supply and sanitation improvements through equal participation and consultation in project design, implementation, monitoring and management, and will provide measures to mitigate any possible negative impacts and reduce risks associated with the sub-projects.

98. The process for the design of the RWSSSP3 has placed high importance to ensure that the design for the sub-projects conforms with the strategic objectives and the principles of the National Strategic Plan (NSP) for Rural Water Supply, Sanitation and Hygiene (RWSSH) for 2014-2025. The design of the Gender Action Plan, as well, is respectful of the mandates of the NSP RWSSH particularly its aspirations to mainstream gender in the RWSSH sector.

E. Safeguards

99. **Environmental Safeguards**. The individual batch 1 sub-projects are classified as Category C, however, as the batch 2-5 sub-projects are yet to be designed and there is potential for more significant impacts, depending on components included, the overall project classification remains as Category B. An initial environmental examination (IEE), including an environmental management plan (EMP), has been prepared (Refer to the Appendix 10). Public consultations were conducted and involved affected people from nearby houses and other project stakeholders.

100. The overall finding of the IEE for batch 1 is that the water supply and sanitation sub-projects will result in significant environmental benefits, by addressing access to safe water supply and sanitary living conditions for households in the project target communes. The anticipated adverse environmental impacts are minor and manageable through the effective implementation of the EMP. Project impacts during construction are expected to be site-specific and temporary. If unmitigated, the construction activities may cause noise and dust nuisance, release of silt into waterways and safety hazards. Excavation operations for ponds, drilling and installing pipe networks may cause erosion risk. During operation phase, potential impacts are related to quality of water in community ponds, quality of water of deep ground water sources and contamination risks of dug wells. Regarding rain water jars, regular cleaning is required to minimize the contamination risk. With small piped water supply systems there is a risk for breach and contamination. Due to the topography in some of the communes on horizontal and flat flood plains, the risk of seasonal flooding exists. In those areas the latrines need elevated designs to prevent water contamination from the latrines during floods. Depths of the rehabilitated community ponds and heights of their embankments need to take into account the potential flood levels.

101. The environmental assessment of the sub-projects for batch 2-5 will be carried out by PDRD staff with capacity development and support from the consultants when necessary. An Environment Assessment and Review Framework (EARF) has been prepared by the PPTA to guide the process. The PPTs will be responsible for the implementation of the EMP. Monitoring of environmental quality and the implementation of mitigation measures will be performed by the PPTs in line with EMP.

102. The sub-projects will include village level water and sanitation safety plans, through which the water points and water catchment areas will be protected to mitigate the likelihood of potential contamination. The community education and mobilization activities will include community participatory process for identification of the potential risks for water contamination and adverse environmental impacts at the water points as well as the development of mitigation measures in the water and sanitation safety plans.

103. The PPTA team has prepared a Climate Risk and Vulnerability Assessment (CRVA) including adaptive measures to mitigate the potential climate change related risks.

104. **Involuntary resettlement.** The project is classified as Category C for involuntary resettlement. The involuntary resettlement screening checklists have been completed for all the batch 1 sub-projects and are attached to the feasibility study reports. The batch-1 sub-projects identified and prepared as part of advance action, screened and assessed during the due diligence confirmed category C on involuntary resettlement impact, as the sub-projects will either be sited on the public/community land, or a privately-owned land plots, where the infrastructure will be used based on the shared use agreement between the beneficiary households. Other types of small-scale infrastructure may require voluntary donation of very minor portion of land that will be selected on a participatory basis by the communities.

105. The project is designed to avoid involuntary resettlement and to minimize land acquisition and resettlement impacts by exploring project design alternatives. Any sub-projects prepared after project approval and/or any replacement of the initially proposed sites shall also be categorized as C for Involuntary Resettlement impact. A Community Participation Framework has been prepared for the Project, based on the experience of the Rural Roads Improvement Project III implemented by MRD to guide the site selection and voluntary donation process for the sub-projects that will be prepared after the project approval (batches 2 to 5). Sub-projects with involuntary resettlement impacts will not be eligible for financing. Due diligence will be exercised to ensure that poor households are not required to donate land. The Social Safeguards Due Diligence Report is presented in the Appendix 9.

106. **Indigenous peoples**. There are no indigenous people, as defined by the Government of Cambodia, within the batch-1 target communes, however there are small numbers of ethnic minority households who are well assimilated into local communities, fluent in Khmer language and are pursuing the same livelihood activities as the mainstream Khmer. They have essentially fully integrated into Khmer communities, but still retain their ethnic character. The Cham, in particular, have resided in Cambodian territory for centuries, use Khmer language within their own communities and are accepted in the wider Khmer society. Indigenous peoples screening checklists have been completed for all the batch 1 sub-projects and are attached to the feasibility study reports.

107. The Project is classified as category B for Indigenous Peoples (IP) impact as it will positively affect the ethnic minorities and indigenous peoples due to improved access to sustainable and safe water supply and sanitation. An Indigenous Peoples Planning Framework (IPPF) has been prepared to guide the design process (for the sub-projects under batches 2 to 5) and to involve ethnic minorities and indigenous people in the consultation and decision-making process on the sub-project design, implementation and monitoring.