

# Project Administration Manual

Project Number: 35173-015  
Loan Number: 3711-NEP  
February 2019

Nepal: Urban Water Supply and Sanitation (Sector)  
Project

## ABBREVIATIONS

ADB	=	Asian Development Bank
DDR	=	due diligence report
DMF	=	design and monitoring framework
DSMC	=	design, supervision, and management consultant
DWSSM	=	Department of Water Supply and Sewerage Management
EARF	=	environmental assessment and review framework
EMP	=	environmental management plan
FMA	=	financial management assessment
GESI	=	gender equality and social inclusion
GRC	=	grievance redress committee
GRM	=	grievance redress mechanism
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IPP	=	indigenous people plan
IPPF	=	indigenous people planning framework
ISSAU	=	institutional support and service advisory unit
M&E	=	monitoring and evaluation
MOWS	=	Ministry of Water Supply
NCB	=	national competitive bidding
OBA	=	output-based aid
OCB	=	open competitive bidding
O&M	=	operation and maintenance
PAM	=	project administration manual
PFS	=	project financial statements
PMO	=	project management office
PMQAC	=	project management and quality assurance consultant
RPMO	=	regional project management office
SEMP	=	site-specific environmental management plan
SOE	=	statement of expenditure
SPS	=	Safeguard Policy Statement
TDF	=	Town Development Fund
TOR	=	terms of reference
WASH	=	water, sanitation and hygiene
WSS	=	water supply and sanitation
WUA	=	water users' association
WUSC	=	water users' and sanitation committee

## NOTES

- (i) The fiscal year (FY) of the Government of Nepal ends on 30 June. "FY" before a calendar year denotes the year in which the fiscal year ends, e.g., FY2018 ends on 30 June 2018.
- (ii) "\$" refers to United States dollars.

# Contents

I.	PROJECT DESCRIPTION	1
A.	Impact and Outcome	3
B.	Outputs	3
II.	IMPLEMENTATION PLANS	5
A.	Project Readiness Activities	5
B.	Overall Project Implementation Plan	6
III.	PROJECT MANAGEMENT ARRANGEMENTS	8
A.	Project Implementation Organizations: Roles and Responsibilities	8
B.	Key Persons Involved in Implementation	12
C.	Project Organization Structure	12
IV.	COSTS AND FINANCING	15
A.	Cost Estimates Preparation and Revisions	16
B.	Key Assumptions	16
C.	Detailed Cost Estimates by Expenditure Category	17
D.	Allocation and Withdrawal of Loan Proceeds	18
E.	Detailed Cost Estimates by Financier	19
F.	Detailed Cost Estimates by Outputs	20
G.	Detailed Cost Estimates by Year	21
H.	Contract and Disbursement S-Curve	22
I.	Fund Flow Diagram	23
V.	FINANCIAL MANAGEMENT	25
A.	Financial Management Assessment	25
B.	Disbursement	30
C.	Accounting	32
D.	Auditing and Public Disclosure	32
VI.	PROCUREMENT AND CONSULTING SERVICES	34
A.	Advance Contracting and Retroactive Financing	34
B.	Procurement of Goods, Works, and Consulting Services	34
C.	Procurement Plan	35
D.	Consultant's Terms of Reference	35
VII.	SAFEGUARDS	36
VIII.	GENDER AND SOCIAL DIMENSIONS	44
IX.	PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION	47
A.	Project Design and Monitoring Framework	47
B.	Monitoring	49
C.	Evaluation	50
D.	Reporting	51
E.	Stakeholder Communication Strategy	51
X.	ANTICORRUPTION POLICY	53
XI.	ACCOUNTABILITY MECHANISM	54
XII.	RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL	55

## **APPENDIXES**

Appendix 1: Subproject Selection Criteria .....	57
Appendix 2: Project Climate Risk and Financing Calculation.....	64
Appendix 3: Procurement Plan.....	66
Appendix 4: Outline Terms of Reference For Consultants.....	73
Appendix 5: Grievance Redress Mechanism.....	86
Appendix 6: Framework For Inclusion of Poor and Vulnerable Households .....	90
Appendix 7: Sample Outline Semi-Annual Environmental Monitoring Reports .....	94
Appendix 8: Sample Outline Semi-Annual Social Monitoring Reports .....	101
Appendix 9: Outline Quarterly Progress Report.....	104
Appendix 10: List of Preselected Project Municipalities.....	106

### **Project Administration Manual Purpose and Process**

The project administration manual (PAM) describes the essential administrative and management requirements to implement the project on time, within budget, and in accordance with the policies and procedures of the government and Asian Development Bank (ADB). The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Ministry of Water Supply (MOWS) are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by MOWS of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At loan negotiations, the borrower and ADB shall agree to the PAM and ensure consistency with the Loan and Project agreement. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and Loan and Project agreement, the provisions of the Loan agreement shall prevail.

After ADB Board approval of the project's report and recommendations of the President (RRP), changes in implementation arrangements are subject to agreement and approval pursuant to relevant government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval, they will be subsequently incorporated in the PAM.



## I. PROJECT DESCRIPTION

1. The project will support Nepal in expanding access to community-managed water supply and sanitation (WSS) in 20 project municipalities by drawing on experiences and lessons from three earlier projects funded by the Asian Development Bank (ADB).<sup>1</sup> The project will finance climate-resilient and inclusive WSS infrastructure in project municipalities and strengthen institutional and community capacity, sustainable service delivery, and project development.<sup>2</sup>

2. **Urbanization.** Since the establishment of 276 urban municipalities in 2015, 58% of Nepal's population of 29 million is urban.<sup>3</sup> Rapid urbanization—resulting from migration, reclassification, and natural increase—has widened the urban infrastructure deficit. Unmanaged urban growth and lack of improved WSS have led to environmental degradation, public health risks, increased vulnerability to the impacts of climate change and natural hazards, a rise in urban poverty,<sup>4</sup> and hampered economic growth. Since 2000, Nepal has made strong efforts to improve access to WSS. It increased water supply coverage from 73% to 84% and basic sanitation<sup>5</sup> from 30% to 81% between 2000 and 2015.<sup>6</sup> Yet, in 2016 only 34% of water supply was reported to be safe<sup>7</sup> and only 15% met the national water quality standards. More efforts are also needed to achieve improved sanitation: only 34% of urban households have septic tanks and only 15% have sewer connections. Fecal sludge management and sanitation for marginalized groups, especially for women and poor households, remain a challenge.<sup>8</sup> Overall, municipalities find it difficult to provide adequate, cost-effective services because they lack funds, skilled personnel, and sufficient operation and maintenance (O&M) budgets.

3. **Sector policy and institutional arrangements.** The government targets<sup>9</sup> for WSS services focus on inclusive development to improve functionality, enhance service levels, and expand municipal sanitation.<sup>10</sup> The government has defined institutional responsibilities and service delivery mechanisms in the sector. The Ministry of Water Supply (MOWS) is responsible for planning, implementation, regulation, and monitoring of WSS; its Department of Water Supply and Sewerage Management (DWSSM) supports the provision of WSS facilities in municipalities

---

<sup>1</sup> ADB. [Nepal: Small Towns Water Supply and Sanitation Sector Project](#); [Nepal: Second Small Towns Water Supply and Sanitation Sector Project](#); and [Nepal: Third Small Towns Water Supply and Sanitation Sector Project](#).

<sup>2</sup> Project preparation was supported under the ongoing *Third Small Towns Water Supply and Sanitation Sector Project*.

<sup>3</sup> Out of 3,900 municipalities (including 58 urban municipalities), the Constitution of Nepal (2015) created, 7 provinces and 77 districts with 6 metropolitan and 11 sub-metropolitan cities, and 276 urban and 460 rural municipalities.

<sup>4</sup> The incidence of urban poverty increased from 9.2% in 2004 to 23.8% in 2015. Government of Nepal, National Planning Commission. 2015. *Approach Paper for the Fourteenth Plan*. Kathmandu.

<sup>5</sup> The Government of Nepal defines the level of sanitation as “limited”, “basic”, or “improved”. Basic sanitation is the lowest-cost solution to ensure hygienic excreta and sludge disposal and a clean environment at home and in the neighborhood.

<sup>6</sup> Government of Nepal. 2016. *Nepal and the Millennium Development Goals: Final Status Report 2000-2015*. Kathmandu.

<sup>7</sup> Drinking water from an improved water source located on premises, available when needed and free from fecal and priority chemical contamination ([WHO/UNICEF Joint Monitoring Program for Water Supply, Sanitation and Hygiene](#)).

<sup>8</sup> World Health Organization and United Nations Children's Fund. 2017. *Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG Baselines*. Geneva.

<sup>9</sup> The sector objectives are laid out by the government's National Urban Water Supply and Sanitation Sector Policy, 2009; the Fourteenth Three-Years Plan, 2016; the updated 15-year Development Plan for Water Supply and Sanitation in Small Towns, 2015; and the National Urban Development Strategy, 2017.

<sup>10</sup> Government of Nepal. 2017. *National Water Plan: Target Revision*. Kathmandu.

where large utilities do not exist, and these are operated by water users and sanitation committees (WUSCs)<sup>11</sup> or municipalities.<sup>12</sup>

4. Recently, the Local Governance Operation Act, 2017, entrusted municipalities with responsibility for WSS services. While municipalities' capacity for this responsibility is being built, the government and residents have been receptive to a decentralized, participatory, and cost-sharing service provision model through water users associations (WUAs) and WUSCs. Development support for municipal WSS has been channeled through a combination of (i) government grants through DWSSM, (ii) loans by the Town Development Fund (TDF),<sup>13</sup> and (iii) contributions from municipalities and beneficiaries.<sup>14</sup>

5. **Past support for water supply and sanitation.** ADB has successfully<sup>15</sup> supported the government in improving WSS services in 70 small towns<sup>16</sup> through three projects (footnote 1), introducing continuous water supply and providing universal household connections including subsidized connections and affordable supply for poor and vulnerable households.<sup>17</sup> The "small towns model" developed with ADB support involves (i) a demand driven cost-sharing approach that strengthens ownership and inclusion of women and marginalized groups; (ii) use of explicit, performance-based subsidies to deliver services to poor and vulnerable groups; (iii) use of a participatory financing mechanism with partial investment cost recovery; (iv) introduction of tariffs that allow to recover operation and maintenance (O&M) and debt service costs; and (v) WUSCs as service operators.<sup>18</sup> The model is considered successful by the government and development partners. ADB also significantly supported urban WSS in water-stressed Kathmandu Valley, which includes tapping additional water from Melamchi river through a 26-kilometer (km) diversion tunnel.<sup>19</sup>

6. **Value addition.** The project will build on previous ADB interventions in the sector. It will apply the 'small towns' model and strengthen particularly (i) technical robustness, (ii) institutional capacity focusing on project municipalities and WUSCs, (iii) long-term operational sustainability,

---

<sup>11</sup> The WUSCs, formed under the Nepal Water Resource Act (1992), are the elected executive bodies of WUAs.

<sup>12</sup> The DWSSM assists in preparing investment plans and project designs, and in establishing sustainable service delivery.

<sup>13</sup> The TDF is a government-owned entity established under the Town Development Fund Act, 1997. Loans from the government to WUAs or municipalities are generally on-lent by the TDF under a subproject financing agreement. The TDF also supports WUAs in institutional and financial management including introduction of tariffs.

<sup>14</sup> WUAs contribute 30% of civil works costs for water supply subprojects (25% from the TDF loan and 5% from users' upfront cash contribution) and 15% of civil works for sanitation subprojects (subsidy from municipalities).

<sup>15</sup> Independent Evaluation Department. 2018. *Draft Impact of Cost-Shared Water Supply Services on Household Welfare in Small Towns*. Manila: ADB.

<sup>16</sup> Small towns have (i) a population of 5,000–40,000; (ii) an average population density of at least 10 persons per hectare; (iii) jurisdiction of one administrative boundary; and (iv) high growth potential, including proximity to a strategic road network with perennial road access, grid power, and telecommunication infrastructure.

<sup>17</sup> The first project supported 29 small towns (593,000 people) to gain access to improved water supply services and was rated successful (Independent Evaluation Department. 2012. *Validation Report. Nepal: Small Towns Water Supply and Sanitation Sector Project*. Manila: ADB). The second project covered 21 small towns (355,396 people) successfully. The third project is being implemented in 20 towns (390,000 people targeted) and is rated on track; completion is expected within the original loan closing date of 2021.

<sup>18</sup> ADB. 2017. *Tapping the Unreached. Nepal Small Towns Water Supply and Sanitation Sector Projects: A Sustainable Model of Service Delivery*. Manila.

<sup>19</sup> ADB. [Nepal: Melamchi Water Supply Project](#); ADB. [Nepal: Kathmandu Valley Water Services Sector Development Program](#); ADB. [Nepal: Kathmandu Valley Water Supply Improvement Project](#); ADB. [Nepal: Kathmandu Valley Wastewater Management Project](#); and ADB. [Additional Financing: Kathmandu Valley Water Supply Improvement Project in Nepal](#).



and (iv) climate-resilient approaches<sup>20</sup> and smart technology application.<sup>21</sup> To overcome startup delays, the project will assist project development by supporting the detailed designs of WSS subprojects for (i) urban areas in Kathmandu Valley not previously covered, and (ii) for newly established provincial capitals and district headquarters. The project is aligned with the government's sector policies, ADB's Urban and Water Operational Plans, ADB's Water for All Policy, and the Sustainable Development Goals 5 (gender equality), 6 (clean water and sanitation), and 13 (climate change).

## A. Impact and Outcome

7. The project is aligned with the following impact: quality of life for urban population, including the poor and marginalized, improved through the provision of sustainable WSS services.<sup>22</sup> The project will have the following outcome: inclusive and sustainable access to WSS services in project municipalities achieved (the design a monitoring framework is in Section IX).

## B. Outputs

8. **Output 1: WSS infrastructure in project municipalities<sup>23</sup> improved.** The project will support the following: (i) 1,600 km of water supply pipes installed or rehabilitated; (ii) 15 water treatment plants, with an estimated capacity of at least 0.6 million liters per day each, constructed; (iii) 66,000 connections for households to piped water supply, with subsidized connections for 8,000 poor and 2,000 vulnerable households (including 100% poor households headed by women); (iv) 8,000 toilets constructed through output-based aid for poor and vulnerable households; (v) 20 public toilets that are suitable for both genders as well as the disabled constructed, with septic tanks; (vi) two decentralized wastewater treatment plants constructed and operational; (vii) 30 km of stormwater drainage constructed; and (viii) climate and disaster risks factored in design of subprojects, as necessary.

9. **Output 2: Institutional and community capacities strengthened.** The project will accomplish the following: (i) water, sanitation and hygiene plans including priority investments in 20 project municipalities prepared and approved by the municipalities; (ii) 20 WUAs registered and 20 WUSCs formed with at least 33% women members and at least one woman in a key post; (iii) business plans and tariff guidelines<sup>24</sup> prepared for project WUA and municipalities with support from the TDF and the Institutional Support and Service Advisory unit (ISSAU) of DWSSM; (iv) at least 15 climate-resilient WSS subprojects for future investments prepared; (v) at least 200 staff (at least 66 of them women) of the DWSSM, TDF, project WUAs, and project municipalities report stronger technical knowledge of smart utility management and leadership; and (vi) at least 100,000 people (at least 50% of them women) covered by awareness campaign on water conservation practices and sustainable hygiene behavior and 80% report greater awareness.

10. The project meets the requirements of the proposed sector lending modality because (i) it has a large number of subprojects; (ii) the government has a sector development plan to meet the priority development needs of the sector, and the institutional capacity to implement the plan;

<sup>20</sup> Systematic climate-resilient approaches are key to (i) securing equitable water distribution; (ii) utilizing scarce water sources more judiciously; and (iii) ensuring that key assets are resilient to climate risks, e.g., flooding, heat waves, droughts, cyclones, and natural hazards such as landslides and earthquakes.

<sup>21</sup> For efficient operation, the project will introduce appropriate technology such as (i) supervisory control and data acquisition systems; (ii) smart metering; and (iii) smart billing, tariff collection, and management systems.

<sup>22</sup> Government of Nepal. 2009. *Urban Water Supply and Sanitation Policy*. Kathmandu

<sup>23</sup> Interventions will be in preselected urban municipalities (referred to as small towns prior to Nepal's federalization).

<sup>24</sup> Tariff revenue will cover the full O&M costs and allow partial recovery of capital costs.

and (iii) the policies applicable to the sector are appropriate and will be improved, if warranted. The project will support the government in implementing key sector reforms.

11. Subprojects will be demand driven by WUAs and municipalities, and selected based on transparent criteria including population growth, poverty index, existing WSS infrastructure, community willingness for cost sharing, and long-term O&M contract.<sup>25</sup> Selection of future WSS investments to be designed under the project will follow same criteria, with preference to investments located in Kathmandu Valley, provincial headquarters, and strategic border municipalities. Selection criteria are in Appendix 1.

---

<sup>25</sup> Procurement can only commence after DWSS and municipality sign management agreement with WUSC for 20 years O&M service. The municipality will own the system, WUSC will be the operator.

## II. IMPLEMENTATION PLANS

### A. Project Readiness Activities

Table 1: Project Readiness Activities

Indicative Activities	Months						Responsible Individual/Unit/Agency/ Government
	06	07	08	09	10	11	
Advance contracting actions	■						DWSSM, and PMO
Government budget inclusion for the 1st year of project implementation		■					MOF, MOWS, and DWSSM
Issue bid documents for civil work packages in at least 8 municipalities	■						PMO, DWSSM
Sign management agreements for the 8 subprojects	■						PMO, DWSSM
Publish expression of interest for 3 DSMCs and PMQAC	■						PMO, DWSSM
Retroactive financing actions			■	■	■	■	PMO, DWSSM
ADB Board approval				■			ADB
Loan signing					■		ADB and MOF
Government legal opinion provided					■		MLJPA
Loan effectiveness						■	MOF and ADB

ADB = Asian Development Bank, DSMC = design, supervision, and management consultant, DWSSM = Department of Water Supply and Sewerage Management, MLJPA = Ministry of Law, Justice, and Parliamentary Affairs, MOF = Ministry of Finance, MOWS = Ministry of Water Supply, PMO = project management office, PMQAC = project management and quality assurance consultant.

Source: Asian Development Bank.

## B. Overall Project Implementation Plan

12. The project will be implemented over 6 years. The overall project implementation schedule is in Table 2.

**Table 2: Overall Project Implementation Plan**

Activities	2018 (Qtr)				2019 (Qtr)				2020 (Qtr)				2021 (Qtr)				2022 (Qtr)				2023 (Qtr)				2024 (Qtr)								
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II							
<b>A. DMF</b>																																	
<b>Output 1. Water supply and sanitation infrastructure in project municipalities improved</b>																																	
Finalize detailed engineering designs and issue bid documents for eight subprojects	■																																
Conduct technical and socio-economic surveys for all subprojects	■																																
Finalize detailed engineering designs and issue bid documents for all other subprojects	■																																
Award all civil work contracts	■																																
Complete construction					■																												
<b>Output 2. Institutional and community capacities strengthened</b>																																	
Review and update WUAs' by-laws			■																														
Approve WASH plans in all project municipalities			■																														
Develop and adopt business plans and tariff guidelines for all WUAs			■																														

Activities	2018 (Qtr)				2019 (Qtr)				2020 (Qtr)				2021 (Qtr)				2022 (Qtr)				2023 (Qtr)				2024 (Qtr)	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II
Identify future investment subprojects and finalize detailed engineering designs																										
Complete all training activities for project-related staff (including women staff) in the DWSSM, TDF, project WUSCs, and project municipalities																										
<b>Management Activities</b>																										
Recruit PMQAC and regional DSMCs																										
Establish project performance monitoring system																										
Implement GESI action plan																										
Prepare project completion report																										

DMF = design and monitoring framework, PMQAC = project management and quality assurance consultant, qtr = quarter, DSMC = design, supervision and management consultant, GESI-AP = gender equality and social inclusion, WASH = water, sanitation and hygiene, WUA = water users' association.

Source: Asian Development Bank.

### III. PROJECT MANAGEMENT ARRANGEMENTS

#### A. Project Implementation Organizations: Roles and Responsibilities

**Table 3: Project Implementation Roles and Responsibilities**

<b>Project Implementation Organizations</b>	<b>Management Roles and Responsibilities</b>
Executing agency: MOWS	<ul style="list-style-type: none"> <li>• Ensures overall oversight of the project;</li> <li>• approves annual programs; and facilitates inter-ministerial coordination.</li> </ul>
<p>PCC:</p> <p>Chair: Secretary, MOWS</p> <p>Members:</p> <p>Joint Secretaries of MOWS, Ministry of Forest and Environment, National Planning Commission, Ministry of Federal Affairs and General Administration</p> <p>Representatives from MOF; and Ministry of Law, Justice, and Parliamentary Affairs</p> <p>Director Generals of Department of Road; Department of Urban Development and Building Construction; and DWSSM</p> <p>Executive Director, TDF</p> <p>President of Federation of Water and Sanitation Users, Nepal</p> <p>Member Secretary: Project Director</p>	<ul style="list-style-type: none"> <li>• Reviews overall progress and discuss key issues to be addressed at the central level;</li> <li>• recommends key policy decisions for DWSSM and PMO for smooth project implementation;</li> <li>• provides guidance and policy level support to the project;</li> <li>• monitors and reviews project performance at an inter-ministerial level and discusses key policy related issues;</li> <li>• ensures collaborations among central level agencies; and</li> <li>• the Project Director will be the member secretary and the convener of the PCC which will meet at least twice a year.</li> </ul>
Implementing agency: Department of Water Supply and Sewerage Management	<ul style="list-style-type: none"> <li>• Establishes/ strengthens existing PMO, Institutional Support and Service Advisory Unit, and RPMOs;</li> <li>• deposes adequate staff in PMO, Institutional Support and Service Advisory Unit, and RPMOs;</li> <li>• signs management agreement with WUSCs and municipalities.</li> <li>• allocates adequate budget to PMO;</li> <li>• provides WUAs and WUSCs with full technical, financial, and institutional support;</li> <li>• selects subprojects based upon the agreed subproject selection criteria for the project; and</li> <li>• develops capacity of stakeholders and staff.</li> </ul>

<b>Project Implementation Organizations</b>	<b>Management Roles and Responsibilities</b>
<p>Project management office</p> <ul style="list-style-type: none"> <li>• Project Director (1)</li> <li>• Deputy Project Directors (3)</li> <li>• Under Secretary-Account (1)</li> <li>• Engineers-Permanent (5)</li> <li>• Engineer-Permanent as environmental safeguards officer (1)</li> <li>• Engineers-Contractual (6)</li> <li>• Social Development Officer concurrently indigenous peoples safeguard officer (1)</li> <li>• Social Development Officer concurrently involuntary resettlement safeguard officer (1)</li> <li>• Social Development Officer as gender equity and social inclusion officer (1)</li> <li>• Section Officer (1)</li> <li>• Administrative Assistant (1)</li> <li>• Accountant (1)</li> <li>• Social Mobilizers-Non Gazetted First (2)</li> <li>• Computer Operators-Contractual (6)</li> <li>• Social Mobilizers-Non Gazetted Second (9)</li> </ul>	<p><i>General Project Administration and Management</i></p> <ul style="list-style-type: none"> <li>• Responsible for overall project management, implementation and monitoring;</li> <li>• coordinates with ADB, stakeholders, and other agencies at central level for smooth project implementation;</li> <li>• monitors and ensures the compliance of covenants, including submission of consolidated audited project financial statements;</li> <li>• submits all audited project financial statements and financial statements pertaining to the project no later than 6 months after the close of each FY;</li> <li>• recruits regional design, supervision and management support consultant, consultants for PMO, and procures equipment and vehicles for the project;</li> <li>• budgeting and financial planning and management;</li> <li>• communicates with ADB, maintains project documents, and submits timely reports to ADB by consolidating inputs from RPMOs, WUAs and TDF; consolidates reports from RPMOs, WUAs, and TDF and submit quarterly project progress reports to ADB in agreed format;</li> <li>• establishes project advance account;</li> <li>• manages project account for government funds and advance account for ADB loan;</li> <li>• ensures auditing of loan proceeds and maintenance of all accounts;</li> <li>• consolidates accounts and submits withdrawal applications to ADB for reimbursement;</li> <li>• coordinates with the MOF to ensure the provision of adequate counterpart budget for the project;</li> <li>• establishes, maintains and updates the project performance monitoring system;</li> <li>• coordinates for PCC meetings;</li> <li>• prepares project completion report with the help of project consultants; and</li> <li>• provides support to ADB missions.</li> </ul> <p><i>Procurement and Recruitment of Consultants</i></p> <ul style="list-style-type: none"> <li>• Prepares draft bidding documents and finalize after addressing comments by ADB;</li> <li>• advertises all packages for procurement;</li> <li>• procurement of goods;</li> <li>• recruitment of consultants and management of their contracts</li> <li>• submits bid evaluation reports to ADB;</li> <li>• prepares updated procurement plans (18-month timeframe) and submit to ADB for review and approval;</li> <li>• monitors the procurement process; and</li> <li>• submits annual contract award and disbursement projections by December of each year.</li> </ul>

Project Implementation Organizations	Management Roles and Responsibilities
	<p><i>Technical Oversight and Support</i></p> <ul style="list-style-type: none"> <li>• Provides technical support and overall guidance to RPMOs, WUSCs, and municipalities;</li> <li>• conducts, reviews, and approves detailed engineering designs and estimates;</li> <li>• carries out periodic quality audit of the civil works contracts; and</li> <li>• guides, supports and monitors RPMOs in implementing subprojects.</li> </ul> <p><i>Safeguards Compliance</i></p> <ul style="list-style-type: none"> <li>• Overall responsibility for safeguards by monitoring and ensuring compliance with ADB’s Safeguards Policy Statement, 2009 and government requirements;</li> <li>• prepares and submit initial environmental examination reports, resettlement plans, and indigenous people development plan, as appropriate;</li> <li>• coordinates for obtaining the right of way clearances;</li> <li>• ensures integration of environmental and social safeguards, including land acquisition and gender aspects, as required in all documents, particularly in tender documents;</li> <li>• prepares and submit to ADB semi-annual environmental and social safeguards monitoring reports;</li> <li>• ensures grievance redressal mechanisms are established and functioning in all project municipalities;</li> <li>• addresses grievances related to the project; and</li> <li>• provides capacity support to RPMOs, and WUAs on safeguards issues.</li> </ul>
<p>RPMO: (i) Eastern Region (Itahari, Sunsari), and (ii) Western Region (Nepalgunj, Banke)</p> <ul style="list-style-type: none"> <li>• Regional Project Manager (1)</li> <li>• Engineer-Permanent (1)</li> <li>• Engineers- Contractual (7)</li> <li>• Social Development Officer as social safeguard and gender equity and social inclusion officer (1)</li> <li>• Administrative Assistant (1)</li> <li>• Account Officer (1)</li> <li>• Social Mobilizer-Non Gazetted First (1)</li> <li>• Computer Operator-Contractual (1)</li> <li>• Social Mobilizers-Non Gazetted Second (7)</li> </ul>	<p>For each of its concerned regions PMO will act as RPMO for central region (Kathmandu).</p> <ul style="list-style-type: none"> <li>• Manages day-to-day project implementation at the subproject/ municipality levels including safeguards compliance;</li> <li>• ensures coordination with concerned municipalities, water supply and sanitation division offices or local unit of DWSSM, TDF and WUAs for all matters related to the project implementation;</li> <li>• supervises and monitors each of the regional design, supervision, and management consultants based at the respective RPMOs;</li> <li>• makes payments for activities performed under the scope of the project and conducts public audits;</li> <li>• liaises with PMO on project implementation;</li> <li>• submits quarterly reports to PMO in agreed format and as required by PMO;</li> <li>• ensures WUAs community contribution;</li> <li>• assists and monitors WUAs maintaining separate accounts for community contribution;</li> <li>• implements and monitors resettlement plans, gender equality social inclusion action plan and initial environment examinations for the subprojects in each municipality and prepares consolidated reports on these; and</li> <li>• prepares progress reports, as outlined in PAM for the subprojects under the RPMO and submits to PMO.</li> </ul>



<b>Project Implementation Organizations</b>	<b>Management Roles and Responsibilities</b>
Project municipalities	<ul style="list-style-type: none"> <li>• Municipal mayor chairs regular subproject coordination committee meetings organized by RPMO at municipal level to disseminate and discuss subproject related information with the WUSC;</li> <li>• approves the municipal WASH Plan and ensures that subproject is in line with the municipal WASH Plan;</li> <li>• endorses beneficiaries for participation in output-based aid;</li> <li>• agrees to include the subproject in their planning and submits subproject application to DWSSM; and</li> <li>• provides 15% of project cost for sanitation subprojects (storm drain, decentralized wastewater treatment).</li> </ul>
Municipal WASH coordination committee	<ul style="list-style-type: none"> <li>• Supports project implementation and review performance at the subproject level; and</li> <li>• facilitates to resolve project implementation issues that require inter-agencies collaboration and grievance redress.</li> </ul>
TDF	<ul style="list-style-type: none"> <li>• Signs subsidiary loan agreement with MOF;</li> <li>• provides loan (up to 25% of civil works costs for water supply subprojects) to the WUAs or municipalities if considered financially feasible, collects repayment from WUAs and pays back to MOF;</li> <li>• provides tariff setting, financial management and capacity building support to the WUAs or municipalities;</li> <li>• signs subproject financing agreements with WUAs or municipalities;</li> <li>• manages institutional development and implementation support consultants; and</li> <li>• publishes yearly bulletin of project municipalities.</li> </ul>
WUSC	<ul style="list-style-type: none"> <li>• Collects upfront cash (5% of civil works costs) in joint account with PMO/RPMO in case of water supply subproject;</li> <li>• signs subproject financing agreements with TDF;</li> <li>• ensures timely payment of user contribution;</li> <li>• coordinates with local bodies and stakeholders; and</li> <li>• ensures land availability.</li> </ul>
ADB	<ul style="list-style-type: none"> <li>• Conducts field review missions, midterm review mission and project completion review missions to assess project implementation progress and compliance of loan covenants;</li> <li>• reviews PMO submissions for procurement of goods, civil works and services and provides comments and no objection on the submissions; and</li> <li>• checks statement of expenditure and disburses the loan funds as agreed in Loan Agreement.</li> </ul>

ADB = Asian Development Bank, DWSSM = Department of Water Supply and Sewerage Management, FY = Fiscal Year, MOF = Ministry of Finance, MOWS = Ministry of Water Supply, PAM = project administration manual, PCC = Project Coordination Committee, PMO = project management office, RPMO = regional project management office, TDF = Town Development Fund, WASH = water, sanitation and hygiene, WUA = water users' association, WUSC = water users' and sanitation committee.

Sources: Asian Development Bank, and Department of Water Supply and Sewerage.

## B. Key Persons Involved in Implementation

### Executing Agency

Ministry of Water Supply

Gajendra Kumar Thakur  
Secretary  
Phone: +977 1 4211693  
secretary@gmail.com  
Singha Durbar, Kathmandu

### Implementing Agency

Department of Water Supply and  
Sewerage Management

Bidya Nath Bhattarai  
Project Director  
Phone: +977 1 4422231  
bidya37@gmail.com

### Asian Development Bank

Urban Development and Water  
Division, South Asia Department

Sekhar Bonu  
Director  
Phone: +63 2 8632 5628  
sbonu@adb.org

Mission Leader

Alexandra Vogl  
Senior Urban Development Specialist  
Phone: +63 2 8632 4582  
avogl@adb.org

## C. Project Organization Structure

13. The MOWS will be the executing agency, working through DWSSM as the implementing agency. DWSSM will establish a project management office (PMO) for the project<sup>26</sup> headed by a Project Director and two regional project management offices (RPMOs).

14. The PMO will be responsible for overall project planning, management, implementation, monitoring, and reporting for the project. The PMO will also be responsible for screening the proposed subprojects in accordance with the subproject selection criteria for the project (Appendix 1) assisting the municipalities in conducting feasibility studies,<sup>27</sup> reporting to and being point of liaison with ADB on the project; quality control of detailed design and construction supervision; procurement of civil works contractors; support for capacity building; and overseeing safeguard compliance. The PMO will liaise with WUSCs and municipalities to sign the management agreement prior to the award of contract for each subproject. The PMO will also engage all consultants under the project.

15. The RPMOs will be established using the existing infrastructure in (i) Itahari, Sunsari (for the eastern region); (ii) in Nepalgunj, Banke (for the western region); and (iii) PMO (Kathmandu) will act as RPMO for central region projects. The RPMOs will report to the PMO and be supported and monitored by PMO to implement the projects in the field and manage contractors and consultants. The RPMOs will manage the detailed design and construction supervision with support from design, supervision, and management consultants (DSMCs) that PMO will engage

<sup>26</sup> The DWSSM will continue the existing PMO established and operational for the Third Small Towns Water Supply and Sanitation Sector project.

<sup>27</sup> The TDF will assist the municipalities in conducting financial appraisal of the subprojects and advice DWSS on its outcomes prior to the start of detailed design process.

(DSMCs for eastern, western, and central region each). Each of the DSMCs will be based at the respective RPMO. For each subproject, a dedicated implementation core group will be established in the field, at each WUA office,<sup>28</sup> headed by a qualified engineer from the RPMO to conduct day-to-day project management, planning and construction supervision. The TDF will coordinate with RPMOs, WUSCs and municipalities at least on monthly basis.

16. The WUSC, on behalf of the WUA<sup>29</sup> or the municipality<sup>30</sup> will be responsible for O&M of the WSS facilities constructed, operating under a management agreement with DWSSM. WUSCs consist of nine executive members,<sup>31</sup> at least three of whom are women. The project will fund the WUA minimum prescribed staffing and other resource requirement, as outlined in the management agreement with DWSSM for sustainable operations of the system during the project implementation period. For the subprojects yet to be selected and where WUA does not exist initially, or when the municipality does not have the capacity and chooses to delegate the operation to user's representatives, an interim user committee will be first established in the feasibility stage by representing potential consumers. The interim user committee will work with the RPMO and DSMC in undertaking a feasibility study, confirm the technical proposals and the boundaries of the service areas. WUAs will be developed from interim user committee at the detailed design stage.

17. WUAs or the municipalities will be responsible for (i) working with the regional DSMCs in finalizing the detailed design; (ii) land acquisition and resettlement, if any; (iii) participating in the bidding evaluation process and witnessing the signing of civil works contracts; (iv) fulfilling the required 5% cash contribution prior to contract award; (v) concluding a pre-proposal management agreement with DWSSM and subproject financing agreement with the TDF, and signing the management agreement with the DWSSM upon project commencement; (vi) assisting the RPMO engineer and regional DSMCs in supervising the construction work; (vii) setting water tariffs, in accordance with the TDF tariff guidelines, and at a level to cover necessary payment or repayment to the government, O&M expenditures, and replacement and future expansion in accordance with the Urban Water Supply and Sanitation Sector Policy; (viii) ensuring all households in the service area are connected and assisting poor families to construct and use toilets; and (ix) appointing adequate staff to be trained to operate the system. After completion of construction, WUAs or municipality will be responsible for (i) operating, maintaining and expanding the system, when appropriate; (ii) collecting the tariff; (iii) repaying the debt to TDF and the government; (iv) managing and operating the sanitation component of the subproject if septage management or wastewater management is included; and (v) ensuring that the subproject coverage area is open defecation free always. An operation unit will be established under the WUA or municipality, with technical staff as outlined in the management agreement for the subproject, before the construction completion to operate the system or supervise the operator, if outsourced. The operation unit will work together with the contractor during the first year of O&M of the system<sup>32</sup> and will be further inducted by the Institutional Support and Service Advisory unit (ISSAU) and National Water Supply and Sanitation Training Center for a minimum of one month prior to takeover. After the first year of O&M by the contractor, WUAs or

<sup>28</sup> The implementation core group, as a minimum, comprises of (i) an engineer, a social mobilizer, and an EMP monitor from RPMO; and (ii) an administration staff, a finance staff, and an engineer or junior engineer from WUSC.

<sup>29</sup> The WUAs are registered with the district water resources committee as a user association under the Nepal Water Resources Act (1992).

<sup>30</sup> As the project is a demand based open access project, the WUAs or the municipalities can apply for funding a proposed subproject that meets the subproject selection criteria.

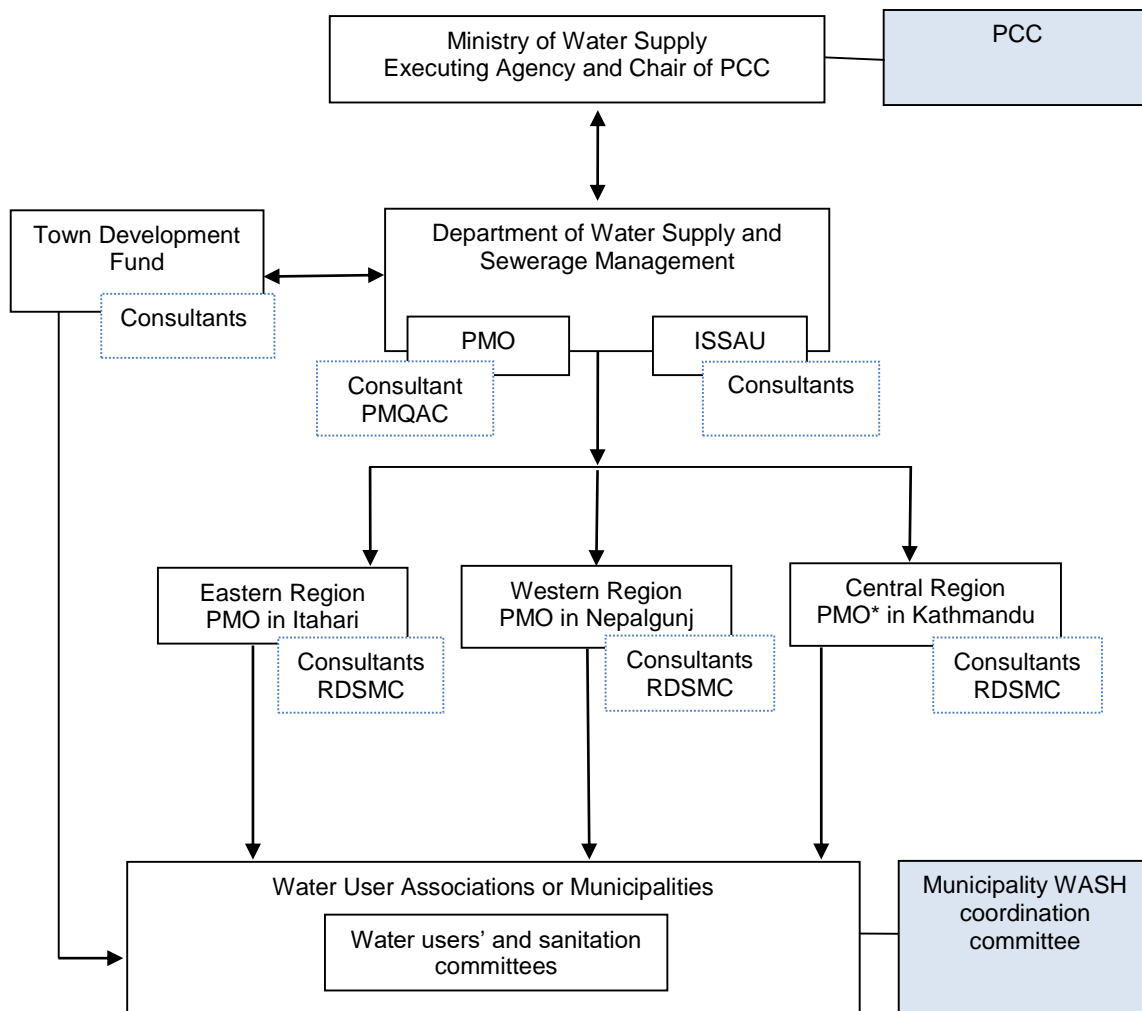
<sup>31</sup> The WUSCs will be formulated by ensuring proportional representation of gender, caste and ethnic groups. It will include at least 33% representation of women.

<sup>32</sup> All water supply civil works contracts will include one year of O&M by the contractor and training of the WUA or municipality staff.

municipalities will have options whether they (i) continue to engage the same operator with agreed fees, (ii) engage a separate operator through competitive bidding, or (iii) operate the system through the operation unit.

18. For all water supply subprojects TDF will carry out the following key tasks: (i) financial appraisal of the subprojects; (ii) signing subproject financing agreement with the WUAs or municipalities; (iii) on-lending the loan portion to the WUAs or municipalities; (iv) recommending and monitoring tariffs to cover operation expenditures, debt service payments and future expansion; (v) providing training in tariff setting, accounting, computerized billing, and financial management to members and/or employees of WUAs or municipalities; and (vi) disbursing and receiving repayment of loans.

**Figure 1: Project Organizational Structure**



ISSAU = Institutional Support and Service Advisory Unit, PCC = Project Coordination Committee, PMO= project management office, PMQAC = project management and quality assurance consultant, RDSMC = regional design, supervision, and management consultant, WASH = water, sanitation and hygiene.

\*PMO will act as regional project management office for the central region.

Source: Asian Development Bank.

#### IV. COSTS AND FINANCING

19. The project is estimated to cost \$178.5 million. The government has requested a concessional loan in various currencies equivalent to \$130.0 million from ADB's ordinary capital resources, in concessional terms, to help finance the project. The loan will have a 32-year term, including a grace period of 8 years; an interest rate of 1.0% per year during the grace period and 1.5% per year thereafter; and such other terms and conditions set forth in the draft loan agreement. The summary cost estimates for the project is in Table 4.

**Table 4: Summary Cost Estimates**  
(\$ million)

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Water supply and sanitation infrastructure in project municipalities improved	147.5
2. Institutional and community capacities strengthened	3.0
<b>Subtotal (A)</b>	<b>150.5</b>
<b>B. Contingencies<sup>c</sup></b>	<b>20.4</b>
<b>C. Financial Charges During Implementation<sup>d</sup></b>	<b>7.6</b>
<b>Total (A+B)</b>	<b>178.5</b>

<sup>a</sup> In mid-2018 prices (as of May 2018): Exchange rate of \$1 = NRs103.0 is used.

<sup>b</sup> Includes taxes and duties of \$15.7 million to be financed from government resources by cash contribution.

<sup>c</sup> Physical contingencies are computed at 7.5% for civil works and equipment. Price contingencies are computed at 1.5%-1.6% on foreign exchange costs and 6.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>d</sup> Interests during construction for the ADB loan and the government's on-lending have been computed at 1.0% and 0.5% per annum, respectively.

Source: Asian Development Bank estimates.

20. The government and beneficiaries (municipalities and WUAs) will provide \$48.5 million to the investment costs of the project to finance: (i) taxes and duties; (ii) part of works; (iii) part of incremental recurrent costs; and (iv) part of contingencies, and will provide the loan and counterpart funds to DWSSM as the implementing agency. The loan from ADB will finance the expenditures in relation to works, equipment, consulting services and capacity building, incremental recurrent costs, contingencies, and financing charges during implementation. The government has assured that it will meet any financing shortfall to ensure that project outputs are fully achieved. The summary financing plan for the project is in Table 5.

**Table 5: Summary Financing Plan**

<b>Source</b>	<b>Amount (\$ million)</b>	<b>Share of Total (%)</b>
Asian Development Bank		
Ordinary capital resources (concessional loan)	130.0	72.8
Government of Nepal	39.5	22.2
Beneficiaries (municipalities and water users associations)	9.0	5.0
<b>Total</b>	<b>178.5</b>	<b>100.0</b>

Source: Asian Development Bank estimates.

21. Climate change adaptation is estimated to cost \$33.9 million, of which ADB will finance 77% (Project Climate Risk and Financing Calculation is in Appendix 2).

#### **A. Cost Estimates Preparation and Revisions**

22. The cost estimates have been prepared based on the detailed feasibility study prepared by DWSSM in consultation with the ADB project preparatory technical assistance team. The cost estimate model was prepared using Microsoft Excel and is available. The cost estimates will be updated during project implementation.

#### **B. Key Assumptions**

23. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: NRs103 = \$1.0 (as of May 2018).
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

**Table 6: Escalation Rates for Price Contingency Calculation**

<b>Item</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Annual Average</b>
Foreign rate of price inflation	1.5%	3.0%	4.5%	6.1%	7.7%	9.3%	1.6%
Domestic rate of price inflation	6.5%	13.0%	19.5%	26.0%	32.5%	39.0%	6.5%

Source: Asian Development Bank estimates.

- (iii) In-kind contributions cannot be easily measured and have not been quantified.

### C. Detailed Cost Estimates by Expenditure Category

**Table 7: Detailed Cost Estimates by Expenditure Category**  
(in \$ million)

Item	Foreign Exchange	Local Currency	Total Cost	Total Net Cost	Tax	% of Total Base Cost	Climate Finance
<b>A. Investment Costs</b>							
1. Civil works	45.7	83.3	129.0	116.8	12.2	85.7%	25.8
a Water supply	36.8	67.2	104.0	94.5	9.5	69.1%	20.8
b Sanitation	8.9	16.1	25.0	22.2	2.8	16.6%	5.0
2. Equipment	2.6	4.7	7.2	6.3	0.9	4.8%	4.2
a Smart water management	1.5	2.7	4.2	3.7	0.5	2.8%	4.2
b Vehicles and others	0.9	1.6	2.5	2.2	0.3	1.7%	-
c Goods and equipment for service improvement	0.2	0.3	0.5	0.4	0.1	0.3%	-
3. Project management and capacity development	4.2	7.6	11.8	10.2	1.5	7.8%	2.9
a Project design and supervision	3.5	6.3	9.8	8.5	1.3	6.5%	2.2
b Capacity Development of ISSAU	0.4	0.6	1.0	0.9	0.1	0.7%	0.7
c Capacity development for TDF	0.2	0.3	0.5	0.4	0.1	0.3%	-
d Capacity development for WUAs and WUSCs	0.2	0.3	0.5	0.4	0.1	0.3%	-
<b>Subtotal (A)</b>	<b>52.4</b>	<b>95.6</b>	<b>148.0</b>	<b>133.3</b>	<b>14.7</b>	<b>98.3%</b>	<b>32.9</b>
<b>B. Recurrent Costs</b>							
1. Incremental administrative costs	2.5	-	2.5	1.5	1.0	1.7%	-
<b>Subtotal (B)</b>	<b>2.5</b>	<b>-</b>	<b>2.5</b>	<b>1.5</b>	<b>1.0</b>	<b>1.7%</b>	<b>-</b>
<b>Total Base Cost</b>	<b>54.9</b>	<b>95.6</b>	<b>150.5</b>	<b>134.8</b>	<b>15.7</b>	<b>100.0%</b>	<b>32.9</b>
<b>C. Contingencies</b>							
1. Physical contingencies	3.7	6.5	10.2	10.2	-	6.8%	1.0
2. Price contingencies	-	10.2	10.2	10.2	-	6.8%	-
<b>Subtotal (C)</b>	<b>3.7</b>	<b>16.7</b>	<b>20.4</b>	<b>20.4</b>	<b>-</b>	<b>13.6%</b>	<b>1.0</b>
<b>D. Financing Charges</b>							
1. Interest during implementation							
a The government's loan (TDF)	-	3.8	3.8	3.8	-	2.5%	-
b ADB concessional loan	3.8	-	3.8	3.8	-	2.5%	-
<b>Subtotal (D)</b>	<b>3.8</b>	<b>3.8</b>	<b>7.6</b>	<b>7.6</b>	<b>-</b>	<b>5.1%</b>	<b>-</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>62.4</b>	<b>116.1</b>	<b>178.5</b>	<b>162.8</b>	<b>15.7</b>	<b>118.6%</b>	<b>33.9</b>

ISSAU = Institutional Support and Service Advisory Unit, TDF= Town Development Fund, WUA = water users' association, WUSC = water users' and sanitation committee.

Notes: 1. Numbers may not sum precisely because of rounding.

2. The costs of the actual audits of the program are minor and will be borne by the government.

3. Minor environmental monitoring and implementation of resettlement plan, gender and social inclusion action plan, and public communication costs are absorbed in B1. ADB will not finance land acquisition cost.

Source: Asian Development Bank estimates.

**D. Allocation and Withdrawal of Loan Proceeds****Table 8: Allocation and Withdrawal of Loan Proceeds**

<b>No.</b>	<b>Item</b>	<b>Total Amount Allocated for ADB Financing (\$) Category</b>	<b>Basis for Withdrawal from the Loan Account</b>
1	Civil Works	94,170,000	73% of total expenditure claimed
2	Equipment	6,290,000	87% of total expenditure claimed
3	Project management and capacity development	10,240,000	87% of total expenditure claimed
4	Incremental recurrent costs	1,423,000	57% of total expenditure claimed
5	Financing Charges (ADB concessional loan)	3,801,000	100% of total amount due
6	Unallocated	14,076,000	
<b>TOTAL</b>		<b>130,000,000</b>	

ADB = Asian Development Bank.

Source: Asian Development Bank estimates.



## E. Detailed Cost Estimates by Financier

**Table 9: Detailed Cost Estimates by Financier**  
(\$ million)

Item	ADB		Government				WUSC/ municipalities		Total Costs
	\$	%	Tax	Non-Tax	Total	%	\$	%	
<b>A. Investment Costs</b>									
1. Civil works	94.2	73.0%	12.2	13.7	25.9	20.1%	9.0	6.9%	129.0
a Water supply	75.9	73.0%	9.5	13.4	22.9	22.0%	5.2	5.0%	104.0
b Sanitation	18.3	73.0%	2.8	0.2	3.0	12.0%	3.8	15.0%	25.0
2. Equipment	6.3	87.0%	0.9	-	0.9	13.0%	-	0.0%	7.2
a Smart water management	3.7	87.0%	0.5	-	0.5	13.0%	-	0.0%	4.2
b Vehicles and others	2.2	87.0%	0.3	-	0.3	13.0%	-	0.0%	2.5
c Goods and equipment for service improvement	0.4	87.0%	0.1	-	0.1	13.0%	-	0.0%	0.5
3. Project management and capacity development	10.2	87.0%	1.5	-	1.5	13.0%	-	0.0%	11.8
a Project design and supervision	8.5	87.0%	1.3	-	1.3	13.0%	-	0.0%	9.8
b Capacity Development of ISSAU	0.9	87.0%	0.1	-	0.1	13.0%	-	0.0%	1.0
c Capacity development for TDF	0.4	87.0%	0.1	-	0.1	13.0%	-	0.0%	0.5
d Capacity development for WUAs and WUSCs	0.4	87.0%	0.1	-	0.1	13.0%	-	0.0%	0.5
<b>Subtotal (A)</b>	<b>110.7</b>	<b>74.8%</b>	<b>14.7</b>	<b>13.7</b>	<b>28.4</b>	<b>19.2%</b>	<b>9.0</b>	<b>6.0%</b>	<b>148.0</b>
<b>B. Recurrent Costs</b>									
1. Incremental administrative costs	1.4	57.0%	1.0	0.1	1.1	43.0%	-	0.0%	2.5
<b>Subtotal (B)</b>	<b>1.4</b>	<b>57.0%</b>	<b>1.0</b>	<b>0.1</b>	<b>1.1</b>	<b>43.0%</b>	<b>-</b>	<b>0.0%</b>	<b>2.5</b>
<b>Total Base Cost</b>	<b>112.1</b>	<b>74.5%</b>	<b>15.7</b>	<b>13.7</b>	<b>29.4</b>	<b>19.6%</b>	<b>9.0</b>	<b>5.9%</b>	<b>150.5</b>
<b>C. Contingencies</b>									
1. Physical contingencies	7.2	70.0%	-	3.1	3.1	30.0%	-	0.0%	10.2
2. Price contingencies	6.9	68.0%	-	3.3	3.3	32.0%	-	0.0%	10.2
<b>Subtotal (C)</b>	<b>14.1</b>	<b>69.0%</b>	<b>-</b>	<b>6.3</b>	<b>6.3</b>	<b>31.0%</b>	<b>-</b>	<b>0.0%</b>	<b>20.4</b>
<b>D. Financing Charges</b>									
1. Interest during implementation									
a The government's loan (TDF)	-	0.0%	-	3.8	3.8	100.0%	-	0.0%	3.8
b ADB concessional loan	3.8	100.0%	-	-	-	0.0%	-	0.0%	3.8
<b>Subtotal (D)</b>	<b>3.8</b>	<b>50.0%</b>	<b>-</b>	<b>3.8</b>	<b>3.8</b>	<b>50.0%</b>	<b>-</b>	<b>0.0%</b>	<b>7.6</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>130.00</b>	<b>72.8%</b>	<b>15.7</b>	<b>23.9</b>	<b>39.5</b>	<b>22.8%</b>	<b>9.0</b>	<b>5.0%</b>	<b>178.5</b>

ADB = Asian Development Bank, ISSAU = Institutional Support and Service Advisory Unit, TDF= Town Development Fund, WUA = water users' association, WUSC = water users' and sanitation committee.

Notes: 1. Numbers may not sum precisely because of rounding.

2. The costs of the actual audits of the program are minor and will be borne by the government.

3. Minor environmental monitoring and implementation of resettlement plan, gender and social inclusion action plan, and public communication costs are absorbed in B1. ADB will not finance land acquisition cost.

Source: Asian Development Bank estimates.

## F. Detailed Cost Estimates by Outputs

**Table 10: Detailed Cost Estimates by Outputs**

Item	(\$ million)				
	Total Costs	Output 1		Output 2	
		\$	%	\$	%
<b>A. Investment Costs</b>					
1. Civil works	129.0	129.0	100.0%	-	0.0%
a Water supply	104.0	104.0	100.0%	-	0.0%
b Sanitation	25.0	25.0	100.0%	-	0.0%
2. Equipment	7.2	6.7	93.1%	0.5	6.9%
a Smart water management	4.2	4.2	100.0%	-	0.0%
b Vehicles and others	2.5	2.5	100.0%	-	0.0%
c Goods and equipment for service improvement	0.5	-	0.0%	0.5	100.0%
3. Project management and capacity development	11.8	9.8	83.0%	2.0	17.0%
a Project design and supervision	9.8	9.8	100.0%	-	0.0%
b Capacity Development of ISSAU	1.0	-	0.0%	1.0	100.0%
c Capacity development for TDF	0.5	-	0.0%	0.5	100.0%
d Capacity development for WUAs and WUSCs	0.5	-	0.0%	0.5	100.0%
<b>Subtotal (A)</b>	<b>148.0</b>	<b>145.5</b>	<b>98.3%</b>	<b>2.5</b>	<b>1.7%</b>
<b>B. Recurrent Costs</b>					
1. Incremental administrative costs	2.5	2.0	80.1%	0.5	19.9%
<b>Subtotal (B)</b>	<b>2.5</b>	<b>2.0</b>	<b>80.1%</b>	<b>0.5</b>	<b>19.9%</b>
<b>Total Base Cost</b>	<b>150.5</b>	<b>147.5</b>	<b>98.0%</b>	<b>3.0</b>	<b>2.0%</b>
<b>C. Contingencies</b>					
1. Physical contingencies	10.2	10.2	99.6%	0.1	0.4%
2. Price contingencies	10.2	10.0	98.1%	0.2	1.9%
<b>Subtotal (C)</b>	<b>20.4</b>	<b>20.2</b>	<b>98.9%</b>	<b>0.2</b>	<b>1.1%</b>
<b>D. Financing Charges</b>					
1. Interest during implementation					
a The government's loan (TDF)	3.8	3.7	98.0%	0.1	2.0%
b ADB concessional loan	3.8	3.7	98.0%	0.1	2.0%
<b>Subtotal (D)</b>	<b>7.6</b>	<b>7.5</b>	<b>98.0%</b>	<b>0.2</b>	<b>2.0%</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>178.5</b>	<b>175.1</b>	<b>98.1%</b>	<b>3.4</b>	<b>1.9%</b>

ISSAU = institutional Support and Service Advisory Unit, TDF= Town Development Fund, WUA = water users' association, WUSC = water users' and sanitation committee.

Notes: 1. Numbers may not sum precisely because of rounding.

2. The costs of the actual audits of the program are minor and will be borne by the government.

3. Minor environmental monitoring and implementation of resettlement plan, gender and social inclusion action plan, and public communication costs are absorbed in B1. ADB will not finance land acquisition cost.

Source: Asian Development Bank estimates.

## G. Detailed Cost Estimates by Year

**Table 11: Detailed Cost Estimates by Year**  
(\$ million)

Item	Total Cost	2018	2019	2020	2021	2022	2023
<b>A. Investment Costs</b>							
1. Civil works	129.0	5.2	32.3	32.3	25.8	14.2	19.4
a Water supply	104.0	5.2	26.0	26.0	20.8	10.4	15.6
b Sanitation	25.0	-	6.3	6.3	5.0	3.8	3.8
2. Equipment	7.2	0.1	1.9	1.8	1.4	0.9	1.1
a Smart water management	4.2	-	1.1	1.1	0.8	0.6	0.6
b Vehicles and others	2.5	0.1	0.6	0.6	0.5	0.3	0.4
c Goods and equipment for service improvement	0.5	-	0.2	0.1	0.1	-	0.1
3. Project management and capacity development	11.8	0.5	2.5	3.1	2.7	1.4	1.6
a Project design and supervision	9.8	0.5	2.4	2.4	2.0	1.0	1.5
b Capacity Development of ISSAU	1.0	-	-	0.4	0.4	0.2	-
c Capacity development for TDF	0.5	-	-	0.2	0.2	0.1	-
d Capacity development for WUAs and WUSCs	0.5	0.1	0.1	0.1	0.1	0.1	0.1
<b>Subtotal (A)</b>	<b>148.0</b>	<b>5.9</b>	<b>36.6</b>	<b>37.2</b>	<b>29.9</b>	<b>16.4</b>	<b>22.0</b>
<b>B. Recurrent Costs</b>							
1. Incremental administrative costs	2.5	0.1	0.6	0.6	0.5	0.3	0.4
<b>Subtotal (B)</b>	<b>2.5</b>	<b>0.1</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.3</b>	<b>0.4</b>
<b>Total Base Cost</b>	<b>150.5</b>	<b>6.0</b>	<b>37.3</b>	<b>37.8</b>	<b>30.4</b>	<b>16.7</b>	<b>22.4</b>
<b>C. Contingencies</b>							
1. Physical contingencies	10.2	0.4	2.6	2.6	2.0	1.1	1.5
2. Price contingencies	10.2	0.1	1.5	2.2	2.3	1.6	2.5
<b>Subtotal (C)</b>	<b>20.4</b>	<b>0.5</b>	<b>4.1</b>	<b>4.7</b>	<b>4.3</b>	<b>2.7</b>	<b>4.1</b>
<b>D. Financing Charges</b>							
1. Interest during implementation							
a The government's loan (TDF)	3.8	0.1	0.2	0.5	0.8	1.0	1.2
b ADB concessional loan	3.8	0.1	0.2	0.5	0.8	1.0	1.2
<b>Subtotal (D)</b>	<b>7.6</b>	<b>0.1</b>	<b>0.4</b>	<b>1.1</b>	<b>1.6</b>	<b>2.1</b>	<b>2.4</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>178.5</b>	<b>6.5</b>	<b>41.8</b>	<b>43.6</b>	<b>36.4</b>	<b>21.4</b>	<b>28.8</b>
<b>% Total Project Cost</b>	<b>100.0%</b>	<b>3.7%</b>	<b>23.4%</b>	<b>24.4%</b>	<b>20.4%</b>	<b>12.0%</b>	<b>16.2%</b>

ISSAU = Institutional Support and Service Advisory Unit, TDF= Town Development Fund, WUA = water users' association, WUSC = water users' and sanitation committee

Notes: 1. Numbers may not sum precisely because of rounding.

2. The costs of the actual audits of the program are minor and will be borne by the government.

3. Minor environmental monitoring and implementation of resettlement plan, gender and social inclusion action plan, and public communication costs are absorbed in B1. ADB will not finance land acquisition cost.

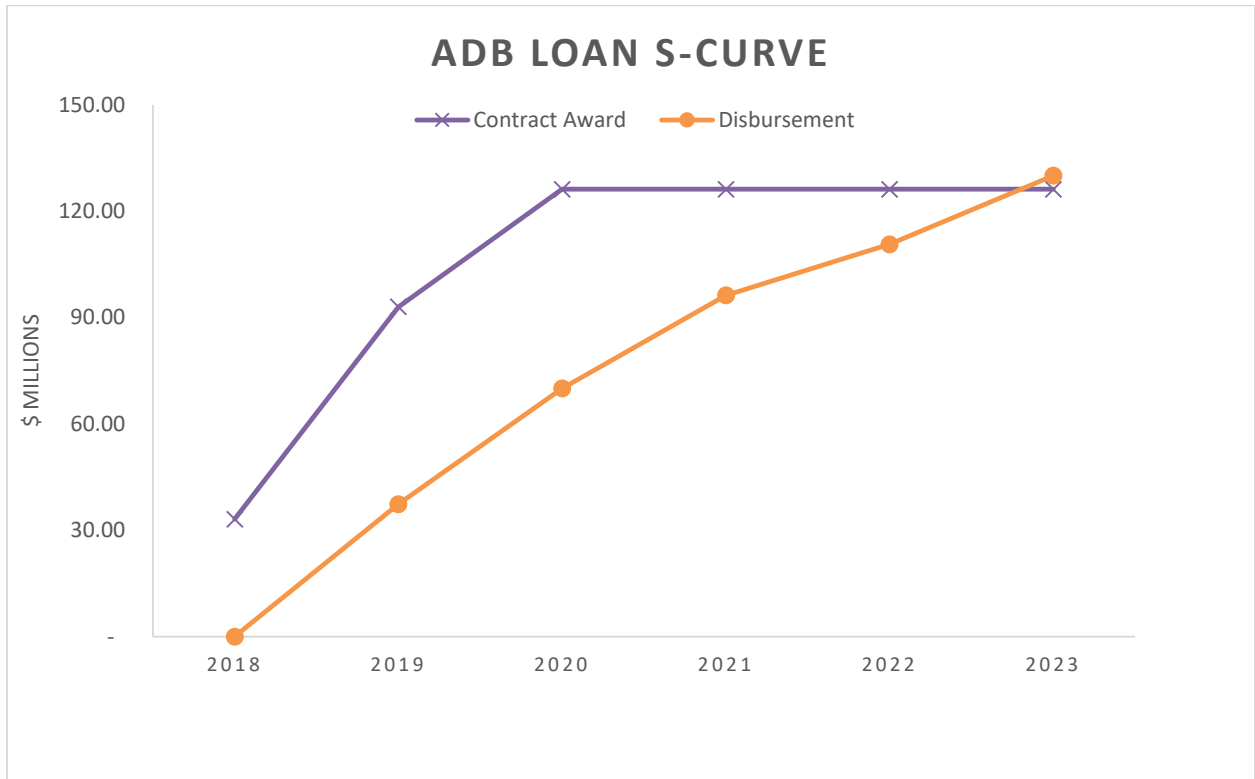
Source: Asian Development Bank estimates.

H. Contract and Disbursement S-Curve

**Table 12: Contract Awards and Disbursement**  
(\$ million)

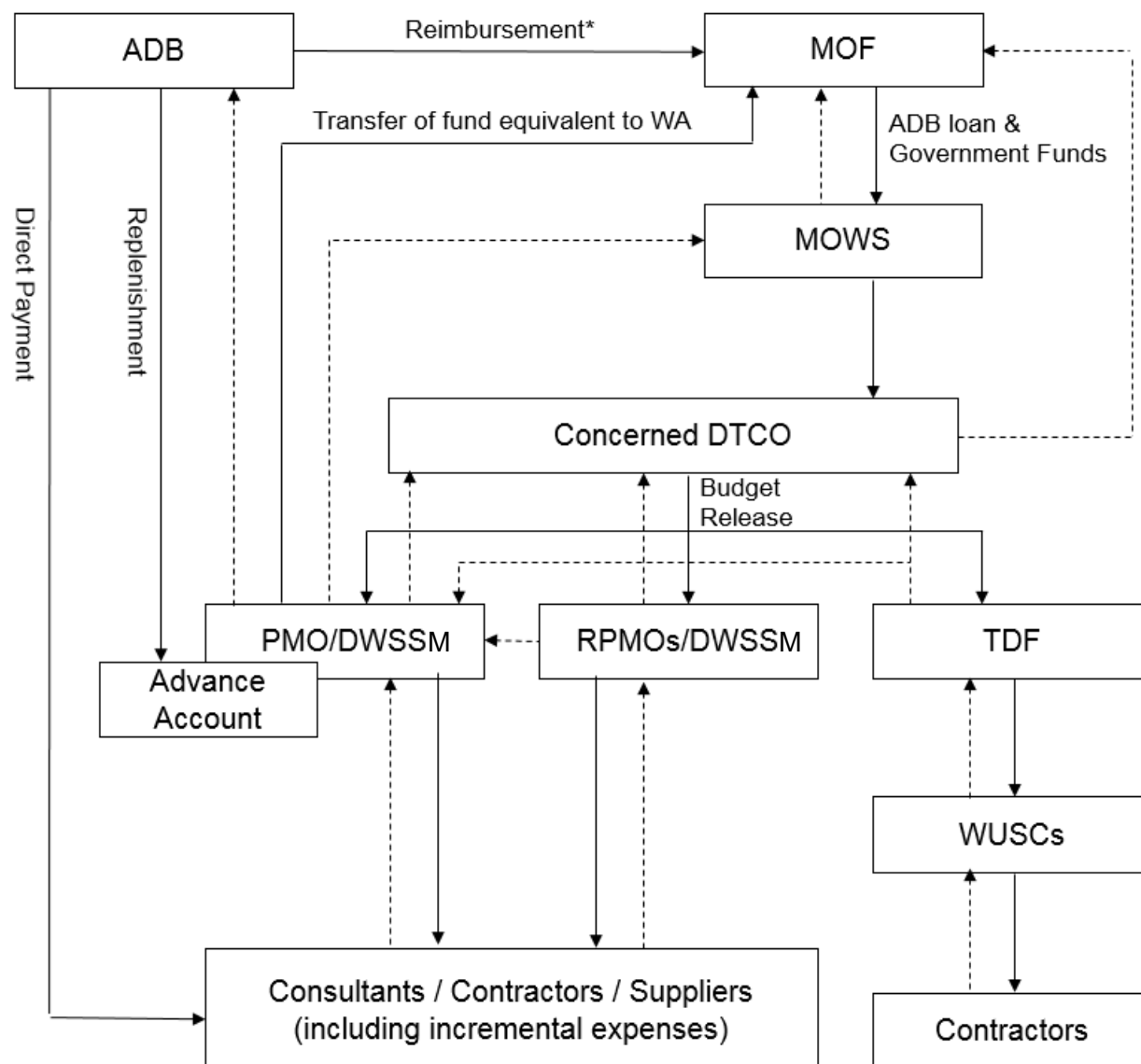
Year	Contract Awards					Disbursements				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2018	-	-	-	33.1	33.1	-	-	-	5.2	5.2
2019	35.4	13.3	4.4	6.8	59.9	8.0	8.2	8.0	8.0	32.2
2020	15.2	9.9	8.0	-	33.2	8.0	8.1	8.3	8.2	32.6
2021	-	-	-	-		6.4	6.5	6.7	6.7	26.3
2022	-	-	-	-		3.5	3.5	3.6	3.8	14.4
2023	-	-	-	-		4.9	4.9	4.8	4.7	19.3

**Figure 2: S-Curve**



## I. Fund Flow Diagram

**Figure 3: Funds Flow for Water Supply Subprojects (including construction of toilets)**

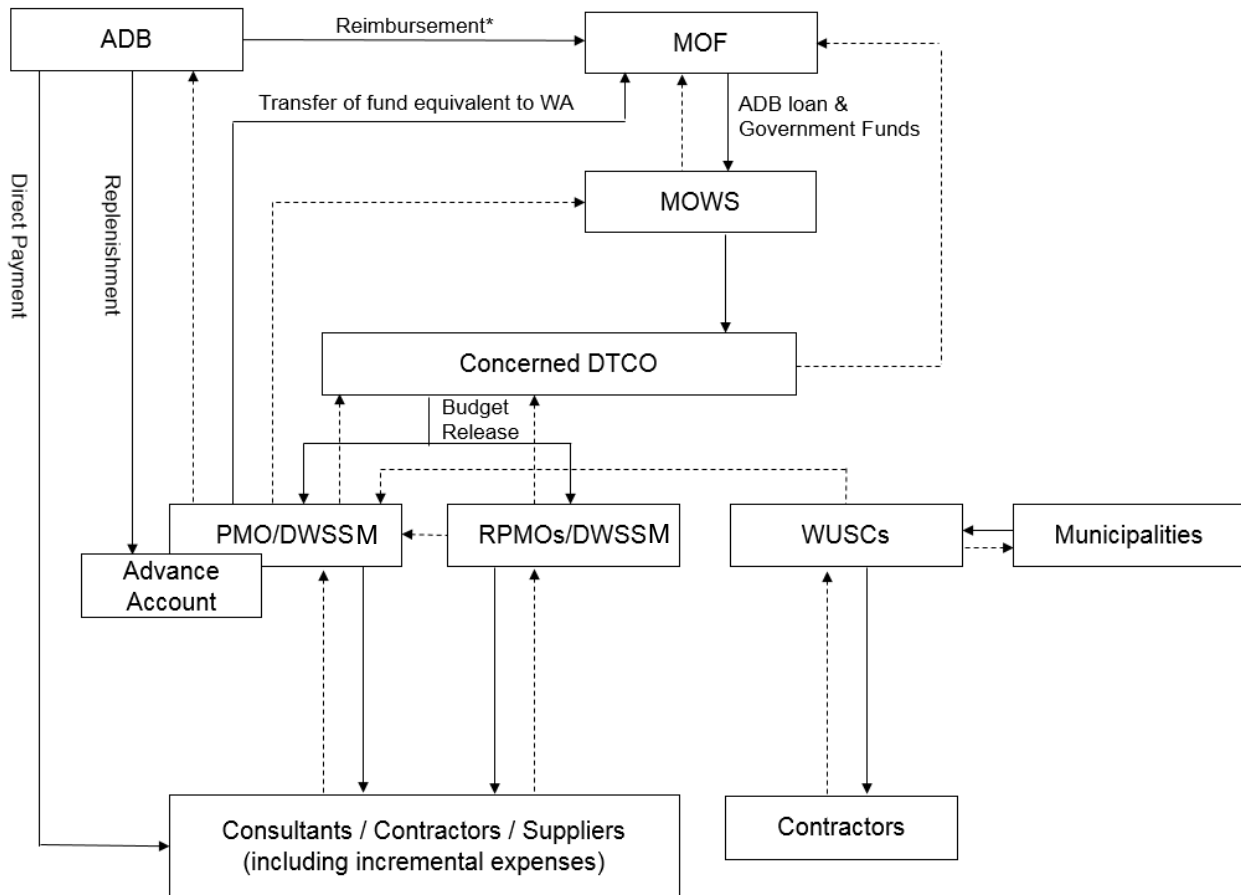


ADB = Asian Development Bank, DTCO = District Treasury Controller Office, DWSSM = Department of Water Supply and Sewerage Management, MOF = Ministry of Finance, MOWS = Ministry of Water Supply, PMO = project management office, RPMO= regional project management office, TDF = Town Development Fund, WUSC = water users' and sanitation committee.

Note: ADB loan for reimbursement will be sent to the central account managed by FCGO (Financial Controller General Office) under MOF.

Source: Asian Development Bank.

**Figure 4: Funds Flow for Sanitation Subprojects (Storm Water Drainage and Decentralized Wastewater Treatment)**



ADB = Asian Development Bank, DTCO = District Treasury Controller Office, DWSSM = Department Water Supply and Sewerage Management, MOF = Ministry of Finance, MOWS = Ministry of Water Supply, PMO = project management office, RPMO= regional project management office, WUSC = water users' and sanitation committee.  
 Note: ADB loan for reimbursement will be sent to the central account managed by FCGO (Financial Comptroller General Office) under MOF.  
 Source: Asian Development Bank.

## V. FINANCIAL MANAGEMENT

### A. Financial Management Assessment

24. The financial management assessment (FMA) was conducted for the project in accordance with Asian Development Bank (ADB) Guidelines for the Financial Management and Analysis of Projects (2005),<sup>33</sup> Financial Due Diligence a Methodology Note (2009),<sup>34</sup> and Financial Management Technical Guidance Note (2015).<sup>35</sup>

25. The FMA considered the capacity of (i) DWSSM under MOWS as implementing agency; and (ii) the TDF as financial intermediary. The FMA focused mainly on fund flows, organization and staffing, accounting policies and procedures, internal controls, financial reporting and monitoring, internal and external audits, and information systems. The FMA also drew on lessons learnt from the ongoing Third Small Towns Water Supply and Sanitation Sector Project (third small towns project)<sup>36</sup> implemented by DWSSM, FMA questionnaires completed by DWSSM and its PMO, and TDF.

26. The DWSSM has considerable experience in implementing ADB projects,<sup>37</sup> including the ongoing third small towns project, which has been implemented at a satisfactory level in terms of receiving project funds in a timely manner, including the government's counterpart funds, efficient project management with adequate staff, timely submission of annual audited financial statements to ADB, and disbursements to contractors and consultants without delays.

27. The dedicated project director is being and will be assisted by a team of technical and non-technical officials to manage the project on full time basis. The existing PMO of DWSSM will be responsible for all day-to-day management of the project, including but not limited to: (i) preparing an overall project implementation plan and detail work program; (ii) monitoring and supervising all management activities; (iii) preparing project progress and project completion reports; (iv) preparing financial and budget plans including contract awards and disbursements; (v) conducting project management and administration; (vi) procuring goods and works; (vii) recruiting contractors and consultants; (viii) making payment of 70% of civil works costs for the water supply subprojects, 85% of civil costs for sanitation subprojects and all other costs including equipment and consulting services; (ix) retaining supporting documents; (x) completing all reporting requirements including the annual audit report and financial statements; and (xi) ensuring full compliance with ADB's resettlement, environmental, and other safeguard policies.

28. The TDF, the financial intermediary established by the government, will be responsible for providing loan, equivalent to 25% of civil works costs for water supply subprojects, to the water users' and sanitation committees (WUSCs).<sup>38</sup> The TDF will support WUSCs in handling project accounts and financial management during the implementation and loan repayment period.

<sup>33</sup> ADB. 2005. *Financial Management and Analysis of Projects*. Manila.

<sup>34</sup> ADB. 2009. *Financial Due Diligence A Methodology Note*. Manila.

<sup>35</sup> ADB. 2015. *Financial Management Technical Guidance Note*. Manila.

<sup>36</sup> ADB. [Nepal: Third Small Towns Water Supply and Sanitation Sector Project](#).

<sup>37</sup> Includes (i) ADB. [Nepal: Small Towns Water Supply and Sanitation Sector Project](#); and (ii) ADB. [Nepal: Second Small Towns Water Supply and Sanitation Sector Project](#).

<sup>38</sup> WUSC is an elected body in each project municipality to manage the water users' association (WUA) formed by the users under the Drinking Water Regulation 1998. WUSCs will be responsible for project preparation and implementation along with PMO of DWSS. WUSCs will also operate and maintain the assets developed under the project in each project municipality. WUSCs will contribute 30% of civil works costs for water supply subprojects

29. The major risk factors identified during the assessment that need to be addressed include:
- (i) delays in full establishment of dedicated WUSCs with qualified staff may hamper the timely and effective implementation;
  - (ii) lack of training to new accounting staff of PMO may cause delays in preparing day-to-day financial management; and
  - (iii) inadequate staff in the finance section of TDF may hamper the timely preparation and submission of periodic financial reports.

30. Despite the highlighted risks, the financial management arrangements are satisfactory taking the ongoing actions of DWSSM, PMO, and TDF into consideration. In addition, DWSSM, PMO, and TDF will be supported by a team of consultants for project management, design, supervision, and monitoring as well as policy and regulatory related matters. At the central level, a project coordination committee, chaired by the Secretary, MOWS, will provide overall direction on the planning and implementation of the project and coordination arrangements with related ministries. The overall risk assessment for the project is “moderate”. Considering sufficient experience handling ADB funded projects of DWSSM, PMO, and TDF and project implementation arrangement established by MOWS, the advance fund limit was set to the advance equivalent to 6 months forecast, and the Statement of Expenditure (SOE) single payment ceiling was set to \$100,000 and below. The action plan including measures for mitigating the foreseen risks is in Table 13.

**Table 13: Financial Management Action Plan**

Area	Current scenario	Risk	Mitigation measures	Responsibility	Target Date
Full establishment of dedicated WUSCs	WUSCs have not been fully established yet.	Delays in full establishment of dedicated WUSCs may hamper the timely and effective implementation.	Commitment of Government of Nepal and DWSSM to ensure the full establishment of WUSCs in a timely manner.	MOWS, DWSSM, and WUSCs	Before loan signing
Training new staff	Staffs of PMO are transferred every 2 years.	New staff may have insufficient knowledge of ADB procedures, which may cause delays in the day-to-day financial management.	Extending full training and capacity building support with the help of a team of consultants to enhance the financial management capacity of PMO.	MOWS and DWSSM	Before loan effectiveness onwards
Staffing	There are vacancies in the finance section of TDF.	This may hamper the timely preparation and submission of periodic	Appointing or recruiting qualified staff to fill the vacant positions in the finance section of TDF.	MOF and TDF	Before loan signing

(25% from TDF loan and 5% from users' contribution) and 15% of civil works costs for sanitation subprojects (subsidy from municipality).



Area	Current scenario	Risk	Mitigation measures	Responsibility	Target Date
		financial reports.			
TDF external audit of project accounts and compliance with financial covenants	Based on the consolidated external audit of project accounts for FY 2016-2017 for the ongoing third small towns project submitted by DWSSM, it appears that TDF has not complied with the financial covenants.	Financial management weakness of TDF	TDF to ensure timely resolution of any audit issues and compliance with mitigation measures.	TDF	Before loan effectiveness onwards

ADB = Asian Development Bank, DWSSM = Department of Water Supply and Sewerage Management, FY = fiscal year, MOF = Ministry of Finance, MOWS = Ministry of Water Supply, PMO = project management office, TDF = Town Development Fund, WUSC = water users' and sanitation committee  
Source: Asian Development Bank.

31. The FMA has considered two types of risks: (i) inherent risks, i.e. risks outside the direct control of executing agency and implementing agencies; and (ii) control risks, i.e. risks concerning the internal functioning and control of executing agency and implementing agencies. The key risks have been identified and presented in Table 14.

**Table 14: Financial Management Inherent and Control Risk Assessment**

Risk	Risk Assessment	Risk Mitigation Measures
<b>A. Inherent Risks</b>		
1. Country-specific risks (Nepal)	<p style="text-align: center;"><b>Moderate</b></p> <ul style="list-style-type: none"> <li>Nepal is currently in the process of state restructuring based on the new constitutional provisions.</li> <li>The state restructuring process may cause changes in existing public service delivery mechanism and financial management system of the country.</li> <li>In such situation, the existing linkage and coordination mechanism between local to central and vice-versa may be changed.</li> </ul>	Government of Nepal and ADB should continue the policy dialogues through various occasions including the country partnership strategy and the country operations business plan.
2. Entity-Specific Risks (DWSSM)	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>MOWS is the executing agency, and DWSSM the implementing agency. PMO established in DWSSM is using the accounting system and procedures prescribed by the government.</li> <li>The system followed for earlier and ongoing ADB funded projects will be followed for the project.</li> </ul>	Not applicable
3. Project-specific risks	<p style="text-align: center;"><b>Substantial</b></p>	

Risk	Risk Assessment	Risk Mitigation Measures
	<ul style="list-style-type: none"> <li>The project aims to provide improved water supply and sanitation services.</li> <li>Delays in establishing WUSCs may hamper timely project implementation.</li> </ul>	Timely establishment of WUSCs to be committed by Government of Nepal
<b>Overall Inherent Risk</b>	<b>Moderate</b> While country- and project-specific risks exist, these risks might be mitigated through cordial efforts of the Government of Nepal with support of ADB. Timely establishment of WUSCs with qualified staff particularly needs to be committed by Government of Nepal.	
<b>B. Control Risks – DWSSM and PMO</b>		
1. Implementing entity	<b>Low</b> <ul style="list-style-type: none"> <li>DWSSM will be responsible for the implementation of the project.</li> <li>DWSSM has implemented several ADB funded projects, including the ongoing third small towns project.</li> <li>The existing PMO for the ongoing third small towns project will continue for project implementation.</li> </ul>	Not applicable
2. Flow of Funds	<b>Low</b> <ul style="list-style-type: none"> <li>Government of Nepal will allocate ADB loans and its counterpart funds to PMO and TDF using the established budgetary mechanism.</li> <li>WUSCs will allocate their contribution through advance payment collected from the users.</li> <li>Funds flow for the project will be same as for the ongoing ongoing third small towns project.</li> </ul>	Not applicable
3. Staffing	<b>Low (DWSSM)</b> <ul style="list-style-type: none"> <li>DWSSM accounts section is adequately staffed with competent and experienced personnel.</li> </ul> <b>Significant (PMO)</b> <ul style="list-style-type: none"> <li>PMO, established for the ongoing ongoing third small towns project, will implement the project.</li> <li>Staff transfer every 2 years may hamper the timely implementation of the project.</li> </ul>	Extending full training and capacity building support are required for the newly assigned staff of PMO.
4. Accounting policy and procedures	<b>Low</b> <ul style="list-style-type: none"> <li>DWSSM and PMO follow established policies and procedures defined by the FCGO and the OAG of Nepal.</li> </ul>	Not applicable
5. Internal audit	<b>Low</b> <ul style="list-style-type: none"> <li>Internal audits of DWSSM and project accounts are conducted by DTCO.</li> <li>Internal audits of DWSSM and PWO have been done up to FY2017 without any delays.</li> </ul>	Not applicable
6. External audit (entity)	<b>Low</b> <ul style="list-style-type: none"> <li>External audit of DWSSM is conducted annually by OAG according to Nepalese Auditing Standards.</li> <li>External audit of DWSSM has been done up to FY2017 without any delays.</li> </ul>	Not applicable
7. External audit (project)	<b>Moderate</b>	DWSSM will ensure timely submission of annual external

Risk	Risk Assessment	Risk Mitigation Measures
	<ul style="list-style-type: none"> <li>External audit of project accounts is also conducted annually by OAG according to Nepalese Auditing Standards.</li> <li>External audit of the project account for the ongoing third small town for FY2016 was qualified and FY2015 was unqualified.</li> <li>External audit of the project account for the ongoing third small towns project has been done up to FY2017 with some delays.</li> </ul>	audit of project accounts and will ensure resolution of any audit issues.
8. Reporting and monitoring	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>The existing system functioning at satisfactory level will be followed for the project.</li> </ul>	Not applicable
9. Information system	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>PMO uses a computerized accounting system.</li> </ul>	Not applicable
<b>Overall Control Risk</b>	<b>Moderate</b>	
Some financial management risks are recognized, but all of them are not high. However, extending training to new staff on ADB procedures needs to be ensured by DWSSM and PMO.		
<b>C. Control Risks – TDF</b>		
1. Implementing entity	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>TDF will be responsible for providing loans to WUSCs up to 25% of civil works costs for water supply subprojects.</li> <li>TDF has experience in managing ADB funded small towns projects as a financial intermediary.</li> </ul>	Not applicable
2. Flow of Funds	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>MOF will disburse 25% of civil works costs for water supply subprojects to TDF.</li> <li>Then, TDF will provide this to WUSCs as loan.</li> <li>Funds flow for the project will be same as for the ongoing third small towns project.</li> </ul>	Not applicable
3. Staffing	<p style="text-align: center;"><b>Substantial</b></p> <ul style="list-style-type: none"> <li>A manager responsible for financial management of TDF is currently vacant.</li> <li>Additional staff is required for future projects including UWSSP.</li> </ul>	TDF needs to ensure filling up of vacancies and recruit new staff with qualification.
4. Accounting policy and procedures	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>TDF follows the accounting and financial reporting system of Government of Nepal and ADB.</li> <li>TDF has adequate policies and procedures governed by the TDF Act and Regulation, Financial Management By-laws, Loan and Grant Policy, Employees Service By-laws, and Accounting Manual.</li> </ul>	Not applicable
5. Internal audit	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>The internal audit of TDF is being conducted by qualified and experienced auditors hired by the TDF Board on a contractual basis (completed up to FY2017).</li> </ul>	Not applicable
6. External audit (entity)	<b>Low</b>	Not applicable

Risk	Risk Assessment	Risk Mitigation Measures
	<ul style="list-style-type: none"> <li>External Audits of TDF are conducted by an independent “class A” registered auditor appointed by the TDF Board (completed up to FY2017).</li> </ul>	
7. External audit (project)	<p style="text-align: center;"><b>Moderate</b></p> <ul style="list-style-type: none"> <li>Based on the consolidated external audit of project accounts for FY 2016-2017 for the ongoing third small towns project submitted by DWSSM, it appears that TDF has not complied with the financial covenants.</li> </ul>	TDF to ensure timely resolution of any audit issues and compliance with mitigation measures.
8. Reporting and monitoring	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>TDF prepares financial statement of the entity and project accounts using MBS and spreadsheets. This procedure will be followed for the project.</li> </ul>	Not applicable
9. Information system	<p style="text-align: center;"><b>Low</b></p> <ul style="list-style-type: none"> <li>TDF's MBS and MIS system provide required information for financial reporting as well as management decision.</li> </ul>	Not applicable
<b>Overall Control Risk</b>	<p style="text-align: center;"><b>Moderate</b></p> <p>Some financial management risks are recognized, but most of them are not substantial. Understaffing of accounts section of TDF may delay the timely and effective implementation of the project. Government of Nepal and TDF needs to commit the full staffing of accounts section of TDF to timely implement the project.</p>	

ADB = Asian Development Bank, DTCO = District Treasury Controller Office, DWSSM = Department of Water Supply and Sewerage Management, FCGO = Financial Comptroller General's Office, FY = fiscal year, MBS = Micro Banking Software, MIS = Management Information System, MOWS = Ministry of Water Supply, OAG = Office of the Auditor General, PMO = project management office, TDF = Town Development Fund, WUSC = water users' and sanitation committee.

Source: Asian Development Bank.

## B. Disbursement

### 1. Disbursement Arrangements for ADB Funds

32. The loan proceeds will be disbursed in accordance with the ADB's *Loan Disbursement Handbook* (2017, as amended from time to time), and detailed arrangements agreed upon between the government and the ADB. The PMO will be responsible for: (i) preparing annual contract awards and disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to the ADB through the MOF. Online training for project staff on disbursement policies and procedures is available.<sup>39</sup> Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

33. **Advance fund procedure.** An advance account should be established and maintained by the PMO for the ADB loan. The PMO is responsible for the liquidation and replenishment of the advance fund. The currency of the advance account is the US dollar. The advance account is to be used exclusively for the ADB's share of eligible expenditures. The PMO, who established the advance account in its name, is accountable and responsible for proper use of advances to the advance account.

<sup>39</sup> Disbursement eLearning. [http://wpqr4.adb.org/disbursement\\_elearning](http://wpqr4.adb.org/disbursement_elearning).

34. The total outstanding advance to the advance account should not exceed the estimate of ADB's share of expenditures to be paid through the advance account for the forthcoming 6 months. The PMO may request via the MOF for initial and additional advances to the advance account based on an Estimate of Expenditure Sheet<sup>40</sup> setting out the estimated expenditures to be financed through the account for the forthcoming 6 months. Supporting documents should be submitted to ADB or retained by the PMO in accordance with the ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing the advance account.

35. **Statement of expenditure procedure.**<sup>41</sup> The SOE procedure will be adopted for liquidation and reimbursement of eligible expenditures not exceeding \$100,000 per individual payment. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review mission, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. Reimbursement and liquidation of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

36. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the government, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is stipulated in the *Loan Disbursement Handbook* (2017, as amended from time to time).<sup>42</sup> Individual payments below such amount should be paid (i) by the executing/implementation agency and subsequently claimed to ADB through reimbursement; or (ii) through the advance fund procedure, unless otherwise accepted by ADB. The Borrower should ensure sufficient category and contract balances before requesting disbursements. Use of ADB's Client Portal for Disbursement system is encouraged for submission of withdrawal applications to ADB.

## 2. Disbursement Arrangements for Counterpart Fund

37. The PMO will submit to ADB, annual contract awards and disbursement projections before the start of each calendar year using the ADB's standard form. PMO is responsible for (i) requesting budgetary allocations for counterpart funds for both PMO and RPMOs, (ii) collecting supporting documents for the project, and (iii) preparing and sending withdrawal applications to ADB.

38. The PMO, in consultation with DWSSM, will prepare the annual budget based on the policy of the medium-term expenditure framework of the government. Similarly, the TDF will also prepare the annual budget for loan to WUSCs. The government has generally been practicing pre-financing the ADB share of funds, through budget transfers, for small towns and municipal projects. For reimbursing eligible project expenditure to the government, the reimbursement procedure will be followed. For the project, the District Treasury Control Office of Kathmandu will allocate counterpart funds to PMO and RPMOs through budgetary allocation. For the TDF managed government loan portion, TDF will disburse required amount agreed between DWSSM and TDF for WUSCs to the concerned WUSCs nominated account upon receipt of payment

<sup>40</sup> ADB. 2017. *Loan Disbursement Handbook*. 10B. Manila.

<sup>41</sup> The SOE forms are available in Appendix 9B and 9C of ADB's *Loan Disbursement Handbook* (2015, as amended from time to time).

<sup>42</sup> The minimum value per withdrawal application is \$200,000 equivalent or 1% of the ADB loan amount, whichever is lower.

advice from the PMO for each subproject. WUSCs will arrange their contribution and deposit their share in a separate account for the project.

### **C. Accounting**

39. The PMO and TDF will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. The DWSSM will prepare consolidated project financial statements (PFSs) in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices. PFSs shall include at a minimum, a statement of receipts and payments with accompanying notes and schedules. PFS shall include all expenditure incurred under the loan portion as well as the grant portion of the project. These shall be prepared to ensure maximum alignment to Government of Nepal's Financial Procedures, Act and Rules. Consolidated financial statements refer to the consolidation of individual financial statements of each cost center, i.e. WUSCs of each town and DWSSM. PFS shall include all sources of funds for the project including ADB loan, WUSCs contributions and government's counterpart funding regardless of whether onlent through TDF as a loan or provided as a grant through DWSSM.

### **D. Auditing and Public Disclosure**

40. The DWSSM will cause the detailed consolidated<sup>43</sup> PFSs to be audited in accordance with International Standards on Auditing or International Standards for Supreme Audit Institutions and with the government's audit regulations, by an independent auditor acceptable to ADB. As the constitutionally mandated supreme audit institution, it is expected that the Office of the Auditor General Nepal shall conduct the audit. The PFSs will be submitted in English language to ADB no later than 6 months from the end of the fiscal year by DWSSM.

41. TDF will maintain separate accounts and records for the project and prepare annual statement of utilization of Loan proceeds in accordance with financial reporting standards acceptable to ADB which will be audited annually by an independent auditor acceptable to ADB, in accordance with auditing standards acceptable to ADB. Audited statements of utilization of loan proceeds together with the auditor's report and a management letter will be furnished to ADB in English language, no later than 6 months after the close of the fiscal year.

42. The audit report for the project financial statements will include a management letter, auditor's opinions, and a separate audit opinion on the advance fund, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting standards; (ii) whether the proceeds of the loan were used only for the purpose(s) of the project; and (iii) whether the borrower or executing agency was in compliance with the financial covenants contained in the legal agreements (where applicable).

43. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

44. The government, DWSSM, and TDF have been made aware of the ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited

---

<sup>43</sup> Consolidated refers to activities across all subprojects.

project financial statements.<sup>44</sup> ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. ADB reserves the right to verify the project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

45. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by the ADB's Public Communications Policy 2011.<sup>45</sup> After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on the ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.<sup>46</sup>

---

<sup>44</sup> ADB's approach and procedures regarding delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advanced accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed;
- (ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advanced accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months; and
- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

<sup>45</sup> Public Communications Policy: <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

<sup>46</sup> This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraph 97(iv) and/or 97(v). Manila.

## VI. PROCUREMENT AND CONSULTING SERVICES

### A. Advance Contracting and Retroactive Financing

46. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, executing agency, and implementing agency, have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

47. **Advance contracting.** Advance contracting will apply for (i) civil works, (ii) equipment and materials, and (iii) recruitment of consultants. Advance contracting that may be completed and concluded includes (i) pre-qualification (if applicable) of contractors, preparation of procurement documents, procurement, bid evaluation and award for civil works packages; (ii) preparation of procurement documents to procure materials and equipment, procurement and bid evaluation, and award; and (iii) recruitment of consultants.

48. **Retroactive financing.** Retroactive financing refers to ADB's financing of project expenditures incurred and paid for by the borrower prior to the effectiveness of the loan agreement but not earlier than 12 months prior to the signing of the loan agreement. Except as otherwise agreed with ADB, the expenditures incurred for civil works, equipment and materials, and consulting services that are eligible for advance contracting, and project management and implementation expenses of PMO will be eligible for retroactive financing of up to 20% of the ADB loan amount.

### B. Procurement of Goods, Works, and Consulting Services

49. All procurement (including consulting services)<sup>47</sup> of goods and works will follow ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time).

50. Open competitive bidding (OCB) (international advertisement) procedures will be used for any works contract estimated to cost \$5 million or higher, and any goods contract valued at \$2 million or higher. Domestic preference may apply to civil works and goods packages. For any works contract estimated to cost less than \$5 million and any goods contract estimated to cost less than \$2 million OCB (national advertisement) procedures will be used. Request for quotations will be used for procurement of works and goods worth less than \$100,000. Community participation<sup>48</sup> will be used for very small contracts to be carried out by the local community and contractors or WUA for works such as fencing, preparation of drying beds for sludge, etc. The Government may opt for the e-bidding system developed by the public procurement monitoring office in work contracts.

51. Before the start of any procurement, ADB and the government will review the public procurement laws of the central and state governments to ensure consistency with ADB Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). The first OCB (national advertisement) contract

---

<sup>47</sup> Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation>.

<sup>48</sup> ADB. 2011. Implementing Small Projects with Community Participation. *Project Administration Instructions*. PAI 5.10. Manila. Community participation will be implemented in accordance with the PAI.



and shopping for works and goods under the project will be subject to prior review by ADB. Procurement capacity assessment of the DWSSM indicates that it has adequate human and physical resources in carrying out procurement works by administrating about nine ADB-funded projects in the past.

52. An estimated 2,001 person-months of national consulting services are required to (i) facilitate design, supervision, and management of subprojects; (ii) support project management and quality assurance; (iii) strengthen institutional capacity; and (iv) facilitate gender development and poverty alleviation. Four teams of consultants will be recruited through firms using the quality- and cost-based method of selection with a quality-cost ratio of 90:10 to ensure engagement of highly qualified and experienced team of consultants. A pool of individual consultants will also be engaged to support PMO, DWSSM, and TDF.

### **C. Procurement Plan**

53. The procurement plan (Appendix 3) is prepared in accordance with ADB's country-specific template. The procurement plan indicates threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines. The procurement plan provides: (i) a list of goods, works, and consulting services contract packages that will be processed over the next 18 months with milestone dates for activities; (ii) the proposed methods for procurement of such contracts that are permitted under the loan agreement; and (iii) the related ADB review procedures. The procurement plan will be updated by the PMO for approval by ADB, at least annually, and more frequently if necessary, and should cover the next 18 months of procurement activity. A delay in loan effectiveness, other start-up delays, and delays during implementation will require an unscheduled procurement plan update. ADB will review each updated procurement plan prior to its publication.

### **D. Consultant's Terms of Reference**

54. An outline terms of reference for all consultant contracts in included in Appendix 4.

## VII. SAFEGUARDS

55. **Environment Safeguards.** The project is classified as category B for environmental safeguards as per ADB Safeguard Policy Statement (SPS), 2009. Initial environmental examination (IEE) conducted for five sample subprojects in the municipalities of Charikot, Ilam, Siddhanath Baijanath, and Kathariya demonstrate proposed subprojects are unlikely to have any significant or irreversible impacts. Most of the potential impacts are due to construction in developed areas and are temporary in nature and can be mitigated with simple and proven mitigation measures. No category A type of works (with significant irreversible, diverse or unprecedented impacts) are anticipated. Subprojects projected to have potentially significant adverse environmental impacts (categorized as A) will not be considered for implementation under the project.

56. **Environmental Assessment of Subprojects.** An environmental assessment and review framework (EARF) has been developed in accordance with ADB SPS, 2009 and Government of Nepal environmental laws and regulations to guide subproject selection, screening and categorization, environmental assessment, and preparation and implementation of safeguard plans of subprojects and to facilitate compliance with the requirements specified in ADB SPS, 2009.<sup>49</sup> The EARF (i) describes the proposed subprojects including safeguards criteria that are to be used in selecting subprojects and/or components; (ii) explains the general anticipated environmental impacts of the subprojects; (iii) specifies the requirements in subproject screening and categorization, assessment, and planning, (iv) arrangements for meaningful consultation with affected person and other stakeholders and information disclosure requirements; (v) PMO capacity to implement national laws and ADB's requirements and needs for capacity building; (vi) specifies implementation procedures and institutional arrangements; (vii) specifies monitoring and reporting requirements; and (viii) describes the responsibilities of PMO and of ADB in relation to the preparation, implementation, and progress review of environment safeguards compliance of the project. The EARF will be reviewed regularly and, if necessary, updated during implementation, if indicated by unanticipated new types of impacts (review of applicability and relevance) or if there is any change in legal and regulatory framework. None of the provisions of EARF will be relaxed or lowered in the subsequent revisions and updates. The most important compliance requirements are:

- (i) compliance with the exclusion and subproject selection criteria;
- (ii) meeting meaningful consultation and disclosure requirements;
- (iv) ADB approval of IEE prior to invitation of bids; and
- (v) obtaining all necessary regulatory clearances and approvals prior to award of contract.

57. **Initial Environmental Examinations and Environmental Management Plans.** The IEEs with environmental management plans (EMPs) will be prepared for each subproject in accordance with ADB SPS, 2009 and EARF. The IEEs will also include environmental compliance audit of existing facilities that will be rehabilitated or expanded under the project and due diligence

---

<sup>49</sup> The EARF is prepared based on (i) ADB's SPS, 2009, and (ii) national environmental acts, rules, regulations, and standards. All environmental assessment is required to follow the procedures outlined in this EARF. Any component included in the project shall comply with Government of Nepal environmental requirements and ADB's SPS, 2009. The EARF ensures that all subprojects under the project, throughout the entirety of their project cycle, will not deteriorate or interfere with the ecological sensitivity of a subproject area, but rather improve environmental quality.

of associated facilities as defined in ADB SPS.<sup>50</sup> The IEEs will form part of the bid and contract document. No works can be commenced until final IEEs<sup>51</sup> are approved by ADB, and if required, will be further updated for ADB's review during the implementation. In event of unanticipated impact including a design change during project implementation or in event of a non-compliance, the IEE will be updated to include corrective actions, associated cost and schedule. All IEEs will be disclosed on ADB and executing and implementing agencies websites.

**58. Environmental Audit of Existing Facilities.** For subprojects involving facilities that already exist or are under construction or proposed, environmental compliance audit will be conducted. The environmental audit will include on-site assessment to identify past or present environmental concerns, whether actions were in accordance with ADB's safeguard principles and requirements for executing and implementing agencies and identify and plan appropriate measures to address outstanding compliance issues. A corrective action plan in the IEEs will be agreed on by ADB and PMO. The plan will define the necessary remedial actions, the budget for such actions, and the timeframe for resolution of non-compliance. The environmental audit report (including the corrective action plan, if any) will be made available to the public in accordance with the information disclosure requirements of ADB SPS, 2009. If a subproject involves an upgrade or expansion of existing facilities that has potential impacts on the environment, the requirements for environmental assessments and planning specified in the EARF will apply in addition to compliance audit.

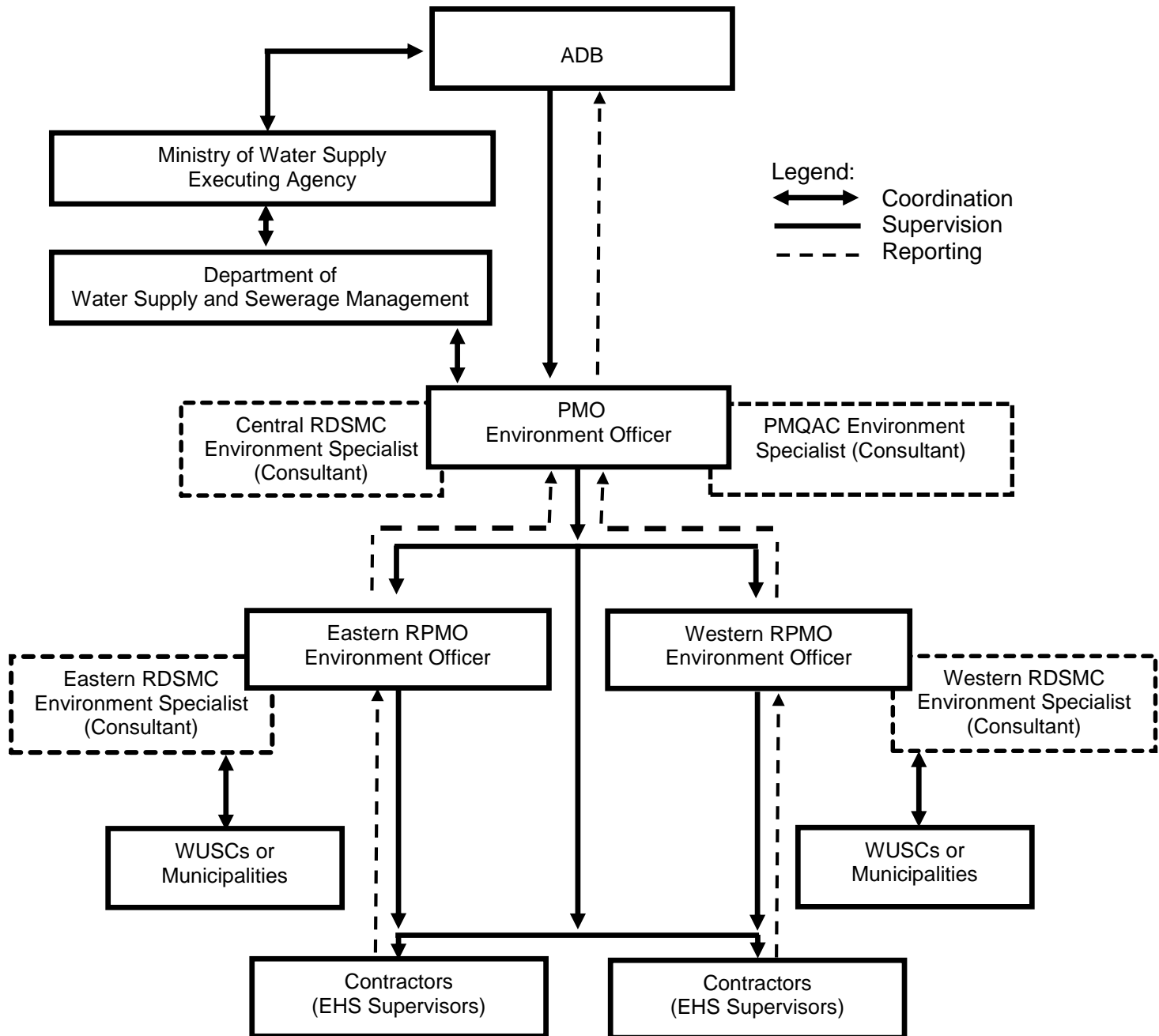
---

<sup>50</sup> ADB SPS defines associated facilities as not funded as part of the project (funding may be provided separately by the borrower/client or by third parties), and whose viability and existence depend exclusively on the project and whose goods or services are essential for successful operation of the project.

<sup>51</sup> The final IEEs will include site-specific EMPs (SEMP) and monitoring program to be implemented by subproject contractors.

59. Safeguards Institutional Arrangements.

Figure 5: Safeguards Implementation Arrangement



ADB = Asian Development Bank; EHS = environmental, health and safety; PMO = project management office; PMQAC = project management and quality assurance consultant; RDSMC = regional design, supervision, and management consultant; RPMO = regional project management office; WUSC = water users' and sanitation committee.  
 Source: Asian Development Bank.

60. **Project Management Office.** A project officer (environment) will be engaged in PMO to ensure implementation of environmental safeguards. He/she will be provided with necessary consultant support, and capacity development and training. The responsibilities of the environment officer are:

- (i) review and confirm existing IEEs and EMPs are updated based on detailed designs, that new IEEs/EMPs prepared by DSMCs comply to exclusion criteria and project selection guidelines as stipulated in the EARF and government rules; and recommend for approval to PMO;
- (ii) approve subproject environmental category;
- (iii) ensure that EMPs are included in bidding documents and civil works contracts;
- (iv) provide oversight on environmental management aspects of subprojects and ensure EMPs are implemented by RPMOs and contractors;
- (v) establish a system to monitor environmental safeguards of the project including monitoring the indicators set out in the monitoring plan of the EMP;
- (vi) facilitate and confirm overall compliance with all government rules and regulations regarding site and environmental clearances as well as any other environmental requirements as relevant;
- (vii) supervise and provide guidance to the RPMOs to properly carry out the environmental monitoring and assessments as per the EARF;
- (viii) review, monitor and evaluate effectiveness with which the EMPs are implemented, and recommend necessary corrective actions to be taken;
- (ix) consolidate monthly environmental monitoring reports from RPMOs and submit semi-annual monitoring reports to ADB;
- (x) ensure timely disclosure of final IEEs/EMPs in project locations and in a form accessible to the public;
- (xi) assist with ongoing meaningful consultation and assist in setting up of GRM in respect environment concerns;
- (xii) address any grievances brought about through the grievance redress mechanism (GRM) in a timely manner as per the IEEs (GRM is in Appendix 5);
- (xiii) undertake regular review of safeguards-related loan covenants, and the compliance during program implementation; and
- (xiv) organize periodic capacity building and training programs on safeguards for project stakeholders, PMO, RPMOs, and WUAs.

61. **Regional Project Management Offices.** The environmental officer assigned by DWSSM to the RPMOs will receive support from (i) the PMO environmental officer, (ii) environmental specialist from PMQAC; and (iii) the environmental specialist and EMP monitors of the regional DSMCs to carry out the following:

- (i) prepare new IEEs and EMPs in accordance with the EARF and government rules;
- (ii) include EMPs in bidding documents and civil works contracts;
- (iii) comply with all government rules and regulations;
- (iv) take necessary action for obtaining rights of way;
- (v) oversee implementation of EMPs including environmental monitoring by contractors;
- (vi) take corrective actions when necessary to ensure no environmental impacts;
- (vii) submit monthly environmental monitoring reports to PMO;
- (viii) assist with ongoing meaningful consultation and assist in setting up of GRM in respect environment concerns; and
- (ix) address any grievances brought about through the GRM in a timely manner as per the IEEs.

62. **Project Management and Quality Assurance Consultant.** The project management and quality assurance consultant (PMQAC) will provide support to the PMO in the following areas:

- (i) ensure that the quality of the designs and construction of all WSS components implemented under the project are to the required standards; and
- (ii) assist the PMO with the overall planning, implementation and monitoring of the project during all stages of implementation including adherence to all environmental and social safeguards' requirements.

63. **Regional Design, Supervision, and Management Consultants.** The regional DSMCs will provide support to the RPMOs in the following areas:

- (i) prepare quality feasibility studies, detailed engineering designs, safeguards documents and bid documents;
- (ii) provide effective construction supervision and contract management of all WSS components implemented under the project in its region;
- (iii) assist the RPMOs with the overall planning, implementation and monitoring of each subproject during all stages of implementation including adherence to all environmental and social safeguards requirements;
- (iv) work closely with the WUSCs, respective project municipalities and communities to ensure that the citizens are aware of project benefits and their responsibilities; and
- (v) ensure that poor and vulnerable groups will benefit equally from the project.

64. **Civil works contracts and contractors.** The IEEs and EMPs are to be included in bidding and contract documents and verified by the RPMOs. The contractor will be required to designate an environment, health and safety supervisor to ensure implementation of EMP during civil works. Contractors are to carry out all environmental mitigation and monitoring measures outlined in their contract. The contractor will be required to submit to RPMO, for review and approval, a site-specific environmental management plan (SEMP) including (i) proposed sites/locations for construction work camps, storage areas, hauling roads, lay down areas, disposal areas for solid and hazardous wastes; (ii) specific mitigation measures following the approved EMP; (iii) monitoring program as per SEMP; and (iv) budget for SEMP implementation. No works can commence prior to approval of SEMP. The contractor will be required to undertake day to day monitoring and report to the respective RPMO and DSMC.

65. A copy of the EMP/approved SEMP will be kept on site during the construction and O&M period always. Non-compliance with, or any deviation from, the conditions set out in the EMP/SEMP constitutes a failure in compliance and will require corrective actions. The EARF and IEEs specify responsibilities in EMP implementation during design, construction and O&M phases.

66. The PMO and RPMOs will ensure that bidding and contract documents include specific provisions requiring contractors to comply with: (i) all applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities; (b) equal pay for equal work of equal value regardless of gender, ethnicity, or caste; and (c) elimination of forced labor; and with (ii) the requirement to disseminate information on sexually transmitted diseases, including HIV/AIDS, to employees and local communities surrounding the project sites.

67. **Social Safeguards.** One draft resettlement plan and four draft social safeguard due diligence reports (DDR)s are prepared for the sample subprojects, in accordance with ADB's SPS,

2009, and government policies. The draft documents will be finalized and submitted to ADB for review, approval, and disclosure following the completion of final detailed design. A resettlement framework, and indigenous people planning framework (IPPF) were prepared to guide the preparation and assessment of subprojects identified after ADB Board approval. The following implementation arrangement will be established to ensure implementation of social safeguards compliance during project implementation.

68. **Project Management Office.** The involuntary resettlement safeguards officer of the PMO will receive support from the social safeguards expert of the PMQAC to conduct the following activities:

- (i) ensure that the resettlement framework/IPPF provisions are adhered to and the resettlement plans are updated based on detailed designs, and that new resettlement plan or DDRs, as required, are prepared in accordance with the resettlement framework, IPPF and government policies;
- (ii) review, approve, resettlement plans or DDRs for new subprojects with support from the social safeguards expert of PMO;
- (iii) provide oversight on social safeguards policy compliance of subprojects and ensure timely implementation of resettlement plans by regional project management offices (eastern, central, and western RPMO) prior to the start of civil works;
- (iv) supervise and provide guidance to the RPMOs to properly carry out the monitoring and assessments as per the resettlement framework;
- (v) consolidate quarterly social monitoring reports from RPMOs and submit semi-annual monitoring reports to ADB. The monitoring reports should record the progress of resettlement activities and any compliance issues, grievances, corrective actions taken, follow-up actions required and status of compliance with relevant loan covenants;
- (vi) ensure timely disclosure of final resettlement plans in project locations and in a form accessible to the public; and
- (vii) ensure any grievances brought about through the GRM are addressed in a timely manner.

69. Indigenous peoples safeguard officer will be recruited in the PMO, with the specific responsibility of overseeing, monitoring and reporting on indigenous peoples safeguards. The indigenous peoples safeguard officer of the PMO will receive support from the social safeguards expert of the PMQAC to conduct the following activities:

- (i) ensure that the IPPF provisions are adhered to and the indigenous people plans (IPPs) are updated based on detailed designs, and that new IPPs or social safeguards DDRs, as required, are prepared in accordance with the IPPF and government policies;
- (ii) review, approve, IPPs or social safeguards DDRs for new subprojects with support from the social safeguards expert of PMO;
- (iii) provide oversight on indigenous peoples safeguards policy compliance of subprojects and ensure timely implementation of IPPs by regional project management offices (Eastern, Central, and Western RPMO) prior to the start of civil works;
- (iv) supervise and provide guidance to the RPMOs to properly carry out the monitoring and assessments as per the IPPF;
- (v) consolidate quarterly social monitoring reports from RPMOs on indigenous peoples safeguards and consolidate inputs on indigenous peoples safeguards for the semi-annual monitoring reports to ADB. The monitoring reports should record

the progress of IPP activities and any compliance issues, grievances, corrective actions taken, follow-up actions required and status of compliance with relevant loan covenants;

- (vi) ensure timely disclosure of final IPPs in project locations and in a form accessible to the public; and
- (vii) ensure any grievances brought about through the GRM are addressed in a timely manner.

70. **Regional Project Management Offices.** The social development officers appointed and deputed by DWSSM to the RPMOs will receive support from; (i) the PMO social safeguards officer; and (ii) the social specialist and the social mobilizers of the regional DSMC teams to carry out the following:

- (i) review and update prepared draft resettlement plans/IPP upon completion of detail design;
- (ii) screen impacts and prepare new resettlement plans and IPPs in accordance with resettlement framework/IPPF and government rules;
- (iii) engage in ongoing meaningful consultations with stakeholders and affected persons particularly through implementation of the consultation and participation;
- (iv) ensure provision of timely payments to the affected persons by the WUA before displacement/impact occurs in project sites ready for construction;
- (v) oversee implementation of resettlement plans and/or IPPs by WUAs;
- (vi) advise and take corrective actions when necessary to minimize/avoid social safeguards impacts;
- (vii) submit monthly social safeguards monitoring reports to PMO; and
- (viii) assist in establishment of grievance redress committee (GRC) at municipality level and assist in redressal of grievances brought about through the GRM in a timely manner.

71. **Safeguards compliance during construction.** The EMPs for all civil works will be included in bidding and contract documents, to be reviewed and verified by the PMO and RPMOs. The contractor will be required to designate an environment supervisor to ensure implementation of EMP during civil works. Contractors are to carry out all environmental mitigation and monitoring measures outlined in their contract. The government will ensure that bidding and contract documents include specific provisions requiring contractors to comply with all: (i) applicable labor laws and core labor standards on (a) prohibition of child labor as defined in national legislation for construction and maintenance activities, on (b) equal pay for equal work of equal value regardless of gender, ethnicity or caste, and on (c) elimination of forced labor; and (ii) the requirement to disseminate information on sexually transmitted diseases including HIV/AIDS to employees and local communities surrounding the project sites. Contractors will only start the civil works activities in the section/subproject sites that have completed resettlement plan/IPP and after receiving clearance from the WUA or municipalities and endorsed by RPMO's social development officer.

72. **Capacity Building.** The PMQAC safeguards experts (environmental and social) will be responsible for training the (i) PMO's safeguards officers (environmental and social), and (ii) RPMOs' engineers and social development officers. Training modules will need to cover safeguards awareness and management in accordance with both ADB and government requirements as specified below:

- 1. Environmental Safeguards
  - (i) sensitization on ADB's policies and guidelines on environment including consultation, GRM and accountability mechanism;



- (ii) introduction to environment and environmental considerations in water supply and wastewater projects;
- (iii) review of IEEs and integration into the project detailed design;
- (iv) improved coordination within nodal departments; and
- (v) monitoring and reporting system. The contractors will be required to conduct environmental awareness and orientation of workers prior to deployment to work sites.

**2. Social Safeguards**

- (i) sensitization on ADB's policies on involuntary resettlement and indigenous people;
- (ii) introduction to social safeguards assessment and document requirements;
- (iii) consultation and participations requirements;
- (iv) project GRM and ADB's Accountability Mechanism; and
- (v) monitoring and reporting system.

73. **Prohibited investment activities.** Pursuant to ADB's SPS (2009), ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the ADB SPS (2009).<sup>52</sup>

---

<sup>52</sup> Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

### VIII. GENDER AND SOCIAL DIMENSIONS

74. The project approaches and interventions directly focus on gender and social inclusion through providing sustainable and improved WSS services. The project ensures access to 24/7 piped water supply and improved sanitation infrastructure in the project municipalities. Inclusion and coverage of all poor and vulnerable households of the project municipalities is ensured through subsidized piped water supply connection and output-based aid (OBA) provision for sanitation infrastructure. The improvement in WSS infrastructures with individual water connections and toilets is going to benefit the project beneficiaries, especially women by decreasing average time per day spent in collecting and managing water and better sanitation facility in the coverage areas. The framework for inclusion of the poor and vulnerable (Appendix 6) outlines the strategy to ensure provisions of WSS services for poor and vulnerable households. The full subsidy for water supply connections to poor is disbursed upfront and a 90% subsidy for individual toilets through OBA is disbursed after completion of toilet construction by beneficiary. The subsidies ensure affordability and access to better service, while a lifeline tariff subsidy for water supply will ensure continuous affordability of water user charges by poor households. The project also benefits poor, women and vulnerable people through ensuring their participation in project related consultations, trainings, skilled and unskilled work generation by project and in awareness campaigns on water conservation and sustainable hygiene behavior practices. Women empowerment is directly targeted through leadership training for at least two women WUSC members of each WUSC and skill development training to at least one woman from each project municipality. The WASH trainings, including girls' menstrual hygiene awareness are focused for public schools.

75. The project will collect data disaggregated by sex, ethnicity and other social and economic indicators as needed to identify poor and vulnerable and socially excluded households to establish baseline figures through socio-economic surveys in the project municipalities. The baseline figures will be used to monitor social and gender results during the project implementation following with mid-term and end-line surveys. The project includes a gender equality and social inclusion (GESI) Action Plan (Table 15) with specific targets for project activities, thus is expected to bring significant benefits for women, poor and vulnerable. The PMO, RPMOs supported by PMQAC and regional DSMCs will ensure implementation of GESI action plan.

76. The National Water Supply and Sanitation Training Center (NWSSTC) within DWSSM is responsible for monitoring GESI mainstreaming in DWSSM operations. The center supervises and monitors implementation of GESI action plan of different projects and coordinates with MOWS for technical advice. The DWSSM reports on GESI progress to MOWS in its regular trimester progress report. A monthly meeting is held between the responsible GESI units within MOWS and DWSSM. This policy and institutional context operational at present is expected change with government's current restructuring process, thus any necessary changes to ensure implementation of the GESI action plan will be closely monitored by PMO and reported quarterly project reports. In case required, adjustments will be discussed and agreed between PMO and ADB.

**Table 15: Gender Equality and Social Inclusion Action Plan**

Activities	Indicators and Targets	Responsibility	Time
<b>Output 1: Water supply and sanitation infrastructure in project municipalities improved</b>			
1.1 Ensure participation of women, poor and vulnerable in project orientation and consultation sessions	(i) Local communities (Target: 33% women and 25% socially excluded and vulnerable groups) <sup>a</sup> participate in project orientation and consultation sessions (including consultations on social and environmental safeguards, resettlement, connection charges, tariffs setting and subsidies for poor households (Target:1 activity per project municipality in 20 municipalities within 2 years, total of 20 sessions)	RPMOs supported by RDSMCs	Years 1–2
1.2 Provide subsidized piped water connection and toilet facilities to poor and vulnerable households including WHHs in project coverage areas	(i) Poverty, caste and ethnicity, households headship, and vulnerable households identified in all project municipalities through socio-economic survey and database maintained with sex and caste and ethnicity-disaggregated data (ii) 10,000 poor and vulnerable households for subsidized piped water connection include 100% poor and vulnerable WHHs (iii) Average time per day spent per woman in water collection reduced to zero in project coverage areas (Baseline: to be established) (iv) 8,000 toilets constructed through output-based aid for poor and vulnerable, include 100% poor and vulnerable WHHs (v) 20 sex segregated public toilets with adequate space (vi) WASH facilities and design friendly to differently-abled people built in public places in project municipalities	RPMOs and PMO supported by RDSMC, PMQAC, WUSCs and municipalities	Years 2–4
1.3 Enjoin contractors to employ poor, women, representative from vulnerable groups, affected persons, and indigenous peoples for skilled and unskilled work, and enforce national CLS	(i) Orientation to all contractors including laborers on national CLS, gender equality in wages, gender-based violence (including sexual exploitation and human trafficking), occupational health and safety standards (Target: 1 orientation per subproject, in total: 22 orientations) (ii) At least 15% of total workers employed by contractors are women, receiving equal pay as men for work of equal value (iii) Sex- and caste and ethnicity-disaggregated record of labor and wages received, maintained by contractors and verified by RDSMC	RPMOs and PMO, RDSMCs, Contractors WUSCs and municipalities	Years 1–5
<b>Output 2: Institutional and community capacities strengthened</b>			
2.1 WASH plans including priority investments for municipalities prepared	(i) WASH plans and priority investments for 20 project municipalities are GESI-inclusive by integrating GESI approaches in all components, interventions with adequate GESI targets	RPMOs and PMO, RDSMCs	Years 1-3
2.2 Inclusive WUSCs formed	(i) WUSC by-laws provision 33% representation of women, and inclusion of socially excluded and vulnerable groups	RPMOs and PMO, RDSMCs	Years 1-3

Activities	Indicators and Targets	Responsibility	Time
	(ii) At least 33% women in WUSC with one woman in a key position (iii) Representation from socially excluded and vulnerable groups in WUSC ensured		
2.3 Climate-resilient WSS subprojects for future investments prepared	(i) 15 WSS subprojects for future investment integrate GESI approaches	RPMOs and PMO, RDSMCs	Years 1-5
2.4 Conduct public awareness campaigns on water conservation and sustainable hygiene behavior practices and trainings on GESI in WASH and leadership	(i) At least 100,000 people are reached through awareness campaign on water conservation and sustainable hygiene behavior practices (Target: 50% women participation) (ii) At least 2 women members of each WUSC trained on leadership and GESI in WASH (iii) WASH training including girl's menstrual health organized in public primary and secondary schools (Target: 2 schools per municipality, 40 sessions)	RPMOs, municipalities supported by RDSMCs	Year 2-4
2.5 Skill development training and employment opportunity for trainees	(i) At least 1 woman and 1 representative from poor and vulnerable households in each project municipality enrolled for plumbing training in CTEVT, got opportunity to skill test level-I of NSTB or CTEVT and passed skill test-I to be available in job market (Target: 2 trainees [1 woman and 1 from poor and vulnerable households] per municipality, in total: 40 trainees) (ii) At least 1 trained woman or representative from poor and vulnerable households in each project municipality gets opportunity to apprenticeship and employment after project completion especially in pipe joining, fixtures fitting and water operation in subprojects (iii) At least 66 female staff of DWSSM, TDF, project WUSCs and municipalities, participate in training on smart utility management and leadership	RPMOs, RDSMCs, WUSCs	Year 2-5
2.6 Monitor and report progress on implementation of GESI action plan during project implementation	(i) Quarterly progress reports submitted with updated information on implemented GESI action plan (sex and caste and ethnicity data disaggregated on participation of implemented activities)	PMO, RPMOs, RDSMCs	Year 1-5

CLS = core labor standards, CTEVT = Council of Technical Education and Vocational Training, DWSSM= Department for Water Supply and Sewerage Management, GESI = gender equality and social inclusion, NSTB = National Skill Testing Board, PMO = project management office, PMQAC = project management and quality assurance consultant, RDSMC = regional design, supervision and management consultant, RPMO = regional project management office, TDF = Town Development Fund, WASH = water, sanitation and hygiene, WHH = women headed household, WUSC = water users' and sanitation committee.

<sup>a</sup> Vulnerable people are defined as those suffering the effects of marginalization within or outside their community due to their ethnicity, gender, caste, religion, disability, health, education, or socioeconomic status. For the project, this specifically includes Dalit, disabled, disaster-affected, marginalized, and endangered indigenous groups that are politically, socially, or economically excluded. Socially excluded groups are Dalits, Adivasi Janajati, other backward castes, Madhesi, Muslims, sexual and gender minorities, persons with disabilities and people living in remote areas.

## IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

### A. Project Design and Monitoring Framework

77. The project design and monitoring framework (DMF) is shown below.

#### Design and Monitoring Framework

<b>Impact the Project is Aligned with</b>			
Quality of life for urban populations, including the poor and marginalized, improved through the provision of sustainable WSS services (Urban Water Supply and Sanitation Policy) <sup>a</sup>			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<p><b>Outcome</b></p> <p>Inclusive and sustainable access to WSS services in project municipalities achieved</p>	<p>By 2024:</p> <p>a. 320,000 people (including all poor and vulnerable)<sup>b</sup> in project municipalities have access to 24/7 piped water supply at 100 liters per capita per day, meeting the national drinking water quality standards (2018 baseline: 0)</p> <p>b. 64,000 people (including all poor and vulnerable) in project municipalities have access to improved sanitation facilities (2018 baseline: 0)</p> <p>c. WSS facilities operate at full capacity as designed (2018 baseline: none exist)</p> <p>d. Operation and maintenance cost fully recovered from water tariff (2018 baseline: none exist)</p> <p>e. Average time per day spent by women on water collection reduced to zero in project coverage areas (2018 baseline: to be established)<sup>c</sup></p>	<p>For all indicators: National census, and annual and quarterly progress reports by PMO and WUAs</p> <p>Periodic project surveys (including baseline and end-line surveys)</p> <p>Annual TDF reports</p>	<p>Climate change and extreme events will undermine the smooth operation of facilities</p>
<p><b>Outputs</b></p> <p>1. WSS infrastructure in project municipalities improved</p>	<p>In project towns by 2023:</p> <p>1a. Water supply infrastructure established or rehabilitated in 20 project municipalities:</p> <p>(i) 1,600 kilometers of water supply pipes installed or rehabilitated (2018 baseline: 0)</p> <p>(ii) 15 water treatment plants, with an estimated capacity of at least 0.6 million liters per day each, constructed (2018 baseline: 0)</p> <p>(iii) 66,000 connections for households to piped water supply, with subsidized connections for 8,000 poor and 2,000 vulnerable households (including 100% poor households headed by women) (2018 baseline: 0)</p>	<p>For all indicators: Annual and quarterly project progress reports by PMO and WUAs</p> <p>Periodic reports by the Ministry of Water Supply</p>	<p>Changes in government structures may jeopardize the institutional arrangements and project implementation</p>

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
2. Institutional and community capacities strengthened	<p>(iv) Climate and disaster risks<sup>d</sup> factored in design of subprojects, as necessary (2018 baseline: not applicable)</p> <p>1b. Sanitation infrastructure improved in 20 project municipalities:</p> <p>(i) 8,000 toilets constructed through output-based aid for poor and vulnerable households (2018 baseline: 0)</p> <p>(ii) 20 public toilets that are suitable for both genders as well as the disabled constructed, with septic tanks (2018 baseline: 0)</p> <p>(iii) Two decentralized wastewater treatment plants constructed and operational (2018 baseline: 0)</p> <p>(iv) 30 kilometers of stormwater drainage constructed (2018 baseline: 0)</p> <p>(v) Climate and disaster risks<sup>d</sup> factored in design of subprojects, as necessary (2018 baseline: not applicable)</p> <p>By 2023:</p> <p>2a. WASH plans, including priority investments for 20 project municipalities, prepared and approved by the respective municipality (2018 baseline: 0)</p> <p>2b. 20 WUAs registered and 20 WUSCs formed with at least 33% women members and at least one woman in a key post (2018 baseline: 0)</p> <p>2c. Business plans and tariff guidelines prepared for project WUAs and municipalities, assisted by the Institutional Support and Service Advisory Unit and TDF (2018 baseline: 0)</p> <p>2d. At least 15 climate-resilient subprojects for future investments prepared (2018 baseline: 0)</p> <p>2e. At least 200 staff (66 of them women) of DWSSM, TDF, project WUAs, and project municipalities reported stronger technical knowledge of smart utility management and leadership (2018 baseline: to be established)<sup>c</sup></p> <p>2f. At least 100,000 people (at least 50% women) covered by awareness campaign on</p>	<p>For all indicators: Quarterly project progress reports by PMO</p> <p>Annual TDF reports</p> <p>Sample project surveys</p>	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	water conservation practices and sustainable hygiene behavior, and 80% reported greater awareness (2018 baseline: not applicable)		
<b>Key Activities with Milestones</b>			
<b>1. WSS infrastructure in project municipalities improved</b>			
1.1 Finalize detailed engineering designs and issue bid documents for eight subprojects (Q2 2018)			
1.2 Conduct technical and socioeconomic surveys for all subprojects (Q1 2019)			
1.3 Finalize detailed engineering designs and issue bid documents for all other subprojects (Q4 2019)			
1.4 Award all civil work contracts (Q2 2020)			
1.5 Complete construction (Q2 2022)			
<b>2. Institutional and community capacities strengthened</b>			
2.1 Review and update WUAs' by-laws (Q2 2019)			
2.2 Approve WASH plans in all project municipalities (Q4 2019)			
2.3 Develop and adopt business plans and tariff guidelines for all WUAs (Q1 2020)			
2.4 Identify future investment subprojects and finalize detailed engineering designs (Q3 2022)			
2.5 Complete all training activities for project-related staff (including women staff) in the DWSSM, TDF, project WUSCs, and project municipalities (Q2 2023)			
<b>Project Management Activities</b>			
Recruit all consultants under the project			
Ensure that the PMO has sufficient staff with complementary skills			
Establish and implement a project performance management system			
<b>Inputs</b>			
Asian Development Bank: \$130.0 million (loan)			
Government of Nepal: \$39.5 million			
Beneficiaries: \$9.0 million			
<b>Assumptions for Partner Financing</b>			
Not applicable			

DWSSM = Department of Water Supply and Sewerage Management; PMO = project management office; Q = quarter; TDF = Town Development Fund; WASH = water, sanitation, and hygiene; WSS = water supply and sanitation; WUA = water users' association; WUSC = water users' and sanitation committee.

<sup>a</sup> Government of Nepal. 2009. *Urban Water Supply and Sanitation Policy*. Kathmandu.

<sup>b</sup> Vulnerable people are defined as those suffering the effects of marginalization within or outside their community because of their ethnicity, gender, caste, religion, disability, health, education, or socioeconomic status. For the project, this specifically includes Dalit, disabled, disaster-affected, marginalized, and endangered indigenous groups that are politically, socially, or economically excluded.

<sup>c</sup> Expected to be determined by the end of the first year of project implementation.

<sup>d</sup> Climate and disaster risks include seismic events.

Source: Asian Development Bank.

## B. Monitoring

78. **Project performance monitoring.** Within 6 months of loan effectiveness, the PMO will establish a project performance management system using the targets, indicators, assumptions, and risks in the DMF. The PMO with the support of PMQAC will incorporate the DMF into a monitoring and evaluation (M&E) framework considering other relevant monitoring parameters in addition to those included in the DMF. The baseline data corresponding to indicators and targets set out in the DMF and M&E framework will be gathered by PMO, with support from RPMO and regional DSMCs during detailed design stage of subproject, disaggregated by income levels, sex, caste, and ethnicity. Based on the M&E framework which incorporates the initial baseline data, the PMO will conduct annual monitoring using the same indicators and submit the reports to ADB throughout project implementation. Results of a comprehensive completion survey will be included in the project completion report. PMO's quarterly reports will also provide information

necessary to update ADB's project performance reporting system.<sup>53</sup>

79. **Compliance monitoring.** PMO on behalf of MOWS will monitor compliance of loan and grant covenants, including that relating to policy, legal, financial, economic, environmental, and others and ensure compliance with loan covenants and assurances. All non-compliance issues, if any, will be updated in quarterly progress reports together with remedial actions. PCC and ADB review missions (at least twice a year) will also monitor the status of compliance with loan and grant covenants and raise the noncompliance issues with the MOF and MOWS and agree on remedial actions.

80. **Safeguards monitoring.** PMO will submit separate semi-annual environmental and social safeguards monitoring reports to ADB, which will be reviewed and disclosed on ADB's and project's websites. The status of safeguard implementation, issues, and corrective actions including associated cost and schedule are to be clearly reported to ADB. The status of safeguards implementation will also be discussed at each ADB review mission and with necessary issues and agreed actions recorded in Aide Memoires. The outline of the semi-annual environmental monitoring report is in Appendix 7 and the outline of the semi-annual social safeguards monitoring report is in Appendix 8. ADB will also carry out annual environmental and/or social (including gender) reviews of the project.

81. **Gender and social dimensions monitoring.** The PMO will ensure GESI issues are reflected in M&E formats and reports. RPMO with the support of regional DSMCs will prepare project municipality level GESI action plan to ensure project municipality specific GESI issues relevant to the project are reflected and addressed. RPMO will collect data disaggregated by gender, caste, ethnicity, economic status and other indicators needed for identifying poor and vulnerable. PMO will ensure RPMOs are oriented and trained adequately on GESI to produce accountability. RPMOs also ensure each project municipality are oriented and trained on GESI for achieving socially inclusive project results.

### C. Evaluation

82. The government and ADB will jointly review the project at least twice a year. This includes (i) the performance of the PMO, RPMOs, consultants and contractors; (ii) physical progress of subprojects and effectiveness of safeguards, and the GESI Action Plan; (iii) inclusion of women and vulnerable groups including the poor in subproject planning and implementation; (iv) compliance with loan/grant assurances; and (v) assessment of subproject sustainability in technical, financial, and social terms. In addition to the regular loan reviews, the government and ADB will undertake a comprehensive midterm review in the third year of project implementation to identify problems and constraints encountered and suggest measures to address them. Specific items to be reviewed will include (i) appropriateness of scope, design, implementation arrangements, and schedule of activities; (ii) assessment of implementation pace against project indicators; (iii) effectiveness of capacity building programs; (iv) compliance with safeguard measures; (v) extent to which the GESI action plan is being implemented; (vi) needs for additional support for O&M of the facilities established under the project; (vii) lessons learned, good practices, and potential for replication; and (viii) changes recommended. Within 6 months of physical completion of the project, the PMO will submit a project completion report to ADB.<sup>54</sup>

---

<sup>53</sup> ADB's project performance reporting system is available at: <http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

<sup>54</sup> Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>



## D. Reporting

83. The PMO will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system (sample outline is in Appendix 9); (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iii) a project completion report within 6 months of physical completion of the project. To ensure that projects will continue to be both viable and sustainable, project accounts and the executing agency audited financial statement together with the associated auditor's report, should be adequately reviewed.

84. PMO will provide ADB the following reports, all of which are subject to web disclosure in compliance with ADB's Public Communications Policy (2011):

- (i) Quarterly progress reports in a format consistent with ADB's project performance reporting system within 30 days of the end of each quarter;<sup>55</sup>
- (ii) semi-annual safeguards monitoring reports;
- (iii) consolidated annual reports including: (a) progress achieved by output as measured through the DMF indicator's performance targets; (b) key implementation issues and solutions; (c) updated procurement plan; and (d) updated implementation plan for next 12 months;
- (iv) a project completion report<sup>56</sup> within 6 months of physical completion of the project; and
- (v) audited consolidated project financial statements and associated auditor's report within 6 months of the end of each fiscal year.

## E. Stakeholder Communication Strategy

85. The PMO will prepare a stakeholder communication strategy and submit to ADB for review by the end of the first quarter after loan effectiveness. The strategy will follow ADB's Public Communications Policy 2011. The PMO will ensure that all communication is in language understood by the specific audience. The stakeholder communication strategy will be based on a stakeholder analysis and will incorporate the following components:

- (i) Compilation of stakeholder communication activities undertaken so far, including gender-disaggregated data on participants, minutes of meetings and photographs;
- (ii) role of the PMO, RPMOs in coordinating and communicating with government or institutional stakeholders;
- (iii) public communication plan for disseminating project related information (a) to the general public, particularly those who may be impacted by the proposed projects; (b) to indigenous peoples' groups who may be benefited or affected by the proposed projects; (c) to communities facing loss of common property resources; and (d) to vulnerable groups, particularly regarding the project's social inclusion policy and how to avail benefits under the project;
- (iv) disclosure of social safeguards and environment monitoring reports and any updated resettlement plans and IEEs in the ADB and PMO websites and to affected persons and local non-government organizations/community-based organizations, in local language; and

<sup>55</sup> An outline is provided in Appendix 10.

<sup>56</sup> Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>.

- (v) other communication arrangements at the local community level including through notice boards, newspapers, local radio stations and cable television, etc.

## X. ANTICORRUPTION POLICY

86. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.<sup>57</sup> All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.<sup>58</sup>

87. To support these efforts, relevant provisions are included in the loan agreement, subproject financing agreement, management agreement, and the bidding documents for the project. 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 PMO, RPMOs, WUAs, contractors, suppliers, consultants, and other service providers as they relate to the project. ADB will disseminate ADB's anticorruption policy to MOWS, DWSSM, PMO, RPMOs and WUAs.

88. The Commission for the Investigation of Abuse of Authority, as the constitutional anticorruption agency, has powers to investigate any irregularities in the project. This includes financial irregularities, as well as corruption of government officials and officers and employees of autonomous bodies.

89. Project-specific measures to enhance governance and prevent corruption, designed with the stages of project implementation and the disbursement chain in mind, include (i) the requirement for PMO and RPMOs to follow government rules and procedures for all expense including cash and the proper and accurate maintenance of financial records, (ii) establishing a project website at PMO to provide transparency on project details including procurement, (iii) displaying Citizen Charter in wards by the project towns, and (iv) RPMOs to organize public audit through regular and effective meetings at the town level with regional DSMCs support.

90. For civil works, the major risks are of collusion to overprice designs and approve low volume and quality-built works. PMO will, with the support of PMQAC, carry quality audit of each subproject. The PMQAC will share the report with MOWS, DWSSM and ADB on confidential basis. Contractors will be made to disclose basic information of contracts in each construction site through display board. Sample technical audit will be done by the National Vigilance Center.

91. Furthermore, the project intends to maximize transparency, as described in sections above. Full information disclosure and participatory monitoring at both the central and the local levels are expected to be effective in reducing the risk of corruption and improving governance at central and local levels.

92. Within 12 months of project effectiveness, the PMO will establish the special committee to receive and resolve complaints/grievances or act upon reports from stakeholders on misuse of funds and other irregularities relating to the project, as outlined in the GRM (Appendix 7), including but not limited to grievances due to safeguard issues. The special committee will: (i) be independent and has no conflict of interest with the project municipalities; (ii) make public of the existence of the GRM; (iii) review and address grievances of stakeholders of the project, in relation to either the project, any of the service providers, or any person responsible for carrying out any

---

<sup>57</sup> Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

<sup>58</sup> ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>

aspect of the project; and (iv) proactively and constructively responding to them.

93. ADB's Anticorruption Policy designates the Office of Anticorruption and Integrity as the point of contact to report allegations of fraud or corruption among ADB-financed projects or its staff. The Office of Anticorruption and Integrity is responsible for all matters related to allegations of fraud and corruption. For a more detailed explanation refer to the Anticorruption Policy and Procedures. Anyone coming across evidence of corruption associated with the project may contact the Anticorruption Unit by telephone, facsimile, mail, or email at the following numbers/addresses:

by email at [integrity@adb.org](mailto:integrity@adb.org) or [anticorruption@adb.org](mailto:anticorruption@adb.org)  
by phone at +63 2 8632 5004  
by fax to +63 2 8636 2152  
by mail at the following address (Please mark correspondence Strictly Confidential):

Office of Anticorruption and Integrity  
Asian Development Bank  
6 ADB Avenue, Mandaluyong City  
1550 Metro Manila, Philippines

## XI. ACCOUNTABILITY MECHANISM

94. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.<sup>59</sup>

### **Contact details:**

Secretary  
Compliance Review Panel  
Asian Development Bank  
6 ADB Avenue  
Mandaluyong City  
1550 Metro Manila, Philippines

Tel + 63 2 632 4149  
Fax +63 2 636 2088  
Email: [crp@adb.org](mailto:crp@adb.org)  
Web: [www.compliance.adb.org](http://www.compliance.adb.org)

---

<sup>59</sup> Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

## XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

95. The first draft of PAM has been prepared and agreed upon at the loan negotiations on 2 August 2018. All revisions/updates during course of implementation should be retained in this Section to provide a chronological history of changes to implemented arrangements recorded in the PAM.

	<b>Reference</b>	<b>Changes made during loan inception mission (20 February 2019)</b>
1	Cover Page	Updated Loan Number: 3711-NEP
2	Department of Water Supply and Sewerage (DWSS) across the whole document	Changed to <b>Department of Water Supply and Sewerage Management (DWSSM)</b> across the whole document
3	Table 2: Overall Project Implementation Plan	Updated
4	Section III (Project Management Arrangements): PCC	Added Director General of Department of Road to list of members
5	Section III (Project Management Arrangements): PMO list of staff: Engineers-Permanent (4)	Changed to Engineers-Permanent (5)
6	Section III (Project Management Arrangements): PMO list of staff: Engineers-Contractual (7)	Changed to Engineers-Contractual (6)
7	Section III (Project Management Arrangements): RPMO list of staff: 'Accountant'	Changed to 'Account Officer'
8	Section III (Project Management Arrangements), key persons involved in implementation	Updated
9	Para 76: A community mobilization section is established within DWSS and is responsible for monitoring GESI mainstreaming in DWSS operations. The section supervises and monitors implementation of GESI action plan of different project and coordinates with MOWS for technical advice. The DWSS reports on GESI progress to MOWS in its regular trimester progress report. A monthly meeting is held between GESI unit, MOWS and the community mobilization section responsible for GESI section in DWSS. This policy and institutional context operational at present is expected change with government's current restructuring process, thus any necessary changes to ensure implementation of the GESI action plan will be closely monitored by PMO and reported quarterly project	Changed to: The National Water Supply and Sanitation Training Center (NWSSTC) within DWSSM is responsible for monitoring GESI mainstreaming in DWSSM operations. The center supervises and monitors implementation of GESI action plan of different projects and coordinates with MOWS for technical advice. The DWSSM reports on GESI progress to MOWS in its regular trimester progress report. A monthly meeting is held between the responsible GESI units within MOWS and DWSSM. This policy and institutional context operational at present is expected change with government's current restructuring process, thus any necessary changes to ensure implementation of the GESI action plan will be closely monitored by PMO and reported quarterly project reports. In case required,

	reports. In case required, adjustments will be discussed and agreed between PMO and ADB.	adjustments will be discussed and agreed between PMO and ADB.
10	Appendix 1, Table A1, list of acronyms under table	NLSS = Nepal Living Standard Survey
11	Appendix 3 (Procurement Plan)	Updated
12	Appendix 10 (List of preselected Municipalities): Khalanga (Darchula) Water Supply and Sanitation Improvement	Changed to: Khalanga (Darchula) Integrated Water Supply and Sewerage Improvement
13	Appendix 10 (List of preselected Municipalities), line item: Makalu Ekuwakhola (Sahnkhuwasbha) Water Supply and Sanitation Improvement – Makalu Municipality – Sahnkhuwasbha District	deleted
14	Appendix 10 (List of preselected Municipalities)	New line item added: Sharadanagar Water Supply and Sanitation Improvement – Bharatpur Municipality – Chitwan District

## SUBPROJECT SELECTION CRITERIA

1. Municipalities and subprojects will only be eligible for financing under the Urban Water Supply and Sanitation (Sector) Project (the Project) if they meet the below criteria. A list of preselected subprojects and project municipalities is in Appendix 10. Selection of future water supply and sanitation (WSS) investments to be designed under the project will follow the same criteria, and preference may be given to subprojects located in Kathmandu Valley, provincial headquarters, and strategic border municipalities, ensuring that people's demand for improved WSS services can be timely addressed. For any future subproject to be designed under the project in Kathmandu Valley municipalities, the selection of such schemes to be designed shall be in line with the latest Capital Investment and Asset Management Plan and in discussion with the Kathmandu Valley Water Supply Management Board (KVWSMB) and the Kathmandu Upatyaka Khanepani Limited. The project management office (PMO) will seek ADB's no objection before initiating design activities for preparation of future investments. Any deviation from selection criteria will require ADB's prior no-objection.

### A. Selection of subprojects coverage area in municipalities

2. **Scoring for municipal subproject areas selection.** Scores will be given in the following manner (see Table A1) to select municipal subproject areas:

- (i) If a subproject does not fit the definition of a municipal subproject area,<sup>1</sup> it is automatically excluded.
- (ii) The municipality has included and/or agreed to include the subproject in their planning either directly or through their municipality water, sanitation and hygiene (WASH) CC, depending on where the subproject is located, and has submitted a formal subproject application to the Department of Water Supply and Sewerage Management (DWSSM).
- (iii) Poverty is weighted so that municipal project areas with a higher proportion of poor people score more. The lowest band is set at the poverty line (i.e., people below the poverty line).<sup>2</sup>
- (iv) The population in the municipal subproject area will have willingness and ability to provide cash-contribution for investment in water supply subprojects and pay for services.
- (v) If a municipal subproject area does not have a piped system, it should be awarded maximum points. If it has a piped system, the scoring is according to the proportion of the population not served by it.
- (vi) As a measure of hardship, intermittent systems providing less than 10 hours service per day are scored inversely by the number of hours.
- (vii) Sanitation is scored proportionate to the number of households not having sanitary latrines.
- (viii) Project readiness regarding source identification and land availability, with no or minimum involuntary resettlement and indigenous people impacts as per ADB's Safeguard Policy Statement (SPS) 2009, are scored higher.

---

<sup>1</sup> A municipal subproject area is defined as a core area in a municipality (previously defined as 'small town') with a (i) population of 5,000–40,000; (ii) located on a road linked to the strategic road network; (iii) has perennial road access; grid power; telecommunications – i.e, potential for growth; (iv) has an average population density of 10 persons per hectare; and (v) has jurisdiction of one administrative boundary (this may be waived with justification in exceptional circumstances for particular service delivery needs).

<sup>2</sup> Nepal Living Standards Survey in 2011 set the average national poverty line as NRs19,261 per person per year, which adjusted to 2014 prices is NRs 23,306 per person per year or NRs1,942 per person per month.

- (ix) Potential for growth is measured so that project municipalities with high population growth rates will also be awarded additional points.

3. Municipal subproject areas with high scores will be selected among those who submit the application/ project proposal to DWSSM.<sup>3</sup> When a municipal subproject area selection has been made, the PMO will send to ADB for review and concurrence (i) a narrative summary of municipal subproject area selection together with the score of municipal subproject areas considered and showing how they meet the agreed selection criteria; and (ii) a location map.

**Table A1: Priority Scoring of Municipal Subproject Areas**

Criterion/Indicator	Details	Points
Meets definition of municipal subproject area	Yes/No	Include/exclude
Municipality approval	Yes/No	Include/exclude
Municipal subproject areas are not in sensitive sites and are not declared protected areas as per ADB SPS, 2009.	Yes/ No	Include/ exclude
<b>Poverty:</b>		
Matrix scoring based on % BPL from NLSS or census 2011		20x % BPL/100
<b>Water Supply</b>		
Piped system	No	25
% of population not served by piped system		10x %/100
% of poor areas not served by piped system		10x %/100
<b>Existing water supply</b>		
Quantity < 45 liters per capita per day		5
Number of hours supply per day	0–4 hours	5
	4–10 hours	3
	> 10 hours	0
<b>Sanitation</b>		
% of population without sanitary latrines		20x %/100
<b>Community Interest</b>		
Is Water users' association registered		3
<b>Project Readiness</b>		
Source identified	Yes	5
Land available for main structures	25% and above	10
<b>Urbanization and Growth Potential</b>		
Population growth in the last decade (% per annum)	5% and above	5
	3–5%	3
	Less than 3%	1
<b>Total Score</b>		

ADB = Asian Development Bank, BPL = below poverty line, NLSS = Nepal Living Standard Survey, SPS = Safeguard Policy Statement.

Source: Department of Water Supply and Sewerage assessment.

## B. Subproject Selection

4. **General Criteria.** Before the subproject is submitted to ADB for concurrence, the PMO will ensure that the specific criteria, including the following, have been satisfied:

- (i) The subproject has been identified and designed in a participatory manner during the prefeasibility and feasibility stages and appropriate physical and socioeconomic surveys have been carried out to allow effective designs. The water users' association (WUA) or project municipality has agreed with the design and cost of the subproject, and the responsibility for the operation and maintenance (O&M) of the same. The WUA or project municipality has also committed (in

<sup>3</sup> The DWSS calls for proposal publicly from municipalities and WUAs for their improvement of WSS publishing these criteria.



- management agreement with DWSSM) to provide minimum required operational staff to operate the particular facilities sustainably.
- (ii) The subproject request application has a minimum 33% female signatories and maximum participation of women, poor and vulnerable in the project identification.
  - (iii) The design of each of the subproject ensures the least-cost of the combined capital and of O&M expenditures in achieving its objectives. The subproject has an economic internal rate of return of 9% or higher.
  - (iv) The subproject complies with all requirements of relevant national laws and regulations, including, among others, the Government's Environmental Protection Rules (1997) and their amendment in 2007, and of ADB's policies, including SPS, 2009.
  - (v) The subproject has been assessed and screened in accordance with the environmental assessment and review framework (EARF), the resettlement framework and IPPF agreed for the project. Subprojects that will cause significant<sup>4</sup> involuntary resettlement impacts and/or cause adverse negative impact to the indigenous people communities will not be selected. Subprojects that will cause significant irreversible, diverse or unprecedented impacts to the environment, protected areas and sensitive receptors as a result of the project design will not be selected.
  - (vi) The design of the facilities has been made in accordance with DWSSM design guidelines for small towns, and all other relevant Government guidelines and design standards.
  - (vii) A pre-project management agreement has been signed between DWSSM and the participating WUA or municipality specifying, among other things, the proportion of cost sharing for both WSS systems, and the principle of integrated WSS, agreement to adhere to the tariff guidelines, and output-based aid (OBA), before the commencement of detailed design work.<sup>5</sup>
  - (viii) Before the handover of the system for its O&M, a management agreement will be signed between WUA<sup>6</sup> or municipality and DWSSM, witnessed by the municipal mayor (if signed between WUA and DWSSM) and TDF, specifying, among other things, (a) the responsibilities of each party; (b) the tariff guidelines and proposed level of tariff to be collected by the concerned WUA or municipalities; (c) WUA's or municipalities commitment to recover payment and repayment, operation costs; and (d) the target and level of grant to be given under the OBA.
  - (ix) O&M responsibilities and costs have been developed and agreed. O&M manuals of each of the subproject will be prepared, and WUA or municipality has committed to implementing the same.
  - (x) The subprojects and the participating WUAs or municipalities will have and maintain an annual operating ratio of less than 1. The operating ratio is defined as the ratio of total expenditure to total revenue and includes debt service (principal and interest). To ensure that this required level of operating ratio is maintained, WUAs or municipalities shall agree to deposit adequate cash into the designated escrow account, as necessary, to meet the potential shortage in the revenue to meet the expected expenditures.

**5. Water Supply.** The specific criteria include the following:

<sup>4</sup> Involuntary resettlement impacts are considered significant when 200 or more people experience major impacts. "Major impacts" is defined as involving affected people (i) being physically displaced from housing; and/or (ii) having 10% or more of their productive, income-generating assets lost.

<sup>5</sup> This will mean the commencement of detailed design review where the detailed design is already available.

<sup>6</sup> Signed by WUSC as the representative of WUA.

- (i) The subproject is prioritized using the criteria in Table A1.
  - (ii) The WUA or municipality has agreed to the design of the subproject, initial community contribution of 5% upfront cash contribution, for which WUA or municipality has agreed that households identified as poor and vulnerable (including 100% of poor women Headed) households will be excluded from (upfront cash contribution requirement), the setting of the tariff will be within the tariff guidelines and at a level to cover at least necessary debt service to Government and all operation and maintenance expenditures. An ability-to-pay survey has confirmed that the tariff structure is affordable for all users.
  - (iii) For raw water extraction, necessary agreement and approval have been obtained in accordance with relevant laws and regulations of the country.
  - (iv) Detailed investigations (e.g. hydrogeological surveys, bore tests, etc.) are carried out to confirm adequate and sustainable yield is available from the proposed source for supply of minimum 100 lpcd.
  - (v) Water quality test of the proposed source is carried out to ensure and confirm it meets National Drinking Water Quality Guidelines (NDWQG) and does not impact on the built infrastructure (e.g. calcium rich groundwater, derived from the underlying geology, may deposit in water pipes and reduce flow or block). Water source with arsenic levels above the national standards will not be selected. If small traces of arsenic (below the national standards) have been detected, testing for arsenic will be conducted once a month for the duration of 3 months. Test results will need to be submitted to ADB for review before the water source is developed for drinking purposes.
  - (vi) For surface water gravity schemes the sediment load to the raw water intake over the hydrological year will be considered.
  - (vii) Intake of the source is located at least 30m upstream of any sanitation facilities. Where this cannot be maintained, the design and implementation will ensure that (a) septic tanks will be sealed to make them water tight and emptied as per the design requirements; (b) appropriate borehole case and screen are installed; and (c) a test pit is established, and water quality monitoring is conducted regularly (at least once every quarter).
  - (viii) Design of the water supply system incorporates a water safety plan to be implemented throughout the operation and maintenance phase.
  - (ix) Design of the distribution system is carried out on a district metering area (DMA) basis and Supervisory Control and Data Acquisition (SCADA).
  - (x) No infrastructure, such as OHT, WTP, is established in floodplains, and all pipes are designed to be constructed underground.
  - (xi) The WUA or municipality has agreed to provide free connections to all the eligible poor, poor female headed, and vulnerable households as the subproject's beneficiaries. The Government has agreed to provide 100% subsidy for such connections.
6. **Household Sanitation.** The specific criteria include the following:
- (i) The WUA or municipality has agreed to use the OBA process for providing household latrines and includes all the eligible poor, poor female-headed, and vulnerable households as the subproject's beneficiaries.
  - (ii) The design of the facilities suits the requirements of women, children, and the disabled.
  - (iii) Septic tanks will be designed as per national standards and DWSSM design guidelines to allow for maximum retention of septage (minimum 3 years) and water sealing.

- (iv) Toilets will be established at least 30m downstream of the drinking water source. Where this cannot be maintained, the design and implementation will ensure that (a) septic tanks of the toilets will be sealed to make them water tight and emptied as per the design requirements; (b) appropriate borehole case and screen are installed; and (c) a test pit is established, and water quality monitoring is conducted regularly (at least once every quarter).
- (v) Toilets will not be established in floodplains or flood prone areas.
- (vi) An O&M plan to be developed will provide details on the frequency and responsibility for collection and disposal of septage at approved site, and identity roles and responsibilities for each of the tasks.
- (vii) Hygiene promotion campaign and educational program is developed, and the WUA or municipality commits to implementing the same.

7. **Public Toilets.** The specific criteria include the following:

- (i) The proposed public toilet is located in, or adjacent to, a frequently used public area on the WUA or municipality land with no or minimum involuntary resettlement/ social impacts.
- (ii) If the municipality doesn't have adequate capacity, the WUA has agreed to manage the public toilet on behalf of the municipality until the municipality has adequate capacity.
- (iii) The WUA and municipality where the proposed public toilet lies have agreed to jointly contribute 15% of the capital cost<sup>7</sup> and cover 100% of the O&M cost.
- (iv) Septic tanks will be designed as per national standards and codes to allow for maximum retention of septage (minimum 3 years) and water sealing.
- (v) Toilets will be established at least 30m downstream of the drinking water source, and not in floodplains or flood prone areas. Where this cannot be maintained, the design and implementation will ensure that (a) septic tanks of the toilets will be sealed to make them water tight and emptied as per the design requirements; (b) appropriate borehole case and screen are installed; and (c) a test pit is established, and water quality monitoring is conducted regularly (at least once every quarter).
- (vi) An O&M plan is developed providing details on the frequency and responsibility for collection and disposal of septage at approved site, and commitment to provide minimum operational staff and operate the facilities sustainably is given by WUAs or municipalities.
- (vii) Hygiene promotion campaign and educational program is developed to promote ODF in the towns, and WUA or municipality commits to implementing it.

8. **Septage Management:** The specific criteria include the following:

- (i) If the municipality does not have adequate capacity, then the WUA has agreed to manage the septage facility on behalf of the municipality until the municipality has adequate capacity.
- (ii) Public or WUA land with no or minimum involuntary resettlement impacts is available for construction. The WUA and municipality where the subproject lies have agreed to jointly contribute 15% of the capital cost<sup>8</sup> and cover 100% of the O&M cost.

<sup>7</sup> WUAs may make contributions either in cash or in kind.

<sup>8</sup> WUAs may make contributions either in cash or in kind.

- (iii) The site selected to establish the facility is at least 300m away from the nearest dwelling, 30m downstream from any drinking water source, not in a protected or religious area, and in relatively flat land with no more than 8% slope.
- (iv) Site is not where food crops are grown. Septage facility can be established in a community forest or woodland that is not declared as a protected area.
- (v) Facility is designed in accordance with appropriate standards. In the absence of national standards, international standards, such as those prescribed by the EHS Guidelines, may be used.

9. **Decentralized Wastewater Treatment (DEWAT):** The specific criteria include the following:

- (i) The subproject is located in the core area of the municipality (most densely populated) area and with an existing or proposed water supply that provides sufficient flow to achieve self-cleansing velocities in the sewers. In case of the latter, water supply subproject will have been completed before the DEWATs is commissioned.
- (ii) The WUA and municipality have agreed to jointly contribute 15% of the capital cost of the subproject. WUA or municipality will cover 100% of the O&M costs through water tariff increments.
- (iii) Public or WUA land with no or minimum involuntary resettlement impacts is available for construction.
- (iv) The zone(s) covered by the subproject has a projected population density of at least 100 per hectare in 2017.

10. **Storm water Drainage:** The specific criteria include the following:

- (i) The municipal core area experiences severe disabilities during heavy rainstorms, such as flooding of roads and buildings, severe water logging, disruption of traffic and general unsanitary conditions;
- (ii) Prior to design - a storm water master plan has been prepared in line with WASH plan and approved for the municipality that shows a feasible drainage solution and prioritizes the first phase/ segments for investment.
- (iii) The municipality is able to develop the means and resources to maintain the proposed drains in a serviceable manner.
- (iv) The municipality has agreed to contribute 15% of the capital cost and cover 100% of the O&M cost.
- (v) The municipality will use the existing road and drainage right-of-way (ROW) with no or minimum involuntary resettlement impacts. Drainage construction using or crossing private lands should be avoided. If involuntary resettlement impacts are identified for the street vendors/shops/stalls, regardless of their legal status, located in the proposed subproject an appropriate due diligence report and or resettlement plan will be prepared in accordance to the agreed Resettlement Framework.
- (vi) Drainage capacities to be designed are based on one in a 50-year flood event.
- (vii) No drainage should be established in protected areas, near sensitive receptors and within the setback distance of a historical or cultural heritage site.

11. Before subproject tendering/implementation, the PMO will submit to ADB for concurrence and disclosure: (i) a summary sheet showing that the criteria have been met; (ii) salient features of each subproject; (iii) preliminary design of each subproject; (iv) environmental and social safeguards assessment screening results; (v) financial and economic analysis of the subproject; (vi) resettlement plans/indigenous people plans if any subproject involves involuntary

resettlement and/or land acquisition or causing adverse impacts to indigenous people communities based on the detail design; (vii) IEEs and other safeguard documents, as applicable; and (viii) feasibility studies and/or detailed design reports.

### PROJECT CLIMATE RISK AND FINANCING CALCULATION

Project component	Link to Climate Risks Identified in the Project Climate Risk Assessment and Management Reporting	Total Cost <sup>a</sup>	Qualifying costs			Non-Qualifying Costs
			ADB funding	Counterpart funding	Total	
<p><b>Output 1: Water supply and sanitation infrastructure in project municipalities improved</b> (civil works, equipment, consultancy services)</p>	<p>Climate risks for subprojects vary from low to high and risk topics include (i) increased temperature, (ii) increased intensity of precipitation and storm events, (iii) prolonged droughts, (iv) floods, and (v) rainfall triggered landslides. The project has considered earthquake threats as non-climatic hazards since several subproject municipalities were severely affected by the 2015 earthquake. Subprojects will consider earthquake threats and be guided by the government standards for such risks. Given the increased frequency and intensity of rainfall and flood events, engineering designs have incorporated mechanisms to inherently respond to climate risk impacts. To safeguard subproject structures against identified climate risks engineering measures will include (i) deeper aquifers as source where yields are not affected by changes in precipitation; (ii) pipes to be laid below ground to avoid damage during floods; (iii) measures for protection of sources and project related infrastructure due to landslides, erosion, or earthquakes; (iv) additional free-board allowance to design parameters, such as channel depth, width and slope, and increased safety easement for key facilities such as production tube wells, pump houses, and water treatment plants; (v) review of the interaction of reinforcing elements, such as rebar, steel, and iron, for standing water impacts on concrete curing, design life, and depth of reinforcement from concrete edge; (vi) 10% additional capacity in drainage and water storage systems to accommodate additional run-off due to increased rainfall intensity; and (vii) power backup generators to ensure operation. Additional adaptation measures incorporated in project design include (i) bioengineering for protection of plantations and landslide prone areas, (ii) water channelization in response to river flooding and glacial lake outburst floods, and (iii) smart water management improving system resilience during periods of droughts and lowered precipitation.</p>					
(a)	Piped water supply schemes and water treatment facilities made climate-resilient	94.5	15.2	5.6	20.8	83.2
(b)	Smart water management	4.2	3.7	0.5	4.2	-

Project component	Link to Climate Risks Identified in the Project Climate Risk Assessment and Management Reporting	Total Cost <sup>a</sup>	Qualifying costs			Non-Qualifying Costs
			ADB funding	Counterpart funding	Total	
(c)	Sanitation, decentralized wastewater treatment plants, storm water drains made climate-resilient	25.0	3.6	1.4	5.0	20.0
(d)	Project design, supervision and management consultants consider climate and disaster risks in subproject design for subprojects in 20 project municipalities	7.8	0.7	-	0.7	7.1
<b>Subtotal 1</b>		<b>131.5</b>	<b>23.2</b>	<b>7.5</b>	<b>30.7</b>	<b>110.3</b>
<b>Output 2: Institutional and community capacities strengthened</b> (consultancy services)	This component includes the preparation of WASH plans for 20 project municipalities and development detailed design project reports for future investments including climate-resilience principles. Staff of the implementing agency, the project management office, project municipalities, and water users' associations and water users' and sanitation committees will receive trainings to incorporate climate change resilience approaches and procedures when undertaking safeguards due diligence. Capacity building on climate change risks, vulnerabilities, mitigation and adaption options will be provided, as necessary during project implementation. Regular operation and maintenance activities and equipment inspections will be carried out for all subprojects to help mitigate damage and ensure continuous operations as well as fast recovery after disaster events. Awareness of project beneficiaries on water conservation and sustainable hygiene behavior will be raised through specific campaigns and strengthen their resilience to the impacts of climate change.					
	WASH plans for 20 municipalities and 15 climate resilient detailed design project reports for future investments prepared by design, supervision, and management consultants	2.0	1.5	-	1.5	0.5
	Capacity development and trainings including smart utility management and awareness campaign on water conservation and sustainable hygiene behavior	2.0	0.7	-	0.7	1.3
<b>Subtotal 2</b>		<b>4.0</b>	<b>2.2</b>	<b>-</b>	<b>2.2</b>	<b>1.8</b>
<b>Physical contingencies (Subtotal 3)</b>		<b>10.2</b>	<b>0.7</b>	<b>0.3</b>	<b>1.0</b>	<b>9.2</b>
<b>TOTAL (Subtotal 1+2+3)</b>		<b>145.7</b>	<b>26.1</b>	<b>7.8</b>	<b>33.9</b>	<b>121.3</b>

ADB = Asian Development Bank, WASH = water, sanitation and hygiene

<sup>a</sup> Only applicable base costs and physical contingencies have been considered in the calculation.

## PROCUREMENT PLAN

### Basic Data

<b>Project Name: Urban Water Supply and Sanitation (Sector) Project</b>		
<b>Project Number:</b> 35173-015	<b>Approval Number:</b> 3711-NEP	
<b>Country:</b> Nepal	<b>Executing Agency:</b> Ministry of Water Supply	
<b>Project Procurement Classification:</b> Category B	<b>Implementing Agency:</b>	
<b>Project Procurement Risk:</b> Medium	Department of Water Supply and Sewerage Management	
<b>Project Financing Amount:</b> US\$ 178,500,000	<b>Project Closing Date:</b> 30 April 2024	
<b>ADB Financing:</b> US\$ 130,000,000		
<b>Cofinancing (ADB Administered):</b>		
<b>Non-ADB Financing:</b> US\$ 48,500,000		
<b>Date of First Procurement Plan:</b> 16 May 2018	<b>Date of this Procurement Plan:</b> 16 February 2019	
<b>Procurement Plan Duration (in months):</b> 18	<b>Advance Contracting:</b> Yes	<b>e-GP:</b> Yes

#### A. Methods, Review and Procurement Plan

Except as the Asian Development Bank (ADB) may otherwise agree, the following methods shall apply to procurement of goods, works, and consulting services.

Procurement of Goods and Works	
Method	Comments
Open Competitive Bidding (OCB) for Goods	OCB (National Advertisement) OCB (International Advertisement)
Request for Quotation for Goods	
Open Competitive Bidding (OCB) for Works	OCB (National Advertisement) OCB (International Advertisement)

Consulting Services	
Method	Comments
Consultant's Qualification Selection for Consulting Firm	Prior review
Quality- and Cost-Based Selection for Consulting Firm	QC ratio 90:10; Prior review
Competitive for Individual Consultant	Prior review

#### B. Lists of Active Procurement Packages (Contracts)

The following table lists goods, works, and consulting services contracts for which the procurement activity is either ongoing or expected to commence within the procurement plan duration.

##### Goods and Works

Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
G01	Pickup Vehicles for 10 Priority towns (10 units)	800,000.00	OCB	Prior	1S1E	Q2 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Goods e-GP: Yes Comments: 1 vehicle per WUSC
G02	Pickup Vehicles	800,000.00	OCB	Post	1S1E	Q4 / 2019	Advertising: National



Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
	for 10 towns						No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Goods e-GP: Yes Comments: 1 vehicle per WUSC
G03	Vehicles for Project Management and Monitoring	450,000.00	OCB	Prior	1S1E	Q3 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Goods e-GP: Yes Comments: 5-PMO/RPMO; 1-TDF
G04	20 Motorbikes and 40 Bicycles	500,000.00	RFQ	Post		Q3 / 2019	No. Of Contracts: 1 Advance Contracting: N e-GP: no Comments: multiple packages, 5 contracts
G05	Goods and equipment for WUSCs Improvement Services	500,000.00	RFQ	Post		Q3 / 2019	No. Of Contracts: 1 Advance Contracting: N e-GP: no Comments: multiple Packages; est 5 contracts
G06	Server for SCADA system and installation	100,000.00	RFQ	Post		Q1 / 2020	No. Of Contracts: 1 Advance Contracting: N e-GP: no Comments: installation of server would be at national data center
G07	Goods for PMO/RPMOs	150,000.00	RFQ	Post		Q3 / 2019	No. Of Contracts: 1 Advance Contracting: N e-GP: no Comments: multiple packages; est 2 contracts
P01	SCADA System and Installation for Service Improvements	3,200,000.00	OCB	Prior	1S1E	Q1 / 2020	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works/plant e-GP: Yes
W01	Charikot (Dolakha) Water Supply and Sanitation Improvement	8,840,000.00	OCB	Prior	1S2E	Q3 / 2018	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: Y Bidding Document: Small Works e-GP: no
W02	Bhojpur (Bhojpur) Water Supply and Sanitation Improvement	6,230,000.00	OCB	Prior	1S2E	Q3 / 2018	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: Y

Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
							Bidding Document: Small Works e-GP: no
W03	Siddhanath Baijanath Water Supply and Sanitation Improvement	2,650,000.00	OCB	Post	1S2E	Q1 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W04	Diktel (Khotang) Water Supply and Sanitation	2,850,000.00	OCB	Prior	1S2E	Q3 / 2018	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works e-GP: Yes
W05	Ilam (Ilaam) Water Supply and Sanitation Improvement	7,708,000.00	OCB	Prior	1S2E	Q3 / 2018	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: Y Bidding Document: Small Works e-GP: No
W06	Liwang (Rolpa) Water Supply and Sanitation Improvement	3,186,000.00	OCB	Post	1S2E	Q2 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W07	Chainpur (Bajang) Water Supply and Sanitation Improvement	2,279,000.00	OCB	Post	1S2E	Q3 / 2018	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works e-GP: Yes
W08	Khalanga (Darchula) Integrated Water Supply and Sewerage	6,784,000.00	OCB	Prior	1S2E	Q3 / 2019	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: N Bidding Document: Small Works e-GP: No
W09	Subhaghat (Surkhet) Water Supply and Sanitation Improvement	6,265,000.00	OCB	Prior	1S2E	Q2/ 2019	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: no

Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
W10	Pragatinagar (Dang) Water Supply and Sanitation Improvement	4,730,000.00	OCB	Post	1S2E	Q3/ 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W11	Brihat Bhanu (Tanahu) Water Supply and Sanitation Improvement	5,947,000.00	OCB	Prior	1S2E	Q4 / 2019	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: N Bidding Document: Small Works e-GP: No
W12	Kanchanrup (Saptari) Water Supply and Sanitation Improvement	5,643,000.00	OCB	Prior	1S2E	Q1 / 2020	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: N Bidding Document: Small Works e-GP: no
W13	Rampurtar (Okahaldunga) Water Supply and Sanitation Improvement	2,491,000.00	OCB	Post	1S2E	Q3 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W14	Panchkhal (Kavre) Water Supply and Sanitation Improvement	20,233,000.00	OCB	Prior	1S2E	Q4 / 2019	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: N Bidding Document: Large Works e-GP: no
W15	Sharadanagar (Chitwan) Water Supply and Sanitation Improvement	4,500,000.00	OCB	Post	1S2E	Q1 / 2020	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W16	Deurali Hupsekot (Nawalpur) Water Supply and Sanitation Improvement	9,000,000.00	OCB	Prior	1S2E	Q4 / 2019	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: N Bidding Document: Small Works e-GP: No
W17	Madi Palpa Water Supply	4,636,000.00	OCB	Post	1S2E	Q1 / 2020	Advertising: National No. Of Contracts: 1

Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Advertisement Date (quarter/year)	Comments
	and Sanitation Improvement						Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W18	Tikapur Drainage	4,500,000.00	OCB	Post	1S2E	Q3 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W19	Charikot: DEWATS	4,500,000.00	OCB	Post	1S2E	Q4 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W20	Mirchaiya Drainage	4,400,000.00	OCB	Post	1S2E	Q2 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W21	Bhojpur Bazar Sewerage and DEWATS	4,727,000.00	OCB	Post	1S2E	Q4 / 2019	Advertising: National No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: N Bidding Document: Small Works e-GP: Yes
W22	Katahariya Drainage	5,455,000.00	OCB	Prior	1S2E	Q3 / 2019	Advertising: International No. Of Contracts: 1 Prequalification of Bidders: N Domestic Preference Applicable: Y Advance Contracting: N Bidding Document: Small Works e-GP: no

**Consulting Services**

Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Advertisement Date (quarter/year)	Comments
C01	Project Management and Quality Assurance Consultants	1,300,000.00	QCBS	Prior	FTP	Q2 / 2018	Type: Firm Assignment: National Quality-Cost Ratio: 90:10 Advance Contracting: Y e-GP: no Comments: SARD approved ratio
C02	Central Design,	2,950,000.00	QCBS	Prior	FTP	Q3 / 2018	Type: Firm

Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Advertisement Date (quarter/year)	Comments
	Supervision and Management Consultant						Assignment: National Quality-Cost Ratio: 90:10 Advance Contracting: Y e-GP: no Comments: SARD approved ratio
C03	Western Design, Supervision and Management Consultants	2,760,000.00	QCBS	Prior	FTP	Q3 / 2018	Type: Firm Assignment: National Quality-Cost Ratio: 90:10 Advance Contracting: Y e-GP: no Comments: SARD approved ratio
C04	Eastern Design and Supervision Consultants	2,610,000.00	QCBS	Prior	FTP	Q3 / 2018	Type: Firm Assignment: National Quality-Cost Ratio: 90:10 Advance Contracting: Y e-GP: no Comments: SARD approved ratio
C06(i)	Implementation support to TDF (Financial Management Specialist: 36 pm)	99,999.99	Competitive	Prior		Q2 / 2019	Type: Individual Assignment: National Expertise: Financial Management Advance Contracting: N e-GP: no
C06(ii)	Implementation support to TDF (Business Development Specialist: 36 pm)	99,999.99	Competitive	Prior		Q2 / 2019	Type: Individual Assignment: National Expertise: Business development Advance Contracting: N e-GP: no
C06(iii)	Implementation support to TDF (Municipal Water and Sanitation Specialist: 36 pm)	99,999.99	Competitive	Prior		Q2 / 2019	Type: Individual Assignment: National Expertise: Municipal Water and Sanitation Advance Contracting: N e-GP: no
C06(iv)	Implementation support to TDF (Planning, Monitoring and Evaluation Specialist: 36 pm)	99,999.99	Competitive	Prior		Q2 / 2019	Type: Individual Assignment: National Expertise: Planning and Monitoring Advance Contracting: N e-GP: no
C06(v)	Implementation support to TDF (Urban Development and Technical Appraisal Specialist: 36 pm)	99,999.99	Competitive	Prior		Q2 / 2019	Type: Individual Assignment: National Expertise: Urban Development and Technical Appraisal Advance Contracting: N e-GP: no
C07(i)	Implementation support to ISSAU (Water Supply and Sanitation Utility Expert: 24 pm)	99,999.99	Competitive	Prior		Q4 / 2019	Type: Individual Assignment: National Expertise: Water Supply and Sanitation Utility Advance Contracting: N e-GP: no
C07(ii)	Implementation support to ISSAU (Institutional Development and Financial Management Expert: 24 pm)	99,999.99	Competitive	Prior		Q4 / 2019	Type: Individual Assignment: National Expertise: Institutional Development and Financial Management Advance Contracting: N e-GP: no
C07(iii)	Implementation support to ISSAU	99,999.99	Competitive	Prior		Q4 / 2019	Type: Individual Assignment: National

Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Advertisement Date (quarter/year)	Comments
	(Legal Specialist: 24 pm)						Expertise: Legal Specialist Advance Contracting: N e-GP: no
C07(iv)	Implementation support to ISSAU (Program Associate: 24 pm)	99,999.99	Competitive	Prior		Q4 / 2019	Type: Individual Assignment: National Expertise: Program Associate Advance Contracting: N e-GP: no

### C. List of Indicative Packages (Contracts) Required Under the Project

The following table lists goods, works, and consulting services contracts for which procurement activity is expected to commence beyond the procurement plan duration and over the life of the project (i.e., those expected beyond the current procurement plan duration).

Goods and Works						
Package Number	General Description	Estimated Value (in US\$)	Procurement Method	Review	Bidding Procedure	Comments
None						

Consulting Services						
Package Number	General Description	Estimated Value (in US\$)	Selection Method	Review	Type of Proposal	Comments
None						

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

### A. Regional Design, Supervision and Management Consultants

1. The project management office (PMO) of the Department of Water Supply and Sewerage Management (DWSSM) will recruit 3 national consulting firms as the regional design, supervision and management consultants (regional DSMCs), one for eastern region (for project municipalities of Province 1 and 2), one for central region (for project municipalities of Province 3 and 4), and one for western region (for project municipalities of 5, 6, and 7), in accordance with the 90:10 quality- and cost-based selection (QCBS) procedure and will follow Asian Development Bank's (ADB's) Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). Each regional DSMC will support the respective regional PMO (RPMO) of DWSSM in conducting design, overall implementation management and construction supervision. They will report to respective RPMO directly and PMO as required.

2. The scope of services of the regional DSMCs includes (i) feasibility studies, socio economic survey, and design of water supply and sanitation (WSS) subprojects for future investments; (ii) construction supervision and subproject implementation of UWSSP project municipality; (iii) institutional strengthening and capacity building of WUSCs and RPMOs; (iv) communication strategy and gender equality and social inclusion (GESI) action plan implementation, and (v) environmental and social safeguards compliance but is not necessarily be limited to, the following tasks.

3. Eastern regional DSMCs will be based at the RPMO, Itahari. Western regional DSMC will be based at the RPMO, Nepalgunj. Central regional DSMC will be based at the PMO, Panipokhari, Kathmandu.

- (i) Induction, setting of systems and initial training of RPMOs and WUSCs or project municipalities
  - (a) familiarize and induct RPMO, water users' and sanitation committees (WUSCs) and relevant stakeholder on project requirements, approaches and processes. This will include project scope, design features, covenants and assurances, safeguards requirements, subproject selection criteria, design parameters and guidelines, all aspects of financing, as well as all environmental, social and land acquisition requirements; and
  - (b) set all required systems and processes in the RPMO and WUSCAs and project municipalities for smooth implementation of the project, such as project accounting, Quality Assurance/Quality Control plan, with guidance from PMO and RPMO, and induct both RPMO and WUSCs or municipalities staff on the same.
  - (c) Support RPMO to set up implementation core group in each WUSC/municipality under its jurisdiction and set up all the systems required in the WUSC's and field offices for each subproject.
- (ii) Feasibility studies and collection of socioeconomic baseline data

- (a) collect existing baseline information pertaining to water supply and environmental sanitation<sup>68</sup> for the project municipalities and analyze the existing situation;
- (b) in liaison with RPMO staff, WUSC and project municipality, identify and prioritize deficiencies in these sectors and finalize the area to be covered by the system;
- (c) study existing and alternative sources of raw water taking into consideration factors such as water quality, safe yields, financial viability, sustainability, other uses, environmental impact, climate and disaster risk, and suggest best possible options. Ensure to avoid conflict on the use of water source; facilitate to meet legal requirements and obtain permit to use water by municipality, awareness raised among source communities on the need to share water and benefit sharing mechanism agreed for use of the water;
- (d) carry out a topographical survey and a socio-economic survey for the system. Both surveys should be adequate to allow the completion of detailed design. The socio-economic survey will include women's time spent on water and sanitation activities and cover a representative sample of 10% of the service area to generate a gender, caste, ethnic-disaggregated socio-economic profile. This will be complemented with a simple 100% census survey to identify the exact number of poor and vulnerable households;
- (e) study existing and alternative sanitation options, considering factors such as current practices, costs, environment, and suggest best possible courses of action including public communication and awareness campaigns. This will include at a minimum, the number of household sanitary latrines required; an assessment of sludge generation and land needs for sludge drying beds where there is no other sanitary disposal option; public toilets if the WUSC or project municipality commits to their upkeep; toilets for public schools, where school commits to their upkeep;
- (f) prepare and compare alternative solutions for improving WSS including introduction of bulk water supply options (for future investments) and present them to primary stakeholders (mainly WUSC, municipality and DWSSM) and assist them in selecting the optimal alternative;
- (g) assess and recommend appropriate connection costs, fees and tariffs, in line with tariff guidelines adopted by DWSSM for small towns, taking into consideration issues such as affordability and willingness to pay, WUSC's and municipality cash flow and ensuring access of all the poor in the service area to the subprojects' benefits;
- (h) prepare report that verifies feasibility with cost estimates and drawings showing all proposed components including land. This will contain: i) proposed tariffs and any other charges to cover operation and maintenance and debt service; ii) proposed implementation arrangements; iii) operational responsibilities and costs; iv) water safety plan. Feasibility should also demonstrate compliance with all Government and ADB safeguards and other project preparation requirements, including benefits, risks, and action plans that confirm inclusive access to subproject benefits; and
- (i) present to the WUSC and municipality for agreement, the feasibility findings, particularly financial aspects, in an easily understandable manner. Revise the feasibility report to accommodate comments agreed by DWSSM, WUSC and

---

<sup>68</sup> Environmental sanitation includes solid and liquid waste disposal which is: on-site latrine coverage, sewerage, stormwater drainage, and solid waste management.



- municipality and obtain their written agreement before proceeding to detailed design; and
- (j) prepare environmental safeguards documents in line with engineering designs, such as IEE as appropriate, and social safeguards documents, such as resettlement plan or DDR as appropriate, in conformance with ADB SPS, project EARF, and Government of Nepal's policy and guidelines. Also prepare economic and financial analyses in conformance with ADB guidelines.
- (iii) WASH plan preparation
- (a) Prepare a WASH plan for entire municipality with guidance from PMO and PMQAC. It should include water supply, sanitation and hygiene components of whole municipality.
  - (b) Water supply plan should include at least an analysis of (i) coverage of existing water supply systems, its functionality status, service level – quantity and quality; (ii) plan for serving uncovered area; (iii) inventory of water sources (specify altitude and capacity, existing and future use).
  - (c) Sanitation plan will include, an analysis on generation, conveyance, treatment and disposal of: (i) household, institutional such as public schools, hospital, offices etc. and public toilet facilities; (ii) septage manage; (iii) waste water management; and (iv) drainage. Sanitation practices including (i) waste (SWM and septage) generation, both domestic and non-domestic; (ii) existing disposal practices including equipment used and the informal sector; (iii) any ongoing or previous waste management initiatives and if there are champions to promote improved environmental sanitation; (iv) status of onsite sanitation practices and status of septic tank sludge management; and (v) municipality capacity to manage waste. Key outputs will be: (i) identification of household-level onsite sanitation management; (ii) identification of household-level measures and initiatives for maximizing and practicing reduce, recycle, reuse (3R) principles; (iii) suggested equipment and other requirements, focusing on household level; (iv) community level fecal sludge management; (v) implementation arrangements, including potential for outsourcing operation; and (vi) phasing and costs.
  - (d) Hygiene includes awareness and capacity building of WUA, WUSCs and Municipality: (i) activities such as training and awareness campaigns; (ii) implementation arrangements, including the potential for outsourcing operation; and (iii) capacity building of WUSC.
  - (e) Identify the areas in project municipalities with high risks of flooding, and thus require storm-water drainage master plan (DMP). After agreeing with RPMOs, the regional DSMC will conduct: (i) identification of the areas of the areas of project municipality that suffer from inundation with an assessment of frequency and extent of damage caused, and (ii) determining the causes of priority segments for flood control and developing options for its alleviation. Prepare the drainage master plan which will show the proposed drains to be constructed (using 50-year flood event) with outline costs and investment phasing, if needed. A detailed map with contours at intervals sufficient to allow detailed design must be prepared as part of the topographical surveys described in the section above.
  - (f) For high priority areas, upon agreement with RPMOs, regional DSMC will prepare detailed designs and tender documents as described below.
- (iv) Detailed Design and Tender Document Preparation

- (a) prepare engineering designs in sufficient detail, and with adequate quality assurance and/or quality control to ensure clarity and understanding by the WUSCs, project municipalities and other relevant stakeholders. All designs should conform to DWSSM design guidelines for small towns, other national engineering standards, and reflect safeguard requirements. Where no national engineering standards exist, regional DSMC will seek RPMO's and PMQAC advice in appropriate design standards to be adopted;
- (b) carry out geotechnical surveys as necessary for structural design of subprojects particularly intakes, water containing structures, water treatment plants, and waste water treatment components;
- (c) detailed designs will include references to DWSSM design guidelines and parameters used and contain calculations and implementation schedule. Detailed costs, using the latest schedule of rates from the subproject district, will be developed from an accurate bill of quantities (BoQ) taken off from detailed technical design drawings that show all design aspects and can be approved by the RPMO;
- (d) estimate the operation and maintenance needs for the first year of operation of the water supply system including staff, material and power costs, and prepare performance standards for this operation to be included in the tender documents;
- (e) where there is a substantial modification from the feasibility study for whatever reason, this should be agreed with the RPMO and WUSCs and project municipality. Any cost deviation over 10% from the feasibility study costs should be adjusted into a revised proposed tariff and agreed with the WUA and PMO;
- (f) identify measurable outcomes of distribution network improvement (DNI) packages during design and supervise them during construction. The regional DSMC will include the procedures outlined in Attachment 1, Guidelines for performance-based Contracts for DNI Packages, as a minimum while ensuring that designs and cost estimates include bulk metering as required;
- (g) Show detail layout of wastewater interceptor, networks with all required components in the wastewater management system. Treatment location should be appropriately selected, and land should manage by municipality / WUSC;
- (h) for the management of fecal sludge proper treatment location should be chosen by the wastewater expert and proper transportation management should also consider during design;
- (i) prepare tender documents using standard ADB cleared master binding documents including all necessary information including: detailed technical specifications; BoQ; detailed construction drawings that permit contractors to carry out construction; specific conditions of contract; evaluation criteria;
- (j) assist the PMO in drafting and issuance of the bid invitation; prepare any addendums, and clarifications to bidders' queries for the PMO's response;
- (k) prepare the Employer's Requirement section for turnkey works such as water treatment plants etc. with drawings in sufficient details based on the preliminary design for tendering, review and approval of contractor's design and drawings; and
- (l) present to the WUSCs or project municipality the key points of the detailed design and brief them on the roles and responsibilities of the WUSC, DWSSM, municipality, TDF and the contractor during construction. Obtain their written agreement before proceeding to the next step.

- (v) Construction Supervision and Management
  - (a) work as the employer's representative as defined in the conditions of contracts;
  - (b) regularly monitor physical and financial progress against the milestones as per the contract so as to ensure completion of contract in time;
  - (c) monitor and enforce the quality of inputs, processes, and outputs during all activities of construction to ensure the quality of works conforms with the specifications and drawings;
  - (d) check Contractors' interim payment statements and recommend for the payment to the Client within 10 days after receiving such statements with sufficient supporting documents;
  - (e) check all construction to ensure conformity with the contract, propose any change in the plans, if required;
  - (f) assess and enforce, as per standard Construction Management System, the adequacy of contractors' inputs in terms of material, equipment, construction machinery, labor, construction approach and methodologies;
  - (g) Customize the Safety Manual prepared by the PMQAC for each subproject and enforce its implementation to ensure safety of construction workers, engineers, and citizens;
  - (h) ensure compliance with the resettlement and environmental management plans;
  - (i) furnish detailed drawings, with revisions as necessary, to the contractor, check contractors' design and drawings for lump sum Design and Build contracts;
  - (j) attend third party inspections as necessary and provide certification on the quality of the supplies based on such inspections;
  - (k) examine contractors' claims for time extension, variations, additional compensation etc. and recommend appropriate decisions;
  - (l) assist the client in resolving contractual issues;
  - (m) after physical completion of the works; check installation and commissioning; monitor preparation of the "as built" drawings by the contractor. Prepare, for each town, Base Maps in electronic geographic information system (GIS) format with integrated spatial and attribute data base showing details of all utilities (existing and newly constructed under the project) pertaining to Water Supply, Sanitation including Sewerage; and Drainage;
  - (n) prepare Operations Manual in user-friendly language and format (usable by WUSCs) for carrying out Operations and Maintenance (O&M) of various systems developed during the town project; and
  - (o) assist the WUA and RPMO monitor the performance of the contractor during its one-year operation's period.
  
- (vi) Safeguards implementation, including GESI action plan, and compliance monitoring
  - (a) conduct sensitization on ADB's policies and guidelines on environment and involuntary resettlement and indigenous people;
  - (b) conduct orientation to all contractors including laborers on national CLS, gender equality in wages, gender-based violence (including sexual exploitation and human trafficking), occupational health and safety standards

- (c) screen impacts and prepare new resettlement plans and/or indigenous peoples' plans (IPPs) in accordance with the resettlement framework/IPPF and government rules;
- (d) review and update prepared draft resettlement plans and/or due diligence report (DDR) upon completion of detail designs;
- (e) engage in ongoing and meaningful consultations with stakeholders and affected persons particularly through implementation of the consultation and participation;
- (f) ensure provision of timely payments to the affected persons by the WUSC before displacement/impact occurs in project sites ready for construction;
- (g) oversee implementation of resettlement plans and/or by WUSCs. Advise/take corrective actions when necessary to minimize/avoid social safeguards impacts;
- (h) assist the RPMO and WUSC/ municipality in implementing the GESI Action Plan and communication strategy;
- (i) ensure that all poor and disadvantaged families in the subproject area also benefit from the WSS interventions.
- (j) apply output-based aid for sanitation and household connections for poor and vulnerable households
- (k) act as focal point for municipality level of GRM process
- (l) assist municipality and WUSCs in establishing the operations for sludge/septage management and other waste management activities.
- (m) prepare new IEEs and EMPs in accordance with the EARF and applicable Government rules.
- (n) include EMPs in bidding documents and civil works contracts. Comply with all government rules and regulations.
- (o) take necessary action for obtaining permission to use rights of way.
- (p) ensure compliance with the resettlement plans and environmental management plans (EMPs).
- (q) oversee implementation of EMPs including environmental monitoring by contractors.
- (r) ensure that at least 15% of total workers employed by contractors are women, receiving equal pay as men for work of equal value
- (s) take corrective actions when necessary to ensure no adverse environmental impacts.
- (t) submit monthly and quarterly social safeguards and environmental monitoring reports to PMO and the RPMO.
- (u) establishment of a grievance redress mechanism (GRM) at Municipality level and ensure that the responsible party addresses any grievances brought about through the GRM in a timely manner.
- (v) inducting WUSC for O&M and initial 1 year of O&M support. Ensure training and capacity building are costed; and
- (w) preparation for commissioning and preparation of the WUSC staff and engineers for the takeover of the system operation.

4. Key personnel requirements and indicative inputs for regional DSMCs are in Table 1.

**Table A4.1: Indicative Inputs of Personnel for Regional DSMC**  
(person-month)

<b>S. No.</b>	<b>National Key Expert Positions</b>	<b>Eastern DSMC</b>	<b>Western DSMC</b>	<b>Central DSMC</b>	<b>Total</b>
1	Team Leader cum Water Supply Construction and Supervision Specialist	50	51	58	<b>159</b>
2	Procurement and Contract Management Specialist	40	40	40	<b>120</b>
3	Water Supply Design Engineer	19	21	28	<b>68</b>
4	Environmental Specialist	30	32	38	<b>100</b>
5	Sanitation and Wastewater Specialist	11	14	14	<b>39</b>
6	Social Safeguards and GESI Specialist	40	39	44	<b>123</b>
7	Electro mechanical Engineer	5	5	6	<b>16</b>
8	Geo-hydrologist	4	4	5	<b>13</b>
9	Construction Supervision Engineers and Structure Engineers	256	264	222	<b>742</b>
10	SCADA Specialist	6	6	14	<b>26</b>
11	Quantity Estimator	4	9	14	<b>27</b>
12	Unallocated (Information Technology/ SCADA Specialist, GIS Expert, Earthquake, Climate and Risk, Structural Engineer etc)	22	20	30	<b>72</b>
<b>Sub total</b>		<b>487</b>	<b>505</b>	<b>513</b>	<b>1505</b>

GESI = gender equality and social inclusion, GIS = geographic information system, SCADA = supervisory control and data acquisition.

## **B. Project Management and Quality Assurance Consultants**

5. The project management and quality assurance consultant (PMQAC) will provide support to the PMO and RPMOs with the main aim of ensuring that the quality of the designs and construction of all WSS components implemented under UWSSP are to the required standards. The PMQAC will also assist the PMO, and RPMOs if required, with overall planning, implementation and monitoring of the Project during all stages of implementation including adherence to environmental and social safeguards compliance in accordance with ADB's and the Government's safeguards policies and guidelines.

6. The scope of the consulting services will include but not necessarily be limited to the following:

- (i) Overall Management of the Project
  - (a) Ensure regular organization of management meetings and progress review meetings among PMO, regional DSMCs and contractors. Prepare minutes of the meeting and review progress of the action plan agreed in subsequent meeting. Bring to the attention of PMO for action required on key issues.
  - (b) Assist the PMO in planning, implementing, managing and monitoring all project activities; advise the PMO on all project-related issues, including policy, loan covenants and special conditions.
  - (c) Work with the PMO to establish a Project Performance Management System (PPMS) as per ADB Guidelines and Government requirements.
  - (d) Assist the PMO and RPMOs supervise regional DSMCs in their assigned tasks and monitor their compliance with their terms of references (TORs).

- Carry out performance monitoring of regional DSMCs and provide regular feedback to the PMO with recommendations for timely corrective action.
- (e) Regularly undertake visits to subprojects sites, assure construction quality, review progress of activities, conduct quality assurance audits and provide concrete suggestions for improvement.
  - (f) Work with the PMO and regional DSMCs to establish a proper financial accounting and control system for each subproject, and for the entire project. This will ensure accurate and timely report submissions; and to ensure smooth funds flow from ADB to the Government of Nepal<sup>4</sup>, the PMO and at the local level, including contractors.
  - (g) Ensure regular organization of management meetings and progress review meetings among PMO, regional DSMCs and contractors. Prepare minutes of the meeting and review progress of the action plan agreed in subsequent meeting. Bring to the attention of PMO for action required on key issues.
- (ii) Training of PMO and RPMOs for UWSSP implementation
- (a) Familiarization with the aims, outputs and processes of the UWSSP. This will include acquaintance with the outcomes and lessons learnt from the first three STWSSS projects. The PMQAC should be fully cognizant of the changes made to the implementation of the UWSSP particularly in its focus, outputs and Design and Monitoring Framework and financing arrangements and in improving the quality of the systems constructed, as well as all environmental, social and Gender Equity and Social Inclusion (GESI) aspects.
  - (b) The PMQAC will assist the PMO to establish all the required systems and processes in the PMO and RPMOs for smooth implementation of the project and induct both PMO and RPMO staff on the UWSSP implementation arrangements.
  - (c) Ensure that all the agreements are prepared and signed: (i) MoU between PMO, TDF, WUSC and municipality; (ii) Financing Agreement between PMO, TDF and WUSC and municipality; (iii) Project Management Agreement between DWSSM, WUSC and municipality; and (iv) Service Operation Agreement between TDF and WUSC and municipality.
  - (d) Ensure that the municipalities and WUAs approve each key stage of the subproject preparation process, particularly about financial contributions, by providing their formal consent to DWSSM for the next stage to commence.
  - (e) The PMQAC's safeguards experts (environmental and social) will be responsible for training the (i) PMO's safeguards officers (environmental and social); (ii) RPMOs' engineers and social development officers. Training modules will need to cover safeguards awareness and management in accordance with both ADB and government requirements as specified in Chapter VII of the PAM.
  - (f) Carryout different capacity development training, workshops to the staff of PMO and RPMOs as per the annual training calendar prepared by the PMO. Such capacity building will include but not limited to: (a) preparation of WASH master plans; (b) smart water management, Supervisory Control and Data Acquisition (SCADA) tools and techniques and application (c) supporting the Institutional Support and Service Advisory Unit (ISSAU) and DSCs in the formation of WUSCs with women and marginalized groups representation; (d) supporting ISSAU and TDF in the preparation of utility operators business plans and tariff guidelines; (e) sharing of lessons learnt and innovation; and (f) environmental and social safeguards and gender and social inclusion.

PMQAC will also review and document the efficacy of training programs organized by regional DSMCs.

- (iii) Preparation Frameworks, Guidelines and Manuals
  - (a) Review and update the existing Engineering Design Guidelines in due consultation with DWSSM to reflect agreed changes in the design parameters, incorporate climate change assessment, water treatment & wastewater treatment components and other agreed parameters and accommodate further design improvements to be agreed with the PMO.
  - (b) Prepare and/or update quality assurance and quality control manual. The manual should define and/or update consistent, comprehensive and uniform system of quality assurance and control at each main stage of subproject implementation. That is during subproject: (i) identification, (ii) feasibility, (iii) detailed design, (iv) procurement, and (v) construction and supervision. This will involve the preparation of processes, inspections and checklists that will demonstrate for each stage of every subproject that the work has been carried out with due diligence, that outputs proposed are optimal solutions, and that works constructed comply with the contract's specifications. It should also apply QA to the construction supervision activities. The manual should be designed to be generally applicable for use in all water supply subprojects. It should guide the RPMO in preparing a simple QA plan for each subproject.
  - (c) Prepare outline template operation manuals for water supply systems that can be tailored for each specific subproject by the contractor and subsequently used by the operator.
  - (d) Review the Safety Manual prepared under earlier projects and update it accordingly based on lessons learned. This manual is to be used by contractors and operators to ensure the safety of all site staff, visitors and the general public in and around all subproject sites.
  - (e) Translate, publish, and disseminate approved environmental and social safeguards framework summaries, as well as summary of initial environmental examination, environmental management plan, and resettlement plan in Nepali.
  - (f) The contents of all frameworks, manuals and guidelines should be agreed with the PMO and circulated to relevant stakeholders. The PMQAC will assist the PMO and RPMOs organize training workshops at appropriate timings to ensure their effective use.
  
- (iv) Project Performance Management System (PPMS) and SCADA Installation
  - (a) Work with the PMO to establish a PPMS as per agreement with ADB and monitor and disseminate the results. The system should be compatible with the reporting systems established under earlier projects and modifications should be agreed with the PMO and tested at the RPMO and subproject levels before being incorporated.
  - (b) Further improve reporting systems to ensure monthly updating of the PPMS with information flowing from the subprojects via the RPMOs to the PMO.
  - (c) Prepare performance monitoring indicators for all aspects of the regional DSMCs' work and monitor their performance quarterly and provide recommendations for improving performance.
  - (d) Prepare a standardized baseline, midterm and end-term socio-economic survey methodology and framework to be followed by the regional DSMCs.

- (e) Assist the PMO in consolidating baseline surveys results at inception stage and subsequent evaluation surveys at project mid-term and completion stage. Assist the PMO implementing the PPMS for the project following ADB's guidelines and Government requirements.
  - (f) Assist the PMO with the use of the PPMS outputs by continuously monitoring Project progress and prepare monthly progress reports and quarterly summaries identified in the PPMS and, based on these reports, suggest appropriate corrective action to the PMO.
  - (g) Study the SCADA system used in the water supply projects, analyze the advantages and disadvantages of the system and propose new reliable sustainable and economical SCADA system for small towns and urban water supply & sanitation projects.
  - (h) Apply the knowledge of SCADA and Advanced Applications in town projects under Urban Water Supply & Sanitation Sector Project for the automation & quality service.
  - (i) Coordinate with National Data Center to create the data server for the SCADA operation in earlier and ongoing small towns projects and the Urban Water Supply and Sanitation (Sector) Project.
  - (j) Monitor GIS mapping of subprojects including assets and service area prepared by regional DSMCs during design and project completion stage.
- (v) **Carry out Design and Cost Estimate Reviews and Quality Audits.** At each stage of subproject implementation, ensure all designs are in line with the design standards and in acceptable quality. The PMQAC will carry out technical checks during construction and periodic technical audits based on government guidelines to ensure the quality of project outputs. Specifically, for each stage this will involve ensuring the following:
- (a) Identification – Ensure that subproject selection follows the defined selection criteria, including: (a) demand from the potential users who are willing to contribute funds for the system construction and for its subsequent operation; (b) defined area to be covered by the subproject; (c) adequate available source (or sources) that can meet the design demand and that any conflicts over water use is resolved to the satisfaction of all involved parties; (d) land is available for any major structures, or it can be easily acquired.
  - (b) Feasibility – this will aim to ensure that the subproject as proposed is viable. Particular focus to be on two main areas: i) technical feasibility, including available water sources and consideration of climate change and risks by natural hazards, and ensuring that the most cost effective technical option has been selected; and ii) affordability to ensure that the proposal is affordable to all users, the WUA and municipality. Feasibility should also ensure that the environmental and social safeguards have been comprehensively included in the design. Water supply, waste water, storm water, and drainage master plans, as well as municipal WASH plans need to be checked to ensure baseline data is correct and subprojects are feasible and cost effective.
  - (c) Detailed Design – These should be verified and improved to show that the design is the most cost effective, that the bill of quantities is complete and correct and uses updated local costs and that the drawings are adequate and correct. Where costs vary substantially from the feasibility study, these should be checked and reasons for the variation determined and justified. Most importantly these activities are to be accomplished within time limits set by PMO.



- (d) Procurement – Tender documents should be checked to confirm that they are complete and correct and will allow potential bidders to submit competitive bids and construct the subproject as designed and specified. Bid documents to follow ADB templates.
  - (e) Construction Supervision – This will ensure that the quality of material, labor and equipment used is as specified in the contract. The checks will also contain details of the type, frequency and procedures for on-site inspections and laboratory tests to be followed to ensure that requisite quality standards are met.
- (vi) Social and Environmental Safeguards Compliance Monitoring, including GESI Action Plan
- (a) Review the existing systems in the PMO used to monitor social and environmental safeguards and further refine this by preparing subproject specific indicators for the PPMS to monitor important safeguard parameters.
  - (b) Incorporate safeguard compliance into all relevant manuals and guidelines. Review and confirm existing resettlement plans/DDR, IPPs, IEEs, and EMPs are updated based on detailed designs. Ensure that all resettlement plans/DDR, IPPs, IEEs, and EMPs are in accordance with the resettlement framework, IPPF and EARF and government rules; and recommend for approval to PMO. Confirm EMPs are included in bidding documents and civil works contracts.
  - (c) Take proactive action to anticipate potential project or subproject environmental impacts and resettlement requirements to avoid delays in implementation and assist the PMO in informing the regional DSMCs and contractors regarding means to address these points.
  - (d) Review initial environmental examinations (IEEs), Resettlement Plans and ensure their compliance with ADB and GON policies. Provide oversight on environmental management aspects of subprojects and ensure EMPs are implemented by contractors and monitored and reported by the RPMOs.
  - (e) Monitor the effectiveness with which the Resettlement Plans and the environmental management plans are implemented and recommend necessary corrective actions to be taken to the PMO. Establish a system to monitor environmental and social safeguards of the project, and all subprojects, including monitoring the indicators set out in the monitoring plan of the EMP and resettlement plans. Consolidate quarterly environmental and social monitoring reports from RPMOs and support PMO in submitting semi-annual monitoring reports to ADB.
  - (f) Ensure timely disclosure of final IEEs, EMPs, resettlement plans, and IPPs in project locations and in a form accessible to the public. Address any grievances brought about through the Grievance Redress Mechanism in a timely manner.
  - (g) Ensure that the resettlement framework/EARF/IPPF provisions are adhered to and the resettlement plans/IEEs are updated based on detailed designs; and that new resettlement plans/IPPs/IEEs, as required. Provide oversight on social and environmental safeguards policy compliance of subprojects and ensure timely implementation.
  - (h) Support PMO in establishment of GRM at all levels within three months of IFB floating.
- (vii) GESI Action Plan and Output Based Aid for the Poor

- (a) Assist the RPMOs and regional DSMCs in developing and implementing locally relevant training packages.
  - (b) Support the RPMOs and regional DSMCs to organize targeted mobilization activities for marginalized and vulnerable groups to ensure their participation and inclusion in project benefits, including representation and decision making in WUSCs.
  - (c) Prepare and integrate in the project indicators related to gender, social inclusion and poverty in all socio-economic surveys and project activities; ensure collection of sex- and caste-/ethnicity-disaggregated data and analysis of the results, especially benefits from the project corresponding to these indicators to include among others, data on time spent per day by women on water and sanitation activities.
  - (d) In consultation with PMO, regional DSMCs review the implementation of the GESI action plan to ensure active involvement of women and vulnerable groups in all decision-making processes.
  - (e) In coordination with regional DSMCs undertake sample survey to assess women's and vulnerable groups' socio-economic benefits and satisfaction from enhanced access to WSS resulting in access to adequate and safe water, reduced time spent in water collection, reduced incidence of water-borne diseases, increased use of toilets, and changed WASH behaviors.
  - (f) Work with PMO, RPMOs and regional DSMCs to establish a system of implementing OBA for the identified poor and vulnerable in the project.
  - (g) Monitor the work of regional DSMCs regarding implementation of OBA.
- (viii) Preparation of Future investment Projects
- (a) Support PMO to set action plans with targets for each regional DSMC for preparation of future investment projects during the full project period, including GESI-responsive features.
  - (b) Organize regular consultations between PMO and each regional DSMC to review the extent to which set targets are being realized.
  - (c) Based on agreement reached, support PMO to prepare whole set of bidding documents to secure financing.

**Table A4.2: Indicative Inputs of Personnel for PMQAC**  
(person-months)

<b>Designation (National)</b>	<b>Indicative Inputs</b>
Team Leader – Project Implementation Specialist	48
Design Review Engineer	12
Financial Management Specialist	6
Environmental Specialist	24
Social Development (GESI) Specialist	24
Social Safeguard Specialist	24
Quality Assurance Specialist	28
Water and Wastewater Treatment Specialist	6
IT and SCADA Specialist	18
Contract Management, Geo-hydrologist, Electro-mechanical, and unallocated	30
<b>Total</b>	<b>220</b>

**C. Implementation Support to ISSAC and TDF**

7. The PMO will recruit 7 individual consultants to provide implementation and institutional support to ISSAU (4 individual experts) and TDF (5 individual experts) following individual consultant selection method of ADB.

8. The individual ISSAU consultants (ISSAC) will work as part of the ISSAU core team in DWSSM to ensure that WUSCs have necessary systems in place for the effective and efficient utility management; developing business plan for WUSCs looking at the legal structure (corporatizing/company/board) for appropriate levels of population/service areas; preparing standard operating processes for operation and maintenance, consumer complaint redress and handling emergencies; and supporting DWSSM in updating its business plan; and implementing institutional and financial support models based on systematic capacity gaps assessment on WUSCs technical, legal, operation, financial and sustainability issues etc.

9. The proposed individual consultant positions (national) for are in Table 3.

**Table A4.3: Individual Consultants**  
(person-months)

Designation (National)	Indicative Inputs
ISSAC Water and Sanitation Utility Specialist (Team Leader)	24
ISSAC Institutional and Financial Management Specialist	24
ISSAC Legal Specialist	24
ISSAC Program Associate	24
TDF Urban Development and Technical Appraisal Specialist	36
TDF Municipal Water and Sanitation Specialist	36
TDF Business Development Specialist	36
TDF Planning, Monitoring and Evaluation Specialist	36
TDF Financial Management Specialist	36
Total	276

## GRIEVANCE REDRESS MECHANISM

1. A project-specific grievance redress mechanism (GRM) will be established to receive, evaluate and facilitate resolution of affected persons' concerns, complaints, and grievances related to social, environmental and other concerns on the project. Grievances may be channeled through letters, emails, text messages (SMS), verbal narration, grievance box and registers. The GRM will aim to provide a time-bound and transparent mechanism to resolve such concerns.
2. A common GRM will be in place for social, environmental or any other grievances related to the project. The GRM will provide an accessible forum for receiving and facilitating resolution of affected persons' grievances related to the project. Project will publish the sample grievance registration form on its website and publish it in local language and/or indigenous peoples dialect, at the hoarding board of each of the participating WUA or municipalities' office. Every grievance shall be registered with careful documentation of process adopted for each of the grievance handled, as explained below. The environmental and social safeguards officer (ESO/SSO) at the project management office (PMO) will have the overall responsibility for timely grievance redress on environmental and social safeguards issues. The Social Safeguards Officer at the regional project management office (RPMO) will be the focal person for facilitating the grievance redress at the local level.
3. A municipal-level public awareness campaign will be conducted on a regular basis as per the communication strategy of the project to ensure awareness on the project and its GRM. The social and environmental safeguards experts of the PMQAC and regional DSMCs will support the WUA or municipalities in conducting municipality-wide awareness campaigns, which will ensure that all stakeholders including poor and vulnerable are aware of the GRM and project's entitlements.
4. A Grievance Redress Committee (GRC) will be formed at the Municipality level, comprising the Mayor as Chairperson of GRC, and Regional Project Manager RPMO as Secretary. The GRC members will comprise of (i) WUSC Secretary, (ii) RPMO Engineer, (iii) RPMO social /environmental (as relevant) officer, (iv) representative of affected persons, (v) regional DSMC's safeguards specialist (social/environment as relevant), (vi) a representative of reputable and relevant CBO/SHG/organization working in the project area as invitee<sup>1</sup> and (vi) contractor's representative. The secretary of the GRC will be responsible for convening timely meetings and maintaining minutes of meetings. The concerned social safeguards expert of regional DSMC will support the RPMO safeguard's officer and Project Manager of RPMO to ensure that grievances, including those of the poor and vulnerable are addressed. All GRCs shall have at least two women committee members. Along with representatives of the APs, civil society and eminent citizens can be invited as observers in GRC meetings. In case of any indigenous people impacts and in areas where Indigenous Peoples are present, the GRC must have representation of the affected indigenous people community, including at least one female indigenous person, leaders of the tribe(s) or a member of the tribal council as traditional arbitrator (to ensure that traditional grievance redress systems are integrated) and a nongovernment organization (NGO) working with indigenous people groups. A representative of the District Coordination Council will be invited to attend any GRC meetings where coordination between government departments is required, particularly to address indigenous peoples' issues.

---

<sup>1</sup> If the complaints are related with indigenous peoples and/or Dalits and/or other vulnerable groups, specific non-government/community-based organizations that actively involved in development of these communities should be involved.

5. The functions of the local GRC are as follows: (i) provide support to affected persons on problems arising from environmental or social disruption, asset acquisition (if necessary), and eligibility for entitlements, compensation and assistance; (ii) record grievances of affected persons, categorize and prioritize them and provide solutions within 15 days of receipt of complaint by WUA or local bodies; and (iii) ensure feedback to the aggrieved parties about developments regarding their grievances and decisions of the GRC. The GRM procedure is depicted in Figure 1, and is outlined below in detail, with each step having time-bound schedules and responsible persons to address grievances and indicating appropriate persons whose advice is to be sought at each stage, as required:

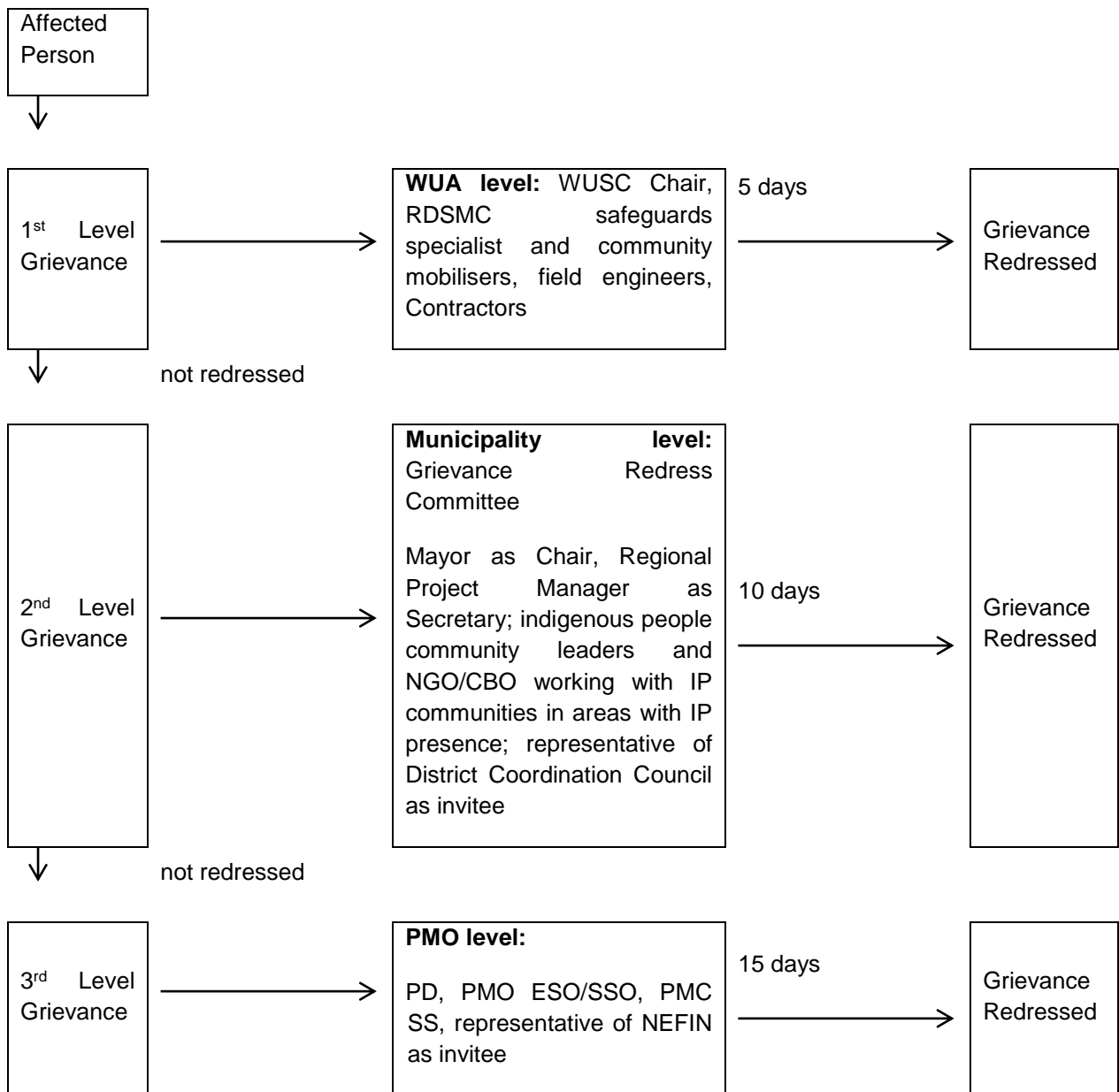
- (i) **First Level of GRM** (WUA level): The first-level, which is also the most accessible and immediate venue for quick resolution of grievances will be the contractors, regional DSMC field engineers and RPMO supervision personnel, who will immediately inform the WUA. Any person with a grievance related to the project works can contact the Project to file a complaint. The municipal-level field office of the RPMO, in WUA's building, will document the complaint within 24 hours of receipt of complaint in the field, and WUA or local bodies will immediately address and resolve the issue at field-level with the contractor, supervision personnel of RPMO and regional DSMC field engineers within 5 days of receipt of a complaint/grievance. The assigned regional DSMC's Social Mobilizer will be responsible to fully document: (i) name of the person, (ii) date of complaint received, (iii) nature of complaint, (iv) location and (v) how the complaint was resolved as well as to provide feedback to the complainant. If the complaint remains unresolved at the local level within 5 days, the WUA will forward the complaint to the municipality level GRM.
- (ii) **Second Level of GRM** (Municipality level): The complainant will be notified by the WUA that the grievance is forwarded to the Municipality-level GRC. The M level GRC will be called for a meeting, called and chaired by the Mayor. The GRC will recommend corrective measures at the field level and assign clear responsibilities for implementing its decision within 10 days of receipt of complaint by WUA. If the grievance remains unresolved within 10 days of receipt of complaint by WUA, the matter will be referred to the third level. The RPMO Engineer will be responsible for processing and placing all papers before the GRC, recording decisions, issuing minutes of the meetings, providing feedback to complainants and taking follow up actions so that formal orders are issued and decisions are carried out.
- (iii) **Third Level of GRM** (PMO Level): Any unresolved or major issues at Municipality level will be referred to the PMO for final solution. A representative of the Nepal Federation of Indigenous Nationalities (NEFIN) will be invited to attend any meetings related to resolution of Indigenous Peoples grievances. Decision has to be made within 15 days of receipt of complaint by WUA. The PD will sign off on all grievances received by the PMO. The concerned Deputy Project Director (DPD) and environmental and social safeguards officers (ESO & SSO) of PMO will be involved with support from the PMQAC's social/environment safeguards experts. The SSO will be responsible to convey the final decision to the complainant.

6. All paperwork (details of grievances) needs to be completed by the WUA member secretary assisted by regional DSMC and circulated to the WUA Chairperson and members. At Municipality level, the RPMO Engineer will be responsible for circulation of grievances to the Regional Project Manager, DWSSM, Mayor and other GRC members, prior to the scheduled meetings. The RPMO's Engineer will be responsible for follow-through of all escalated grievances. All decisions taken by the GRC will be communicated to the affected persons by the RPMO's SSO.

7. Despite the project GRM, an aggrieved person shall have access to the country's legal system at any stage and accessing the country's legal system can run parallel to accessing the GRM and is not dependent on the negative outcome of the GRM.

8. In the event that the established GRM is not in a position to resolve the issue, the affected person also can use ADB's Accountability Mechanism (AM) through directly contacting (in writing) the Complaint Receiving Officer (CRO) at ADB headquarters or the ADB Nepal Resident Mission. The complaint can be submitted in any of the official languages of ADB's developing member countries (DMCs). The ADB's AM information will be included in the Project Information Datasheet (PID), to be published in web and distributed to the affected communities, as part of the project GRM.

**Figure 1: Grievance Redress Process**





## **FRAMEWORK FOR INCLUSION OF POOR AND VULNERABLE HOUSEHOLDS**

### **A. Background**

1. This framework outlines the strategy for inclusion and coverage of poor and vulnerable households in the participating municipalities under the Urban Water Supply and Sanitation (Sector) Project (the project). The project envisages provision of free water supply connections to 100% of poor and vulnerable households (HHs) in the project municipalities, for which grants will be given upfront to the participating water users' and sanitation committees (WUSCs) or the municipalities. Output Based Aid (OBA) was introduced as an innovative feature in earlier projects to deliver water supply and sanitation (WSS) services to the poor and vulnerable groups in the municipalities.<sup>1</sup> Under the project, OBA will continue for sanitation, while a 100% targeting approach to poor and vulnerable HHs in Project municipalities will be adopted for water supply. This framework provides the identification process and eligibility criteria for beneficiaries and fund flow mechanisms for WSS to beneficiaries. The essential difference between the two is that for water supply, the grant for connections to poor is disbursed upfront, whereas for sanitation the grant is disbursed after completion of toilet construction by the beneficiary as certified by the municipality.

### **B. Provision of Water Supply Services to the Poor**

#### **1. Beneficiary Identification**

2. Eligible beneficiaries for free water supply connections will be identified through:
- (i) A 100% rapid census of households proposed in each project municipality, which will capture the socio-economic characteristics of each household (income source, vulnerability, land/house ownership status, housing type, asset ownership, and food sufficiency) to identify poor and vulnerable households;
  - (ii) Confirmation/ cross checking/verification of survey results through participatory appraisal, that will tap the knowledge of the community and its perceptions of poverty, to be facilitated by the regional DSMC social mobilisers;<sup>2</sup> and
  - (iii) Validation of final beneficiary list by the project management and quality assurance consultant (PMQAC)'s Social Development Expert.

#### **2. Eligibility Criteria and application**

3. Eligible beneficiaries are poor and vulnerable households identified through the census and possess at least three of the following characteristics:
- (i) Indigenous people or Dalit households, households headed by a female or disabled or elderly person;
  - (ii) Households dependent on one daily wage laborer;
  - (iii) Landless households / households with land holding less than 0.5 ha;<sup>3</sup>
  - (iv) Kucchi (temporary) housing (more than 75% of the house structure is made up of light materials)

---

<sup>1</sup> Output-based aid (OBA) is a method for using explicit performance-based grants to support delivery of basic services where policy concerns justify public funding to complement or replace user charges.

<sup>2</sup> The results will be cross-checked using key informant interviews if the community appears to be divided, with high levels of mistrust.

<sup>3</sup> As per an FAO assessment of food and nutrition security in Nepal, 2010, a minimum of 0.5 ha of agricultural land is required for household food security.



- (v) Households without TV or refrigerator; and
- (vi) Households having less than 2 productive cattle.

### **3. Extent of Grant**

4. A 100% grant will be paid upfront to the contractor through the WUA or municipality for water supply connections to poor households.<sup>4</sup> The baseline survey conducted in sample municipalities in 2017 reveals the presence of an average of 20% poor households across municipalities.

## **C. Provision of Sanitation Services to the Poor**

### **4. Beneficiary Identification and eligibility**

5. Eligible beneficiaries for OBA are proposed to be identified through:
- (i) a 100% rapid census of households proposed in each project municipality, which will help identify:
    - (a) poor and vulnerable households (using the same criteria as for water supply);
    - (b) households without individual toilets; and
    - (c) availability of space for toilet within or adjacent to the house.
  - (ii) confirmation of survey results through participatory appraisal by regional DSMC social mobilisers;
  - (iii) willingness to pay 10% of actual cost of toilet construction either in cash or kind by beneficiary, to be determined through consultations by the regional DSMC social mobilisers;
  - (iv) validation of beneficiary list for OBA by PMQAC GESI expert; and
  - (v) endorsement by municipality.

### **5. Extent of Grant and Mode of Payment**

6. The ratio of grant to beneficiary contribution will be 95:5. A fixed unit grant amount of NPR 10,000 per household will be provided. As construction of a latrine by a household is essentially an individual choice, it is desirable that construction be done by individual householders as per his or her choice. The Project through the WUA or municipalities and regional DSMC will give all information and will support the household in making an informed decision regarding the type of model, cost of model, minimum specifications, sourcing the material, etc. Payment of the grant amount will be made to the WUA or municipalities after completion of toilet construction has been verified.

## **D. Implementation Arrangements**

7. The following process will be followed in the implementation of WSS subsidy:

---

<sup>4</sup> In order to ensure the quality of house connection, minimize leakages at the connection point, and reduce occurrences of frequent road cuts, house connection for water supply will be executed by the subproject civil works contractor.

## 1. Identification, Endorsement, and Application

- (i) The project management office (PMO), regional project management offices (RPMOs), PMQAC experts, regional DSMCs, WUAs / municipalities' responsible unit should be in place and fully functional.<sup>5</sup>
- (ii) The regional DSMC, in collaboration with the WUA or municipalities, identifies the poor and vulnerable households as per the eligibility criteria and participatory consultative process of identification mentioned in this framework.
- (iii) After identification of target beneficiaries, the WUA or municipality organizes a meeting of water users and the list of target beneficiaries is read out in this meeting, objections invited and corrected, and the final list endorsed. Representatives of concerned WUA or municipality, RPMO and regional DSMC will also attend this meeting.
- (iv) PMQAC will conduct a random sample survey to confirm that all eligible beneficiaries are included in the project and there is no elite capture of benefits and no exclusion of eligible beneficiaries.
- (v) The WUAs or municipalities with the help of regional DSMC's social mobilisers will explain to target beneficiaries the level of grant and process of delivery of WSS services.<sup>6,7</sup>
- (vi) Voluntary application by the target beneficiary to the WUA or municipalities should be obtained by the regional DSMC social mobilisers, verified, compiled, and recommended to the WUA or municipalities for approval.

## 2. Flow of Grant Fund and Civil Works Procedures

### Water Supply

- (i) Social preparation of approved target beneficiaries will be undertaken by the regional DSMC's social mobiliser and a copy of the list of target beneficiaries will be made available to the subproject civil works contractor for the subproject.
- (ii) The actual work of installing water supply connection is carried out by the subproject civil works contractor for house connections, who will give priority to connections to poor and vulnerable households.
- (iii) The contractor will submit an estimate to the WUA or municipalities along with details of work proposed for the target beneficiaries such as name, address, length of pipe proposed for connection, fixtures and fittings, water meter, valve, etc., user's contribution, and the amount claimed for each household. The regional DSMC will certify the estimate of the contractor.

---

<sup>5</sup> The census of all the households in the sample municipalities is to be carried out by consultants with guidance of PMO and RPMOs.

<sup>6</sup> In the case of water supply, the details of house water supply connection—including length of pipe, fixtures, water meters, and valves—method of construction by the main contractor, and responsibility of the household for oversight and quality control in this regard should be explained by RDSMC social mobiliser to the target beneficiary household.

<sup>7</sup> In the case of sanitation, the RDSMC social mobiliser should explain the OBA framework to target beneficiaries in the list, including the level of grant, extent of coverage, and process of delivery of sanitation services, etc. The responsibility of the household for oversight and quality control in this regard should be explained to the target beneficiary household. It includes details of different types of latrine models, cost of each model, type and unit costs of material required, specifications, level of grant, method of payment of grant, etc. The choice of the model should be ascertained and documented. The responsibility of construction by the beneficiary has to be clearly explained to the household and the likely time frame of construction by the household should also be ascertained and documented.

- (iv) The WUA or municipalities will get the list of beneficiaries verified through the PMQAC so as to ascertain that the house connections have actually been made to the intended beneficiaries and that the desired outputs have been achieved.
- (v) The WUA or municipalities will get upfront funds from the RPMO based on the estimates submitted by the contractor.
- (vi) The WUA or municipalities will make full payment to the contractor from the grant funds available.

### **Sanitation**

- (i) The WUA or municipalities will provide grants to the household, either in cash or in the form of materials needed, together with some guidance for procurement of materials, if the household chooses to procure materials on its own.
- (ii) The minimum specifications for toilet construction will be given to the beneficiaries.
- (iii) The actual work of latrine construction is carried out by the concerned household or by a contractor appointed by the community.
- (iv) Once a latrine has been constructed and made operational by an individual household, such household will send a statement to the WUA or municipality informing it of the completion of the work. (The regional DSMC social mobilisers will provide the format for this application.)
- (v) The WUA or municipalities will ask the regional DSMC social mobiliser to verify that the latrine has been constructed, the quality and workmanship of construction, and whether it is operational, and issue a verification report.
- (vi) The WUA or municipality will send a request for reimbursement of the grant to the RPMO together with a verification report and have it reimbursed.

### **E. Evaluation**

8. Evaluation will be carried out by the PMQAC GESI Expert, with help from regional DSMCs. The choice of respondents will be done using random sampling methods.

### **F. Detailed OBA Implementation Guidelines**

9. A combined OBA guideline for both WSS (toilets) construction is available with DWSSM. For any revisions to the guidelines, ADB No Objection will be sought prior to implementation of any sanitation subprojects.

## SAMPLE OUTLINE SEMI-ANNUAL ENVIRONMENTAL MONITORING REPORTS

### Semi-Annual Environmental Monitoring Report Template

#### I. INTRODUCTION

- (i) Overall project description and objectives
- (ii) Environmental category as per ADB Safeguard Policy Statement, 2009
- (iii) Environmental category of each subproject as per national laws and regulations
- (iv) Project Safeguards Team

Name	Designation/Office	Email Address	Contact Number
1. PMU			
2. PIUs			
3. Consultants			

- (v) Overall project and sub-project progress and status
- (vi) Description of subprojects (package-wise) and status of implementation (preliminary, detailed design, on-going construction, completed, and/or O&M stage)

Package Number	Components/ List of Works	Status of Implementation (Preliminary Design/Detailed Design/On-going Construction/Completed/O&M) <sup>77</sup>	Contract Status (specify if under bidding or contract awarded)	If On-going Construction	
				%Physical Progress	Expected Completion Date

#### II. COMPLIANCE STATUS WITH NATIONAL/STATE/LOCAL STATUTORY ENVIRONMENTAL REQUIREMENTS <sup>78</sup>

Package No.	Subproject Name	Statutory Environmental Requirements <sup>79</sup>	Status of Compliance <sup>80</sup>	Validity if obtained	Action Required	Specific Conditions that will require environmental monitoring as per Environment Clearance, Consent/Permit to Establish <sup>81</sup>

#### III. COMPLIANCE STATUS WITH ENVIRONMENTAL LOAN COVENANTS

<sup>77</sup> If on-going construction, include %physical progress and expected date of completion

<sup>78</sup> All statutory clearance/s, no-objection certificates, permit/s, etc. should be obtained prior to award of contract/s. Attach as appendix all clearance obtained during the reporting period. If already reported, specify in the "remarks" column.

<sup>79</sup> Specify (environmental clearance? Permit/consent to establish? Forest clearance? Etc.)

<sup>80</sup> Specify if obtained, submitted and awaiting approval, application not yet submitted

<sup>81</sup> Example: Environmental Clearance requires ambient air quality monitoring, Forest Clearance/Tree-cutting Permit requires 2 trees for every tree, etc.

No. (List schedule and paragraph number of Loan Agreement)	Covenant	Status of Compliance	Action Required

**IV. COMPLIANCE STATUS WITH THE ENVIRONMENTAL MANAGEMENT PLAN (REFER TO EMP TABLES IN APPROVED IEE/S)**

- (vii) Confirm if IEE/s require contractors to submit site-specific EMP/construction EMPs. If not, describe the methodology of monitoring each package under implementation.

**Package-wise Implementation Status**

Package Number	Components	Design Status (Preliminary Design Stage/Detail ed Design Completed)	Final IEE based on Detailed Design				Site-specific EMP (or Construction EMP) approved by Project Director? (Yes/No)	Remarks
			Not yet due (detailed design not yet completed)	Submitted to ADB (Provide Date of Submission)	Disclosed on project website (Provide Link)	Final IEE provided to Contractor/s (Yes/No)		

- (viii) Identify the role/s of Safeguards Team including schedule of on-site verification of reports submitted by consultants and contractors.
- (ix) For each package, provide name/s and contact details of contractor/s' nodal person/s for environmental safeguards.
- (x) Include as appendix all supporting documents including **signed** monthly environmental site inspection reports prepared by consultants and/or contractors.
- (xi) With reference to approved EMP/site-specific EMP/construction EMP, complete the table below
- (xii) Provide the monitoring results as per the parameters outlined in the approved EMP (or site-specific EMP/construction EMP when applicable).
- (xiii) In addition to the table on EMP implementation, the main text of the report should discuss in details the following items:
  - a) **Grievance Redress Mechanism.** Provide information on establishment of grievance redress mechanism and capacity of grievance redress committee to address project-related issues/complaints. Include as appendix Notification of the GRM (town-wise if applicable).
  - b) **Complaints Received during the Reporting Period.** Provide information on number, nature, and resolution of complaints received during reporting period. Attach records as per GRM in the approved IEE. Identify safeguards team member/s involved in the GRM process. Attach minutes of meetings (ensure English translation is provided).
    - o Confirm if any dust was noted to escape the site boundaries and identify dust suppression techniques followed for site/s.
    - o Identify muddy water was escaping site boundaries or muddy tracks were seen on adjacent roads.
    - o Identify type of erosion and sediment control measures installed on site/s, condition of erosion and sediment control measures including if these were intact following heavy rain;

- Identify designated areas for concrete works, chemical storage, construction materials, and refueling. Attach photographs of each area.
- Confirm spill kits on site and site procedure for handling emergencies.
- Identify any chemical stored on site and provide information on storage condition. Attach photograph.
- Describe management of stockpiles (construction materials, excavated soils, spoils, etc.). Provide photographs.
- Describe management of solid and liquid wastes on-site (quantity generated, transport, storage and disposal). Provide photographs.
- Provide information on barricades, signages, and on-site boards. Provide photographs.
- Provide information on
- Checking if there are any activities being under taken out of working hours and how that is being managed.

**Summary of Environmental Monitoring Activities (for the Reporting Period)<sup>82</sup>**

<b>Impacts (List from IEE)</b>	<b>Mitigation Measures (List from IEE)</b>	<b>Parameters Monitored (As a minimum those identified in the IEE should be monitored)</b>	<b>Method of Monitoring</b>	<b>Location of Monitoring</b>	<b>Date of Monitoring Conducted</b>	<b>Name of Person Who Conducted the Monitoring</b>
<b>Design Phase</b>						
<b>Pre-Construction Phase</b>						
<b>Construction Phase</b>						
<b>Operational Phase</b>						

<sup>82</sup> Attach Laboratory Results and Sampling Map/Locations





Site No.	Date of Sampling	Site Location	Parameters (Monitoring Results)					
			pH	Conductivity μS/cm	BOD mg/L	TSS mg/L	TN mg/L	TP mg/L

### Noise Quality Results

Site No.	Date of Testing	Site Location	LA <sub>eq</sub> (dBA) (Government Standard)	
			Day Time	Night Time

Site No.	Date of Testing	Site Location	LA <sub>eq</sub> (dBA) (Monitoring Results)	
			Day Time	Night Time

## VII. SUMMARY OF KEY ISSUES AND REMEDIAL ACTIONS

- Summary of follow up time-bound actions to be taken within a set timeframe.

## VIII. APPENDICES

- Photos
- Summary of consultations
- Copies of environmental clearances and permits
- Sample of environmental site inspection report
- Other

## SAMPLE ENVIRONMENTAL SITE INSPECTION REPORT

Project Name \_\_\_\_\_  
 Contract Number \_\_\_\_\_

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
 TITLE: \_\_\_\_\_ DMA: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_ GROUP: \_\_\_\_\_

WEATHER CONDITION: \_\_\_\_\_

INITIAL SITE CONDITION: \_\_\_\_\_

CONCLUDING SITE CONDITION:  
 Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_ Incident \_\_\_\_\_ Resolved \_\_\_\_\_ Unresolved \_\_\_\_\_

INCIDENT:  
 Nature of incident: \_\_\_\_\_

Intervention Steps: \_\_\_\_\_

Incident Issues

Resolution

Project Activity Stage	Survey	
	Design	
	Implementation	
	Pre-Commissioning	
	Guarantee Period	

### Inspection

Emissions	Waste Minimization
Air Quality	Reuse and Recycling
Noise pollution	Dust and Litter Control
Hazardous Substances	Trees and Vegetation

Site Restored to Original Condition      Yes       No

Signature \_\_\_\_\_

### Sign off

\_\_\_\_\_  
**Name**  
**Position**

\_\_\_\_\_  
**Name**  
**Position**

## SAMPLE OUTLINE SEMI-ANNUAL SOCIAL MONITORING REPORTS

1. Following requirements of the ADB Safeguard Policy Statement (2009) and the *Operations Manual* section on safeguard policy (OM F1), borrowers/clients are required to establish and maintain procedures to monitor the status of implementation of safeguard plans and ensure progress is made toward the desired outcomes. For UWSSP, which is categorized as B for Involuntary Resettlement and Indigenous People impacts, the Borrowers/clients are required to submit semi-annual monitoring reports for ADB review. The level of detail and comprehensiveness of a monitoring report is commensurate with the complexity and significance of social safeguards impacts (involuntary resettlement and indigenous people) and with the current status of project implementation phase.

2. This outline can be used for the semi-annual social safeguards monitoring report and resettlement plan/IPP completion report to start the civil works in the impacted areas. A social safeguard monitoring report may include the following elements:

### A. Executive Summary

3. This section provides a concise statement of project scope and impacts, key findings and recommended actions.

### B. Background of the Report and Project Description

4. This section provides a general description of the project, including:

- (i) Background/context of the monitoring report which includes the information on the project, project components, safeguards categorizations and general scope of the social safeguards impacts;
- (ii) Information on the implementation progress of the project activities, scope of monitoring report and requirements, reporting period, including frequency of submission and changes in project scope and adjusted safeguard measures, if applicable; and
- (iii) Summary table of identified impacts and the mitigation actions.

### C. Scope of Impacts

5. This section outlines the detail of:

- (i) Scale and scope of the project's safeguards impacts;
- (ii) Vulnerability status of the affected people/communities; and
- (iii) Entitlement matrix and other rehabilitation measures, as applicable, as described in the approved final resettlement plan(s).

### A. Compensation and Rehabilitation<sup>83</sup>

6. This section describes the process and progress of the implementation of the safeguards plan and other required activities as determined in the plan. This includes:

- (i) Payment of the affected assets compensation, allowances, loss of incomes, etc. to the affected persons;

---

<sup>83</sup> Depending on the status of the final detailed design during the submission of the report, this activity might not yet have started. In such a case, provide the information on the expected date the activity to be conducted instead.

- (ii) Provision of other types of entitlement as described in the matrix and implementation of livelihood rehabilitation activities as determined in the plan; and
- (iii) Quantitative as well as qualitative results of the monitoring parameters, as agreed in the plan, should be provided.

## **B. Public participation and consultation**

7. This section describes public participation and consultation activities during the project implementation as agreed in the plan. This includes final consultations with affected persons during resettlement plan finalization after the completion of detailed design; the numbers of activities conducted; issues raised during consultations and responses provided by the project team, RPMOs, regional DSMCs, contractors, etc.

## **C. Grievance Redress Mechanism**

8. This section describes the implementation of project grievance redress mechanism (GRM) as design in the approved resettlement plan/IPP. This includes evaluations of its effectiveness, procedures, complaints receive, timeliness to resolve issues/complaints and resources provided to solve the complaints. Special attention should be given if there are complaints received from the affected people or communities.

## **D. Institutional Arrangement**

9. This section describes the actual implementation, or any adjustment made to the institutional arrangement for managing the social safeguards issues in the projects. This includes the establishment of safeguards unit/team and appointment of staff in the executing agency/implementing agency; implementation of the GRM and its committee; and supervision and coordination between institutions involved in the management and monitoring of safeguards issues etc.

## **E. Monitoring Results—Findings**

10. This section describes the summary and key findings of the monitoring activities. The results are compared against previously established benchmarks and compliance status (e.g., adequacy of involuntary resettlement compensation rates and timeliness of payments, adequacy and timeliness of involuntary resettlement rehabilitation measures including serviced housing sites, house reconstruction, livelihood support measures, and training; budget for implementing EMP, resettlement plan, or IPP, timeliness and adequacy of capacity building, etc.). It also compares against the objectives of safeguards or desired outcomes documented (e.g., involuntary resettlement impacts avoided or minimized; livelihood restored or enhanced; indigenous people's identity, human right, livelihood systems and cultural uniqueness fully respected; indigenous peoples not suffer adverse impacts, environmental impacts avoided or minimized, etc.). If noncompliance or any major gaps identified, include the recommendation of corrective action plan.

## **F. Compliance Status**

11. This section will summarize the compliance status of the project activities with the loan covenants, ADB SPS (2009) on SR 2 and SR 3 and the approved final resettlement plan(s) and indigenous peoples plan(s).

**G. Follow up Actions, Recommendation and Disclosure**

12. This section describes recommendations and further actions or items to focus on for the remaining monitoring period. It also includes lesson learned for improvement for future safeguards monitoring activities. Disclosure dates of the monitoring report to the affected communities should also be included. A time-bound summary table for required actions should be included.

**Appendix 1**

- i. List of Affected Persons and Entitlements
- ii. Summary of Resettlement Plan/IPP with entitlement matrix

**Appendix 2**

- i. Copies of Affected Persons' certification of payment (signed by the affected persons)
- ii. Summary of minutes of meetings during public consultations
- iii. Summary of complaints received and solution status

## OUTLINE QUARTERLY PROGRESS REPORT

### A. Introduction and Basic Data

Provide the following:

- (i) ADB loan number, project title, borrower, executing agency(ies), implementing agency(ies);
- (ii) total estimated project cost and financing plan;
- (iii) status of project financing including availability of counterpart funds and cofinancing;
- (iv) dates of approval, signing, and effectiveness of ADB loan;
- (v) original and revised (if applicable) ADB loan closing date and elapsed loan period based on original and revised (if applicable) loan closing dates; and
- (vi) date of last ADB review mission.

### B. Utilization of Funds (ADB Loan, Cofinancing, and Counterpart Funds)

Provide the following:

- (i) cumulative contract awards financed by the ADB loan, cofinancing, and counterpart funds (commitment of funds to date), and comparison with time-bound projections (targets);
- (ii) cumulative disbursements from the ADB loan, cofinancing, and counterpart funds (expenditure to date), and comparison with time-bound projections (targets); and
- (iii) re-estimated costs to completion, need for reallocation within ADB loan categories, and whether an overall project cost overrun is likely.

*(sample Project Data Sheet and Loan/Grant Utilization table available at NRM)*

### C. Project Purpose

Provide the following:

- (i) status of project scope/implementation arrangements compared with those in the report and recommendation of the President, and whether major changes have occurred or will need to be made;
- (ii) an assessment of the likelihood that the immediate development objectives (project purpose) will be met in part or in full, and whether remedial measures are required based on the current project scope and implementation arrangements;
- (iii) an assessment of changes to the key assumptions and risks that affect attainment of the development objectives; and
- (iv) other project developments, including monitoring and reporting on environmental and social requirements that might adversely affect the project's viability or accomplishment of immediate objectives.

*(sample project results profile, safeguard matrix available at NRM)*

### D. Implementation Progress

Provide the following:

- (i) assessment of project implementation arrangements such as establishment, staffing, and funding of the PMO or PIU;
- (ii) information relating to other aspects of the EA's internal operations that may impact on the implementation arrangements or project progress;
- (iii) progress or achievements in implementation since the last progress report;

- (iv) assessment of the progress of each project component, such as,
  - a) Recruitment of consultants and their performance;
  - b) procurement of goods and works (from preparation of detailed designs and bidding documents to contract awards); and
  - c) the performance of suppliers, manufacturers, and contractors for goods and works contracts;
- (v) assessment of progress in implementing the overall project to date in comparison with the original implementation schedule—quantifiable and monitorable target, (include simple charts such as bar or milestone to illustrate progress, a chart showing actual versus planned expenditure, S-curve graph showing the relationship between physical and financial performance, and actual progress in comparison with the original schedules and budgets); and
- (vi) an assessment of the validity of key assumptions and risks in achieving the quantifiable implementation targets.

*(sample procurement plan, physical/financial monitoring matrix table available at NRM)  
(Status on agreed action plan of last review mission)*

### **E. Compliance with Covenants**

Provide the following:

- (i) the borrower's compliance with policy loan covenants such as sector reform initiatives and EA reforms, and the reasons for any noncompliance or delay in compliance;
- (ii) the borrower's and EA's compliance with financial loan covenants including the EA's financial management, and the provision of audited project accounts or audited agency financial statements; and
- (iii) the borrower's and EA's compliance with project-specific loan covenants associated with implementation, environment, and social dimensions.
  - (a) Status on the compliance of audit observation for FY audited project account

*(sample covenant matrix available at NRM)*

### **F. Major Project Issues and Problems**

Summarize the major problems and issues affecting or likely to affect implementation progress, compliance with covenants, and achievement of immediate development objectives. Recommend actions to overcome these problems and issues (e.g., changes in scope, changes in implementation arrangements, and reallocation of loan proceeds).

*(sample matrix table available at NRM)*

**LIST OF PRESELECTED PROJECT MUNICIPALITIES**

<b>Subproject</b>	<b>Project Municipality</b>	<b>District</b>
(a) Bhojpur (Bhojpur) Water Supply and Sanitation Improvement (b) Bhojpur Bazar Sewerage and Decentralized Wastewater Treatment	Bhojpur	Bhojpur
Brihat Bhanu (Tanahu) Water Supply and Sanitation Improvement	Bhanu	Tanahu
Chainpur (Bajhang) Water Supply and Sanitation Improvement	Jaya Prithivi	Bajhang
(a) Charikot (Dolakha) Water Supply and Sanitation Improvement (b) Charikot Decentralized Wastewater Treatment	Bhimeshwor	Dolakha
Deurali Hupsekot (Nawalpur) Water Supply and Sanitation Improvement	Hupsekot	Nawalpur
Diktel (Khotang) Water Supply and Sanitation	Haelsi Tuwachung	Khotang
Ilam (Ilam) Water Supply and Sanitation Improvement	Ilam	Ilam
Kanchanrup (Saptari) Water Supply and Sanitation Improvement	Kanchanrup	Saptari
Katahariya Drainage	Katahariya	Rautahat
Khalanga (Darchula) Integrated Water Supply and Sewerage Improvement	Mahakali	Darchula
Liwang (Rolpa) Water Supply and Sanitation Improvement	Rolpa	Rolpa
Madi Palpa Water Supply and Sanitation Improvement	Rampur	Palpa
Sharadanagar Water Supply and Sanitation Improvement	Bharatpur	Chitwan
Mirchaiya Drainage	Mirchaiya	Siraha
Panchkhal (Kavre) Water Supply and Sanitation Improvement	Panchkhal	Kavre
Pragatinagar (Dang) Water Supply and Sanitation Improvement	Rapti	Dang
Rampurtar (Okahaldunga) Water Supply and Sanitation Improvement	Siddhicharan	Okahaldunga
Siddhanath Baijanath Water Supply and Sanitation Improvement	Bheemdatt	Kanchanpur
Subhaghat (Surkhet) Water Supply and Sanitation Improvement	Gurbhakot	Surkhet
Tikapur Drainage	Tikapur	Kailali