

Project Administration Manual

Project Number: 47252-002
Loan and/or Grant Number(s): {LXXXX; GXXXX; TXXXX}
September 2017

Nepal: Regional Urban Development Project

ABBREVIATIONS

ADB	=	Asian Development Bank
ADF	=	Asian Development Fund
AFS	=	audited financial statements
CQS	=	consultant qualification selection
DMF	=	design and monitoring framework
EARF	=	environmental assessment and review framework
EIA	=	environmental impact assessment
EMP	=	environmental management plan
ESMS	=	environmental and social management system
GACAP	=	governance and anticorruption action plan
GDP	=	gross domestic product
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IPP	=	indigenous people plan
IPPF	=	indigenous people planning framework
LAR	=	land acquisition and resettlement
LIBOR	=	London interbank offered rate
NCB	=	national competitive bidding
NGOs	=	nongovernment organizations
PAI	=	project administration instructions
PAM	=	project administration manual
PIU	=	project implementation unit
QBS	=	quality based selection
QCBS	=	quality-and cost based selection
RRP	=	report and recommendation of the President to the Board
SBD	=	standard bidding documents
SGIA	=	second generation imprest accounts
SOE	=	statement of expenditure
SPS	=	Safeguard Policy Statement
SPRSS	=	summary poverty reduction and social strategy
TOR	=	terms of reference

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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 Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The executing and implementing agencies are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by executing and implementing agencies 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 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 the Loan 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 improve resilience and delivery of urban services in eight municipalities in the southern Terai region of Nepal bordering India, including four municipalities from the less developed Province 7 in far western Nepal.¹ The project will support municipal infrastructure investments, urban planning and institutional strengthening to improve quality, sustainability, economic growth and competitiveness.

2. **Nepal's urbanization and economic growth.** Although Nepal is urbanizing at a rapid rate of 6% since the 1970s², it has been accompanied with lower economic growth compared to other South Asian countries. This is a result of inadequate urban planning, weak urban institutions and municipal finances, neglect of operations and maintenance (O&M), and limited urban infrastructure development capabilities.³ Planned urbanization through a regional approach can stimulate economic growth in Nepal, especially in the southern Terai region, where opportunities for economic growth have increased due to regional cooperation and trade.⁴

3. **Importance of investing in the Terai region.** The Terai region has the country's largest urban population outside the Kathmandu and Pokhara Valleys, and its cities are growing. The majority of trade in landlocked Nepal flows through the three Terai cities of Biratnagar (population: 235,000) in the east; and Birgunj (population: 240,000) and Siddharthanagar (population: 73,000).⁵ A fourth city, Nepalgunj (population: 175,000), is a major industrial and business hub of its province. Along the border with India in the Terai region, regional clusters of non-farm economic activities are emerging, which can be fostered to boost economic growth. A number of initiatives, many supported by the Asian Development Bank (ADB), are completed or ongoing in the Terai to facilitate trade and improve regional connectivity, rural-urban linkages, power supply, agricultural productivity, and the quality of technical education.⁶ ADB financed urban projects are also near completion in the four regional economic centers of Biratnagar, Birgunj, Siddharthanagar and Nepalgunj.⁷ Additional support is required to build on and scale up previous efforts to make the Terai region more livable and competitive.

4. **Investing in the Terai of Province 7.** Province 7 in far west of Nepal is one of the poorest provinces in Nepal, with 40% of the population living below the poverty line.⁸ Urban

¹ The project preparation was supported by *Technical Assistance for the Far Western Region Urban Development Project*. Manila (TA-8817) approved in 2014 and *Supplementary Technical Assistance for the Far Western Region Urban Development Project* (TA-8817) approved in 2015.

² World Bank. 2013. *Urban Growth and Spatial Transition in Nepal*. Washington, D.C.

³ Government of Nepal. 2017. *National Urban Development Strategy*. Kathmandu.

⁴ Regional approach is an integrated and planned approach of spatial development of urban center surrounded by adjacent or smaller towns and rural areas to enhance competitiveness and stimulate economic growth by facilitating common infrastructure, strategic infrastructure, geospatial proximity for supply chains and networks, and concentration of human resources and skills. The project is expected to lay the foundation for greater regional development.

⁵ World Bank. 2014. *Nepal Trade Facilitation and Improvement Study*. Washington, D.C.

⁶ ADB. 2006. *Report and Recommendations to the President for the Road Connectivity Sector Project*. Manila; ADB. 2009. *RRP for the South Asia Tourism Infrastructure Development Project*. Manila; ADB. 2010. *RRP for the Subregional Transport Enhancement Project*. Manila; ADB. 2010. *RRP for the Energy Access and Efficiency Improvement Project*. Manila; ADB. 2014. *Report and Recommendations to the President for the South Asia Subregional Economic Cooperation Power System Expansion Project*. Manila; ADB. 2016. *RRP for the South Asia Subregional Economic Cooperation Roads Improvement Project*. Manila.

⁷ ADB. 2010. *Report and Recommendations to the President for the Secondary Towns Integrated Urban Environmental Improvement*. Manila; and ADB. 2012. *Report and Recommendations to the President for the Integrated Urban Development Project*. Manila.

⁸ Government of Nepal and UNDP. 2014. *Nepal Human Development Report*. Kathmandu.

infrastructure and basic services in this province need significant improvement. None of these Province 7 municipalities has solid waste and wastewater collection and treatment facilities and an average of one-third of households do not have modern toilet facilities. Storm water drainage is inadequate and an average of one-third of households experience chronic waterlogging. Key roads are in poor condition and peri-urban areas are expanding haphazardly. Growth opportunities in Terai of this province are likely to increase with the anticipated construction of the Mahakali River bridge connecting India and western Nepal. Investments in urban infrastructure and planned urbanization in Province 7 will have multiplier effects on economic growth and job creation, while reducing regional disparities.

5. **The Regional Urban Development Project.** The project will scale up investments in the four municipalities of Biratnagar, Birgunj, Siddharthanagar, and Nepalgunj where ADB's ongoing urban projects are near completion. In the four municipalities of the Province 7 (Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta), for the first time ADB will invest in urban infrastructure that will improve flood management, mobility, and solid waste management. The project will support the development of urban plans and bylaws that reflect greater disaster risk resiliency, improved land management, and regional development. The project will also support a project development facility⁹ for the preparation of a pipeline of urban infrastructure projects with high readiness to reduce future startup delays. To create incentives for the municipalities to improve governance and financial and operational performance, the project will support the implementation of the performance-based socioeconomic development program (PBSEDP) in the Province 7. The subprojects were selected based on households' priorities, the municipalities' priorities, feasibility studies, and institutional mandate.

6. The project is aligned with the following impacts: sustainable, inclusive, and resilient urban areas developed; and a balanced and prosperous sub-national urban system achieved.¹⁰ The project will have the following outcome: quality, sustainability, and disaster resilience of urban services, and competitiveness in eight municipalities of the Terai region improved.¹¹

7. The outputs of the project are:

- (i) **Output 1: Urban infrastructure in 8 municipalities with climate-resilient and sustainable designs constructed or rehabilitated**

8. **Drainage, sewerage and roads constructed or upgraded.** The project will construct or upgrade 200 kilometer (km) of stormwater drainage, 20 km of sewerage network in Biratnagar¹², 240 km of urban roads with urban design features. Future increase in the rainfall intensities will be taken into account in pending detailed designs of drainage systems to strengthen urban resilience to climate change.

9. **Solid waste management system improved.** In four municipalities (Province 7), the project will improve solid waste management (SWM) by adopting an integrated approach, reviewing and improving the entire system from segregation and collection, through reduce, reuse and recycle (the 3Rs), to transportation and final disposal at the sanitary landfill including resource recovery facilities. The project will construct key infrastructure, particularly sanitary

⁹ The project development facility is a mechanism under which consultants will be recruited to prepare detailed project reports to develop an investment pipeline of projects with high readiness.

¹⁰ Government of Nepal. 2017. *National Urban Development Strategy*. Kathmandu.

¹¹ The design and monitoring framework is in Appendix 1.

¹² Wastewater treatment plants are being constructed in Biratnagar and Birgunj under ongoing Loan 2650-NEP: Secondary Towns Integrated Urban Environment Improvement Project.

landfill site, transfer station (if required), access road to the landfill site and procurement of equipment, transfer trucks and machines. The project will also design an integrated SWM system including design of sanitary landfill site for Biratnagar sub-metropolitan city. The possibility of private sector participation in SWM services, including collection and landfill operation will be explored through incorporating management services of about 3 years in the civil works contract. This is to ensure effective and efficient operation of the system. SWM systems in Birgunj, Nepalgunj and Sidharthanagar are already supported through previous projects.

10. The SWM subproject scope will also include remediation of existing dumpsites and fecal sludge management. Key outputs will include 4 municipal sanitary landfills and resource recovery centers with septage treatment facilities constructed (Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta).

11. The project will ensure that at least 30% of the PBSEDP is spent on socioeconomic infrastructure and GESI-related activities

12. Salient subprojects under output 1 include improving the main access road from central Siddharthangar to its international airport, strengthening urban resilience by increasing storm water drainage capacity, expanding wastewater service coverage in Biratnagar, and improving a four-lane road as part of Birgunj's planned expansion.

(ii) **Output 2: Municipal capacity strengthened**

13. The project will strengthen municipalities to provide and sustain quality services for all, including the poor and marginalized through the following initiatives.

14. **Other municipal infrastructure improved.** The project will improve municipal administration services by constructing municipal office buildings of Godawari and Shuklaphanta. The buildings will be constructed to be earthquake resistant, energy efficient, and inclusive.

15. **Performance-based socioeconomic development program (PBSDP) in Province 7 municipalities.** The project will provide a PBSDP grant against achieving a set of performance milestones to incentivize improvement in the municipalities' governance, financial and operational performance. The grant would be used for small community infrastructure, capacity building, communication activities, or revenue-generating infrastructure. Each municipality will be supported by the institutional development consultant. PCO will prepare detailed guidelines for planning, implementation and reporting of the PBSDP.

16. The other operational and governance related targets under this output are: (i) development plans and planning and building bylaws developed or updated and adopted, (ii) O&M plan implemented in project municipalities, (iii) GIS-based house numbering systems operationalized as well as utility mapping, (iv) integrated property tax system introduced in two project municipalities and strengthened in the other project municipalities, and (v) improved organizational structure for Godawari and Shuklaphanta is approved and includes the establishment of a social development section.

(iii) **Output 3: Project preparation capacity improved**

17. The project will support the Department of Urban Development and Building Construction (DUDBC) and municipalities to close the infrastructure gap by preparing detailed project reports (DPRs), and an investment pipeline. The project development facility will address the lead time of at least two years in Nepal's urban sector to reach the procurement stage by developing a shelf of projects.¹³ The project will (i) ensure project development facility guidelines are adopted for the Urban Planning and Development Centre; (ii) prepare DPR for a multi-sector, subregional investment program; and (iii) prepare at least two other DPRs for SWM, drainage, roads, water supply and/or sanitation subsectors.

II. IMPLEMENTATION PLANS**A. Project Readiness Activities****Table 1: Project Readiness Plan**

Activities	2016	2017				Who responsible	Status as of 10 Feb 2017
	Q4	Q1	Q2	Q3	Q4		
Appointment of Project Director	—					MOUD, DUDBC	Appointed
Complete appoint of core staff including Deputy Project Directors, Engineers, Accountant at PCO and Urban Planner at UPDC	—						UPDC established
Establish Regional Project Implementation Unit at Dhangadhi	—					MOUD, DUDBC	R-PIU established.
Complete appointment of core staff including Project Manager at R-PIU, PIU and PISU	—					DUDBC, Province 7 and non-Province project municipalities	project managers appointed
Government budget inclusion for the 1 st year of project implementation			—			MOF, MOUD	ensured
Advance contracting for recruitment of consultants (DSC for R-PIU, PMC, IDC, and CSCs)	—					MOUD, PCO, Dhangadhi PIU and non-Province 7 project Municipalities	EOI published PMC, DSC (2), CSC (3)
Land acquisition for sanitary landfill site in Province 7 project municipalities	—					Municipalities	Location confirmed in all municipalities
Budget allocation for land acquisition	—					MOUD, MOFALD, Municipalities	
Establish GRM				—		PCO, PIUs	By 15 July
Loan Negotiation Completed			▲			MOF and ADB	by 15 June
ADB Board approval				▲		ADB	by 15 August

¹³ See Section G of the PAM for more details on the management of the project development facility; and Appendix 6 of the PAM for a summary of the project development facility guidelines and project selection criteria (accessible from the list of linked documents in Appendix 2).

Activities	2016	2017				Who responsible	Status as of 10 Feb 2017
	Q4	Q1	Q2	Q3	Q4		
Loan/Grant signing				▲		MOF	by 15 September
Government legal opinion provided				—		MOLJ	
Loan effectiveness					▲	MOF and ADB	
PMC Mobilized			—————			PCO	
DSC - R-PIU mobilized			—————			DUDBC, PCO	
IFBs (3) published		—				Biratnagar, Siddharthanagar, Nepalgunj	
IFB (1) published			—			Birgunj	
Three CSCs and IDC mobilized			—————			Municipalities	

ADB = Asian Development Bank, CSCs = construction supervision consultant, DSC = design and supervision consultants, DUDBC = Department Urban Development and Building Construction, EOI = expression for interest, GRM = grievance redressal mechanism, IDC = institutional development consultant, IFB = Invitation for Bids, MOF = Ministry of Finance, MOLJ = Ministry of Law and Justice, MOUD = Ministry of Urban Development, PCO = project coordination office, PMC = project management support consultant, R-PIU = regional project implementation unit, UPDC = urban planning and development center.

B. Overall Project Implementation Plan

18. The project is expected to be approved in Q3 2017. After loan effectiveness, anticipated in Q4 2017, the project implementation period is 5 years. The project is expected to be physically completed by December 2022. Monitoring of project performance and outcome will be until December 2023 including preparation of the project completion report. The project's overall implementation plan is in Table 2.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations–Roles and Responsibilities

Table 3: Roles and Responsibilities of Project Implementation Organizations

Project Implementation Organizations	Management Roles and Responsibilities
Executing Agency MOUD	<ul style="list-style-type: none"> • Provides overall strategic planning, guidance and management support to the project • Chairs the project steering committee meeting • Makes key policy level decisions to facilitate project implementation. • Coordinates with other ministries and utilities on project issues under their respective jurisdictions • Coordinates with other ministries and utilities at the central level • Ensures adequate allocation of budget, including counterpart funding • Ensures deputation of qualified staff to PCO and R-PIU • Ensures minimum staff turnover
MoFALD	<ul style="list-style-type: none"> • Participates in the project steering committee • Monitors performance of project municipalities, particularly in implementing performance-based grants in Province 7 municipalities • Ensures minimum turnover of executive officers • Informs relevant stakeholders about policy changes, if any, and shares relevant documentation • Monitors performance of project municipalities and facilitates to resolve municipal level issues, if any
PSC	<ul style="list-style-type: none"> • Makes key policy recommendations to facilitate project implementation • Meets at least quarterly, and as required, to review project performance and discuss key policy-related issues • Provides guidance to the project • Ensures collaboration among central level agencies
Relevant technical departments (DOR, DWSS, SWMTSC)	<ul style="list-style-type: none"> • Assigns a representative for the project steering committee • Reviews technical reports of subprojects, ensures policy and design coherence and quality • Advises PCO and PIUs on technical matters • Shares knowledge, experiences and documents of the concerned subsector
Social Coordination Section, MOUD	<ul style="list-style-type: none"> • Provides technical support and guidance on GESI in subproject design, implementation and monitoring through GESI unit, DUDBC • Provides guidance to ensure small infrastructure is GESI-responsive • Leads coordination with GESI section of MOFALD for capacity building initiatives, joint monitoring, and establishment of joint steering committee • Trains staff of project municipality Social Development Sections • Trains PIU and PISU engineers on mainstreaming GESI

Project Implementation Organizations	Management Roles and Responsibilities
DUDBC	<ul style="list-style-type: none"> • Organizes quarterly project progress review meetings • Establishes/ strengthens existing project coordination office (PCO), and establishes regional project implementation unit (R-PIU) at DUDBC Kailali Division Office • Ensures timely decisions for efficient procurement and contract management • Appoints dedicated project director at PCO, and dedicated project managers at R-PIU and PIUs (Biratnagar and Nepalgunj)¹⁴ • Deputes adequate staff in PCO, R-PIU and PIUs • Ensures adequate delegation of authority to project director, PCO for implementing the project • Allocates adequate budget to the project • Provides project municipalities with full technical, financial and institutional support for implementing projects in full capacity • Selects subprojects based upon the agreed subproject selection criteria for the project
PCO	<ul style="list-style-type: none"> • Authority equivalent to other divisions (such as urban development division, housing division, building division and procurement division) of the DUDBC • Signs memorandum of understanding with project municipalities agreeing to commence the project • Responsible for overall project management, implementation and monitoring • Coordinates with ADB and other line agencies at central level for smooth project implementation • Monitors and ensures the compliance of covenants, particularly submission of audited project accounts • Recruits project management consultant, design and supervision consultants for Province 7 project municipalities, institutional development consultant, and procures equipment for PCO, R-PIU, PIUs, and project implementation support units (PISU) of Province 7 project municipalities • Updates procurement plan • Monitors the procurement process followed by R-PIU, PIUs (Biratnagar, Birgunj, Siddharthnagar, and Nepalgunj), and PISUs • Guides, supports and monitors R-PIUs, PIUs, and PISUs in implementing subprojects • Reviews the subproject reports submitted by R-PIU and PIUs with respect to detailed design, costs, safeguards, financial, economic, and social viability • Supports R-PIU and PIUs in preparing bidding documents, request for proposals, and bid evaluation reports • Serves as point of contact with ADB, maintains project documents, and submits timely reports (quarterly progress reports and project completion report) to ADB by consolidating relevant inputs from PIUs, R-PIU and PISUs • Consolidates accounts and submits withdrawal applications to ADB for reimbursement

¹⁴ PIU Heads of Birgunj and Siddharthnagar are municipality staff.

Project Implementation Organizations	Management Roles and Responsibilities
Social Development Section, DUDBC	<ul style="list-style-type: none"> • Opens and manages imprest account for ADB loan • Submits all audited project accounts and financial statements pertaining to the project within 9 months of the end of the fiscal year.
Implementing Agency 1. DUDBC Regional Project Implementation Unit (Kailali Division Office)	<ul style="list-style-type: none"> • Manages and implements the subprojects in municipalities (Dhangadhi, Bheemdatt, Godawari and Shuklaphanta) of the Province 7 • Undertakes procurement of works, goods and consulting services and contract management • Establishes MPCC in each Province 7 project municipality • Ensures coordination with concerned local bodies (DDC and project municipalities), PCO, and District Urban Development and Building Construction Division Offices (DUDBC-DOs) for all matters related to project implementation • Opens and maintains separate account for the project • Ensures Province 7 project municipalities' contribution and assists and monitors these municipalities to maintain separate accounts for their respective contributions • Supervises and monitors DSC-Province 7 and IDC based at the R-PIU • Makes payments for activities performed under the scope of the project and conducts public audits together with Province 7 project municipalities • Implements and monitors resettlement plans, GESI Action Plans and IEEs for the subprojects in each Province 7 project municipality • Prepares consolidated progress reports as outlined in PAM for Province 7 project municipality subprojects and submits to PCO • Submits consolidated monthly expenditure sheet to PCO • Completes audit within 6 months of the end of the fiscal year and submits the audited project account to PCO
MPCC	<ul style="list-style-type: none"> • Reviews project performance and provides guidance • Facilitates to resolve project implementation issues that require interagency collaboration and/or public support • Establishes collaboration mechanism among municipality, offices of line agencies and civil society at the municipality level • Advocates and coordinates with MOUD and MOFALD for timely policy decisions • Ensures municipal priorities are addressed by making inputs into proposals

Project Implementation Organizations	Management Roles and Responsibilities
	<ul style="list-style-type: none"> Disseminates project related information to the public
Implementing agency 2: Non-Province 7 Municipalities Birgunj sub-metropolitan city Biratnagar sub-metropolitan city Nepalgunj sub-metropolitan city Siddharthanagar municipality	<ul style="list-style-type: none"> Continues with existing MPCC Appoints project managers in consultation with DUDBC/ PCO and provides adequate authority to project managers for project implementation Adopts and implements updated Comprehensive Financial Management Improvement Plan Maintains separate project accounts and accounts for municipal contribution Ensures timely municipality contribution Submits consolidated monthly expenditure sheet to PCO Completes audit of project account annually by OAG accredited auditor within 6 months of the end of the fiscal year and submits the audited project account, including management letter to PCO Responsible for procurement of works and recruitment of design supervision consultant or construction supervision consultant Monitors performance of consultants and contractor Makes payments for activities performed under the scope of the Project and conducts public audits Prepares and implements resettlement plans and environmental management plan Implements gender equality and social inclusion action plan Prepares progress reports and submits to PCO Facilitates audits by National Vigilance Center
Province 7 project Municipalities- Bheemdatt, Godawari, Dhangadhi and Shuklaphanta	<ul style="list-style-type: none"> Complies with targets set under the Performance-based Socioeconomic Development Grant ('the Grant') with the support of institutional development consultant Establishes MPMCC Ensures coordination between different sections of municipalities (Planning, Environment, Administration, Finance, Social, and Legal Section) through the establishment of PISU in each municipality headed by municipal engineer Supervises and monitors IDC at the municipality level Provides office space for IDC Prepares compliance report with the support of IDC and submits to PCO through R-PIU to access the grant Facilitates to resolve municipal level issues to implement project smoothly Supervises and monitors civil works at municipal level Ensures timely municipal contribution Ensures community contribution and maintains separate accounts for community contribution Ensures the PBSDP targets are achieved Submits audited project account annually through R-PIU within 6 months of the end of the fiscal year
Project Manager, PIUs	<ul style="list-style-type: none"> Liaises with municipality management and PCO Coordinates activities of the project team, contractors, and consultants

Project Implementation Organizations	Management Roles and Responsibilities
	<ul style="list-style-type: none"> • Implements quality control for design reviews, construction checks, milestone assessments, progress meetings, and reports • Administers financial aspects such as invoice approvals, progress certificates, and payment of invoice
DUDBC Divisional Offices-Non-Province 7 municipalities	<ul style="list-style-type: none"> • Coordinates with PCO and assists PIUs in subproject implementation • Provides post-construction support to municipalities
ADB	<ul style="list-style-type: none"> • Monitors overall project implementation • Conducts field review missions, midterm review mission and project completion review mission to assess project implementation progress for all subcomponents, compliance of loan covenants and implementation status of Comprehensive Financial Management Improvement Plan • Reviews PCO's submissions for procurement of goods, civil works and services and provides comments and no objection on the submissions • Checks Statement of Expenditure

ADB = Asian Development Bank, CSCs = construction supervision consultant, DWSS = Department of Water Supply and Sanitation, DOR = Department of Roads, DSC = design and supervision consultants, DUDBC = Department Urban Development and Building Construction, GESI = Gender Equality and Social Inclusion, IDC = institutional development consultant, MoFALD = Ministry of Federal Affairs and Local Development, MOUD = Ministry of Urban Development, MPCC = Municipal Project Coordination Committee, OAG = Office of the Auditor General, PCO = project coordination office, PISU = project implementation support unit, PIUs = project implementation units, PSC = Project Steering Committee, R-PIU = regional project implementation unit, SWMTSC = Solid Waste Management Technical Support Center.

B. Key Persons Involved in Implementation

Executing Agency

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ADB

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C. Project Organization Structure

19. The Ministry of Urban Development (MOUD), through the project coordination office (PCO) established in the Department of Urban Development and Building Construction (DUDBC), will be the executing agency. MOUD has recently established the Urban Planning and Development Center (UPDC) at DUDBC for scaling up urban planning and investment. PCO is headed by a project director.

20. Biratnagar, Birgunj, Nepalgunj and Siddharthanagar sub-metropolitan municipalities have each established project implementation units (PIU). For the four municipalities of Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta in the Province 7, a regional PIU (R-PIU) will be established in the DUDBC Kailali Divisional Office in Dhangadhi. These 4 municipalities will each have a project implementation support unit (PISU) headed by the municipal focal person.

21. At the central level, a project steering committee (PSC) will be set up with the secretary of MOUD as chair, and the director generals of the DUDBC, DWSS and Department of Roads, the executive director of Solid Waste Management Technical Support Center (SWMTSC), joint secretaries of the MOUD, MOFALD, the Ministry of Environment (MOE), Ministry of Water Supply and Sanitation (MOWSS), and the National Planning Commission (NPC), a representative from the Ministry of Finance (MOF), the executive officers of the project municipalities, the president of Municipal Association of Nepal (MuAN) as members, and the project director as member and the convener of the PSC. The PSC will review overall preparation and implementation progress and recommend key policy decisions. MOUD also established a separate steering committee to make policy decisions for UPDC and project development facility, with representatives from the same agencies as the project (and some additional representatives).

22. Representatives from DOR and SWMTSC will be assigned to work with the PCO in reviewing technical reports of subprojects, ensure policy and design coherence, and advise the PCO and PIUs on technical matters of subprojects.

23. In each municipality, a municipal project coordination committee (MPCC) will be established to discuss project implementation issues, enhance collaboration among relevant departments and organizations, and expedite decision-making processes with the aim to achieve intended project outputs and outcome. MPCC will be chaired by the executive officer and comprise relevant department heads of the respective municipality, members representing local disadvantaged communities, nongovernment organizations (NGOs), women's groups, private sector, and political parties and the respective project manager working as member secretary.

24. For each Province 7 project municipality, the project implementation support unit (PISU) will have representatives from sections on revenue, accounting, audit, urban planning, GIS, water and sanitation, transport, solid waste management, GESI etc. to work closely with the project consultants. PISU's main task will be to ensure the Performance-Based Socioeconomic Development Program targets are achieved. PCO will allocate the PBSDP grant based on the municipalities' performance and score. Appendix 1 lists the performance milestones and explains in details the steps to be followed by R-PIU and each Province 7 project municipality for accessing the grant.

25. The Central and Department level implementation arrangements are the same for both Province 7 and non-Province 7 municipalities. However, each non-Province 7 municipality has its own PIU, whereas Province 7 project municipalities have a regional PIU covering 4 municipalities. Below is an outline organization chart for the project, R-PIUs, PISUs, UPDC and PBSEDP.

Figure 1: Project Implementation Arrangement

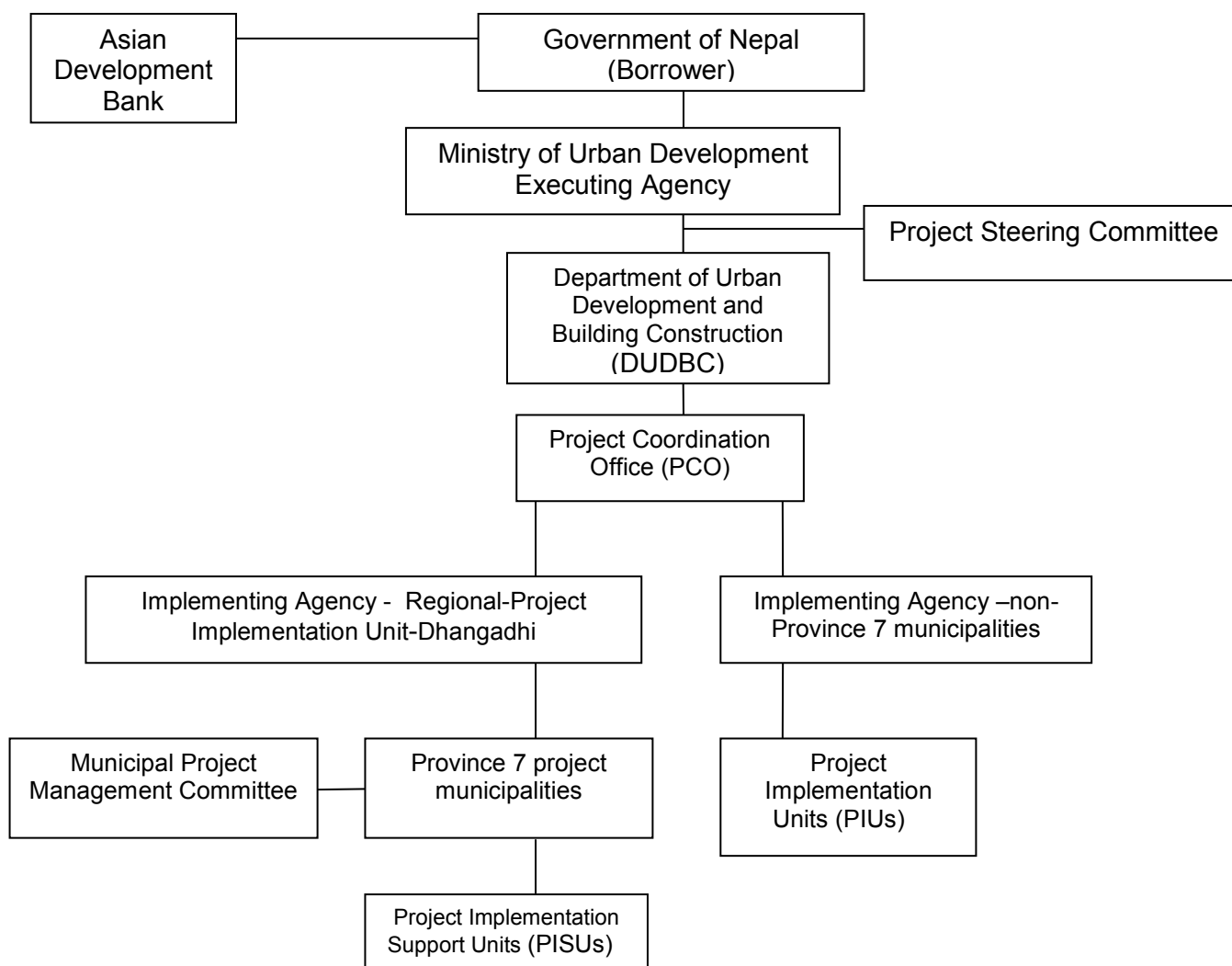
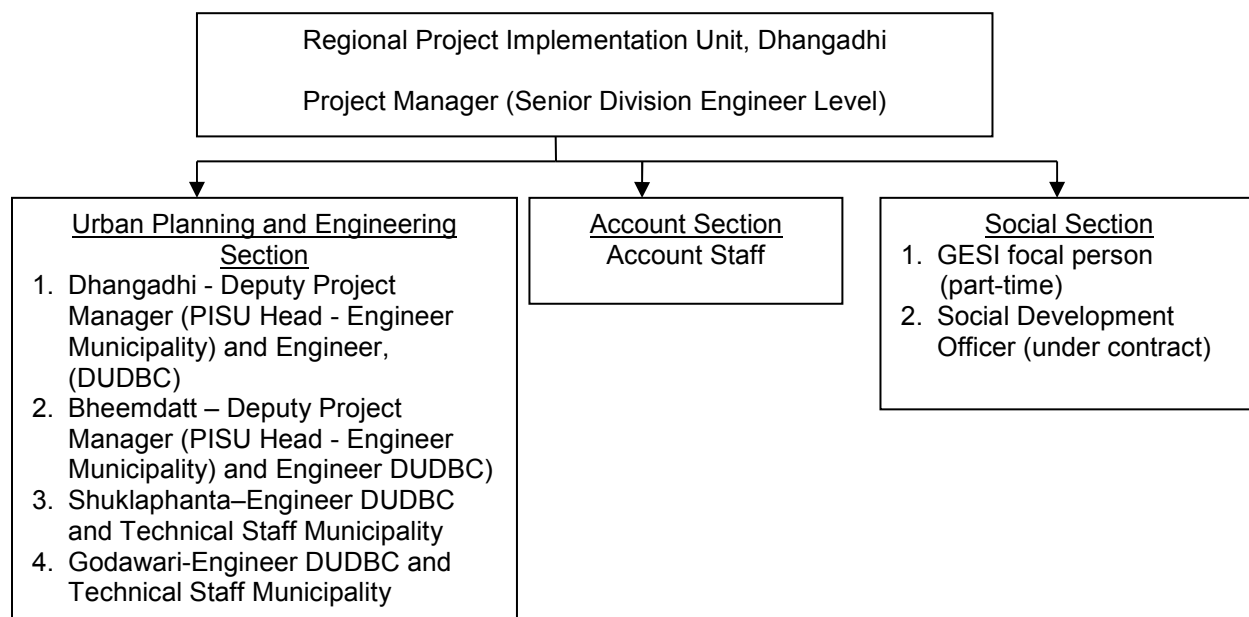
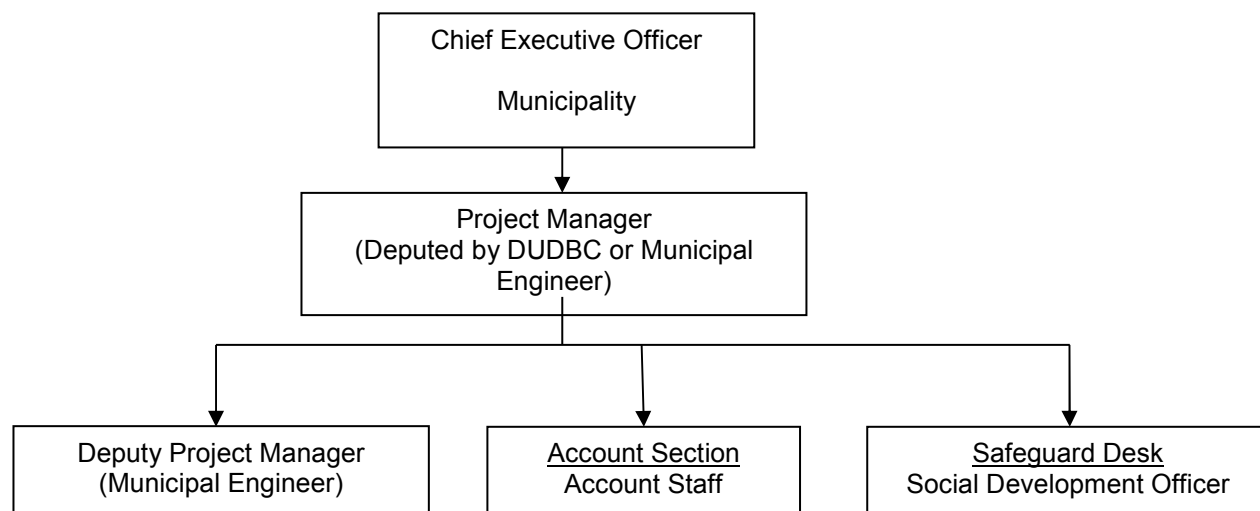


Figure 2: Structure of Regional Project Implementation Unit (R-PIU)

DUDBC = Department of Urban Development and Building Construction, GESI = gender equality and social inclusion, PISU = project implementation support unit

Figure 3: Structure of the Project Implementation Units–non-Province 7 Municipalities**Table 4: Key Roles and Responsibilities**

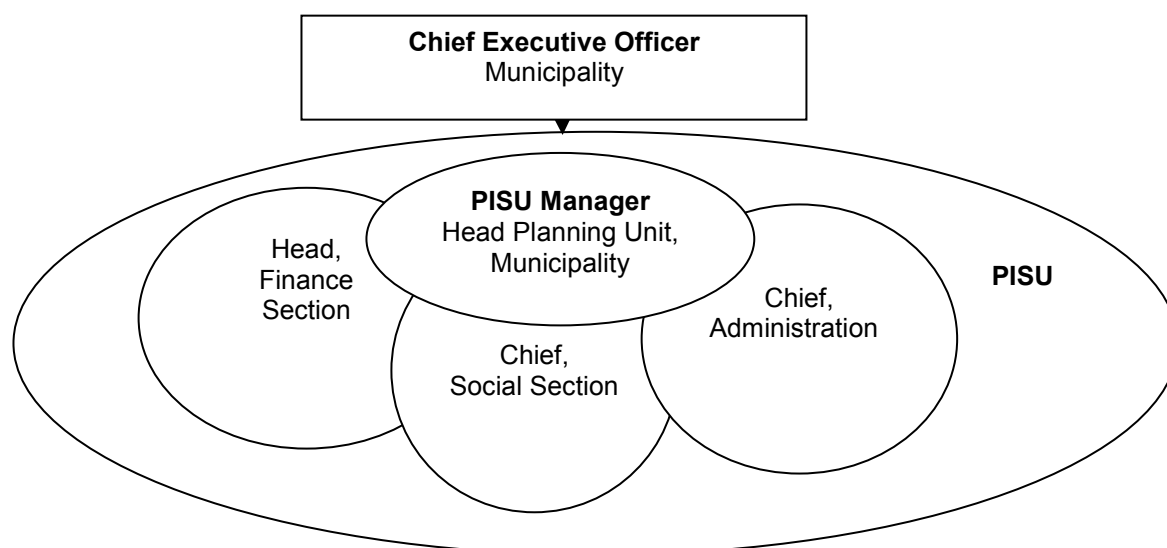
Position Title	Key Roles and Responsibility
Deputy Project Manager Head Engineer Municipality)	<ul style="list-style-type: none"> ➤ Assists project manager for smooth project implementation including planning, designing and monitoring. ➤ Works with engineer and facilitate to resolve project implementation issues. ➤ Assists project manager to organize at least quarterly municipal project coordination committee meeting. ➤ Ensure Quality Control and Quality Assurance plan is implemented.

Position Title	Key Roles and Responsibility
Engineer (Full-time per municipality)	<ul style="list-style-type: none"> ➤ Works together with deputy project manager (PISU Head of Municipality) for smooth project implementation. ➤ Coordinates stakeholders for smooth project implementation. ➤ Shares municipality-level issues with project manager on a timely basis. ➤ Checks timesheets for each expert of DSC. ➤ Monitors and ensures timely inputs provided by expert of DSC. ➤ Reviews DSC's outputs and ensures their quality. ➤ Reviews detail engineering designs, bidding documents, cost estimate and technical specifications. ➤ Supports in procurement of works and goods and recruitment of consulting services.
Technical Staff	<ul style="list-style-type: none"> ➤ Assists project manager for smooth project implementation, including planning, designing, monitoring. ➤ Works with engineer and facilitates to resolve project implementation issues. ➤ Assists project manager to organize at least quarterly municipal project coordination committee meeting. ➤ Ensures quality control and quality assurance plan is implemented.
GESI Focal Person Social Development Officer	<ul style="list-style-type: none"> ➤ Establishes Grievance Redress Committee at R-PIU and each municipality. ➤ Keeps records of grievances. ➤ Ensures key elements of MOUD's GESI guidelines are incorporated in designs of subprojects. ➤ Supervises inputs of social and resettlement experts of DSC and GESI experts of IDC. ➤ Ensures quality quarterly reports of the status of implementation of GESI action plan and resettlement plan are prepared.
Account Staff (Full-time Accountant)	<ul style="list-style-type: none"> ➤ Works under account officer, Divisional Office, Dhangadhi. ➤ Reviews invoices and prepares vouchers. ➤ Maintains contract-wise ledger in spread sheets. ➤ Keeps project accounts of each transaction. ➤ Consolidates statement of expenditure and submits summary expenditure through PM and Account Officer to PCO on a monthly basis. ➤ Facilitates and supports to complete timely audit.
Deputy Project Manager (Engineer Municipality)	<ul style="list-style-type: none"> ➤ Takes lead role to implement institutional development activities under the project, particularly GIS institutionalization, house numbering, Comprehensive Financial Management Improvement Plan, and capacity development trainings. ➤ Assists project manager for smooth project implementation, including planning, designing, and monitoring of subprojects. ➤ Assists project manager to organize at least quarterly municipal project coordination committee meeting. ➤ Assists to ensure quality control and quality assurance plan is implemented. ➤ Coordinates stakeholders. ➤ Checks timesheets for each DSC/ CSC expert. ➤ Monitors and ensures timely inputs provided by DSC/ CSC experts. ➤ Reviews DSC's/CSC's outputs and ensures quality. ➤ Shares local context, documentation and information with DSC/ CSC. ➤ Supports in procurement of works and goods and recruitment of consulting services. ➤ Takes on other responsibilities, as needed and directed by the project manager.
Account Staff	<ul style="list-style-type: none"> ➤ Works under the municipal account chief. ➤ Reviews invoices and prepares vouchers.

Position Title	Key Roles and Responsibility
	<ul style="list-style-type: none"> ➤ Maintains contract-wise ledger in spreadsheets. ➤ Keeps project accounts of each transaction. ➤ Consolidates statement of expenditure and submits summary expenditure through PM and account officer to PCO on a monthly basis. ➤ Facilitates and supports to complete timely audit.

CSC = construction supervision consultant, DSC = design and supervision consultant, GESI = gender equality and social inclusion, GIS = geographic information system, IDC = institutional development consultant, PISU = project implementation support unit, PM = project manager, R-PIU = regional project implementation unit.

Figure 4: Structure of the Project Implementation Support Units (PISU) – Province 7 municipalities



PISU = project implementation support unit

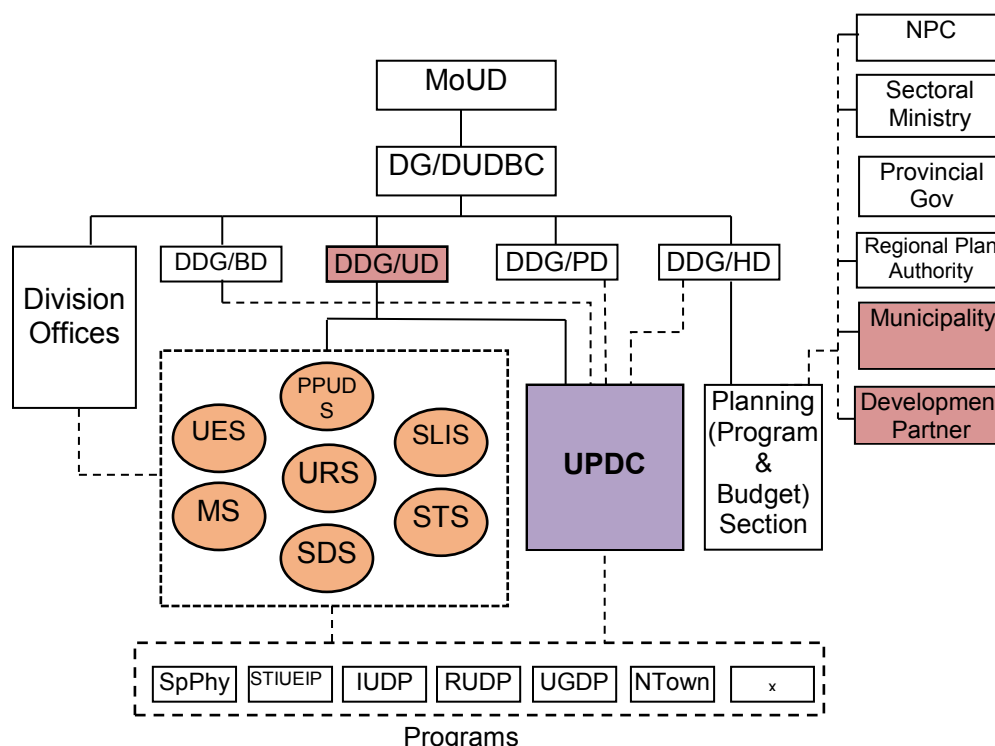
Table 5: Responsibilities of Project Implementation Support Units Staff

Position	Responsibility
Municipal Engineer (PISU Chief)	<ul style="list-style-type: none"> ➤ Leads PISU activities and supervises IDC municipal team. ➤ Prepares annual plan and program under the PBSDP. ➤ Designs and implements small infrastructure works, 3R activities, and city core area beautification. ➤ Submits financial and physical progress reports to the concerned agencies as per the guidelines provided. ➤ Prepares and implements urban development planning documents, including building bylaws and codes. ➤ Establishes GIS-based maps and house numbering system. ➤ Delineates poverty-ridden areas within the municipality to implement small, community infrastructure development projects. ➤ Prepares and implements O&M plan. ➤ Formulates asset management plan of major municipal assets.
Information Technology Staff	<ul style="list-style-type: none"> ➤ Supports municipality to establish and operate office automation system. ➤ Prepares and updates GIS-based maps and leads house numbering system. ➤ Coordinates with central level agencies to receive and establish software such as revenue billing, office administration, accounting, and planning.
Financial Management Staff	<ul style="list-style-type: none"> ➤ Prepares revenue improvement plan and revenue projection. ➤ Prepares FOP of the municipality and supports annual budgeting. ➤ Implements revenue enhancement activities.

Position	Responsibility
	<ul style="list-style-type: none"> ➤ Develops revenue database and implements revenue software programs for revenue administration. ➤ Supports municipality to prepare annual plan and program of project fund. ➤ Maintains project account and prepares financial reports. ➤ Prepares SOE in coordination with R-PIU.
Social Development Staff	<ul style="list-style-type: none"> ➤ Carries out surveys and data collection. ➤ Mobilizes community and community groups. ➤ Introduces GESI concept in municipal working system. ➤ Prepares annual program related with GESI, social development and economic development and implements those programs. ➤ Designs and implements community awareness programs. ➤ Prepares progress reports and good practice.
Environmental Staff	<ul style="list-style-type: none"> ➤ Forms and mobilizes environmental management plan. ➤ Prepares annual plan and program for environmental management. ➤ Implements environmental management activities including 3R (reduce, recycle and recover). ➤ Operates solid waste and fecal sludge management (FSM) activities established under the project. ➤ Collects data and prepares reports for municipal environmental management and monitoring guidelines.

FOP = financial operating plan, FSM = fecal sludge management, GESI = gender equality and social inclusion, GIS = geographical information system, O&M = operation and maintenance, PISU = project implementation support unit, R-PIU = regional project implementation unit, SOE = statement of expenditure.

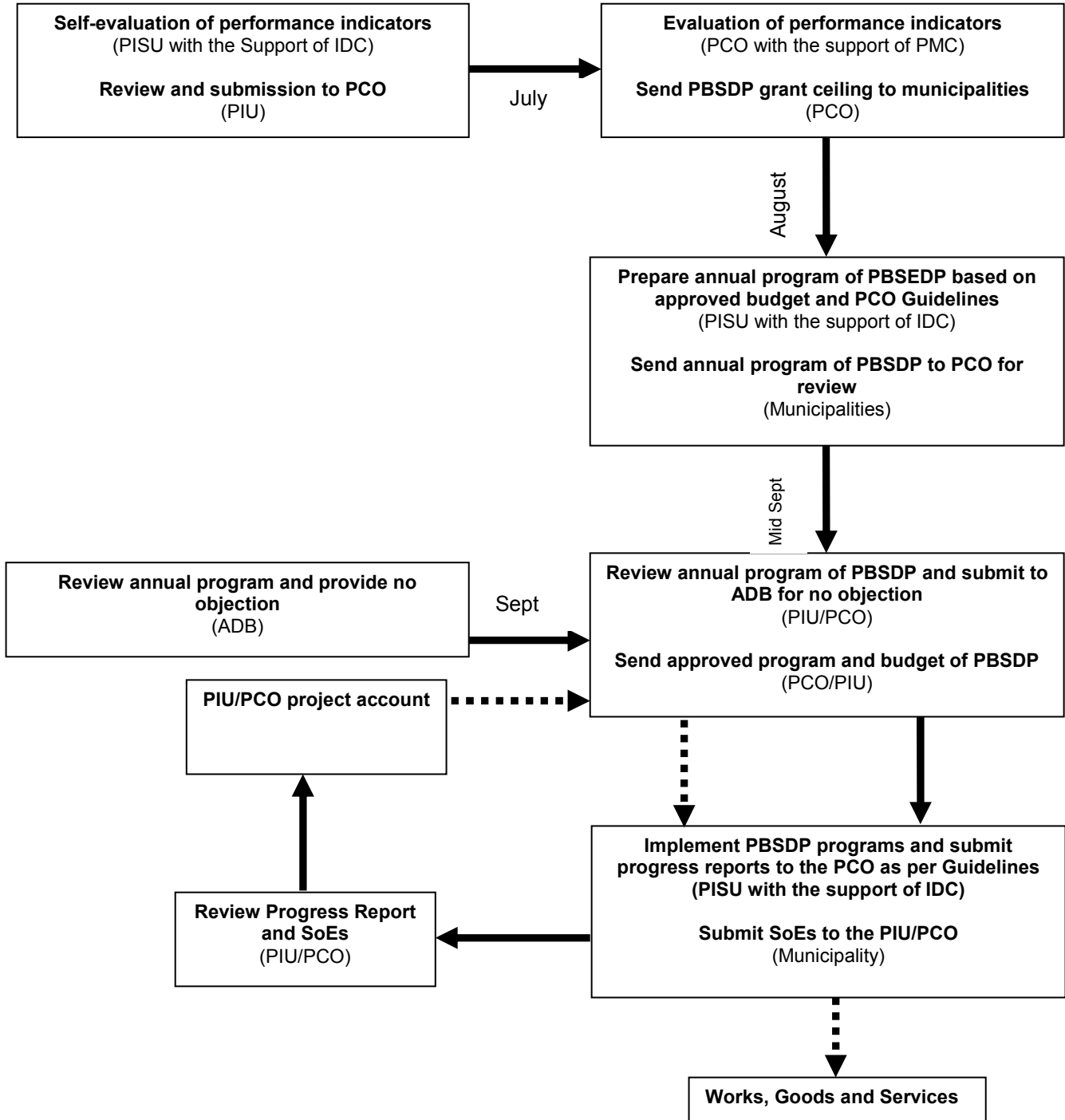
Figure 5: Structure of Urban Planning and Development Center (UPDC)



BD = board director, DG = director general, DDG = deputy director general, DUDBC = Department Urban Development and Building Construction, HD = housing division, IU DP = Integrated Urban Development Project, MOUD = Ministry of Urban Development, MS = municipality section, NPC = National Planning Commission, Ntown = New town, PD = project director, PPUDS = physical planning and urban development section, RU DP = Regional Urban Development Project, SDS = social development section, SLIS = social and land information section; STS =

small towns sections, SpPHY = special physical, STIUEIP = Secondary Towns Integrated Urban Environmental Improvement Project, UD = urban director, UES = urban environment section, UGDP = urban governance and development project, UPDC = urban planning and development center; URS = urban road section

Figure 6: Implementation Arrangement for the Performance-Based Socioeconomic Development Program (PBSEDP)



ADB = Asian Development Bank, IDC = institutional development consultant, PBSDP = performance-based socioeconomic development program, PCO = project coordination office, PIU = project implementation unit, PISU = project implementation support unit, SOE = statement of expenditures.

IV. COSTS AND FINANCING

26. The project is estimated to cost \$214 million. The government has requested a concessional loan in various currencies equivalent to \$150 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 loan from ADB will finance: (i) part of civil works and equipment costs, (ii) consulting services, (iii) part of incremental recurrent costs, and (iv) financing charges during implementation.¹⁵ The government will provide \$56.1 million equivalent to cover: (i) taxes and duties, (ii) part of civil works and equipment costs, (iii) part of incremental recurrent costs, and (iv) land acquisition and social mitigation costs. The municipalities (including beneficiaries) will contribute \$7.9 million equivalent to (i) cover part of civil works, (ii) part of land acquisition and social mitigation cost, (iii) part of performance-based socioeconomic development program cost, and (iv) part of incremental costs. The investment program is in Table 6 and financing plan is in Table 7.

Table 6: Summary of Cost Estimates
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Urban infrastructure developed	160.6
2. Municipal capacity strengthened	13.9
3. Urban planning and project preparation capacity improved	6.0
Subtotal (A)	180.5
B. Contingencies^c	27.3
C. Financial Charges During Implementation^d	6.2
Total (A+B+C)	214.0

^a Includes taxes and duties of \$17.4 million to be financed from government resources by cash contribution. Nominal taxes and duties expected on consultancy services shall be financed by Asian Development Bank.

^b In early 2017 prices; Exchange rate of US\$1 = NPR 107.2 is used.

^c Physical contingencies computed at 8.5% for civil works, equipment and project management. Price contingencies computed at 1.4%-1.5% on foreign exchange costs and 7.0%-8.5% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

^d Interest during construction for the ADB loan has been computed at 1.0% per annum.

Source: Asian Development Bank and the Government of Nepal.

Table 7: Summary Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	150.0	70.1
Ordinary capital resources (concessional loan)	150.0	70.1
Government	64.0	29.9
Total	214.0	100.0

Source: Asian Development Bank and the Government of Nepal.

A. Cost Estimates Preparation and Revisions

27. The cost estimates have been prepared based on the detailed project reports, where available, or other relevant details of the subprojects. The cost estimate model was prepared using Microsoft Excel and, is available with the project team and PMU. The cost estimates shall be further revised during the implementation by the PMU.

¹⁵ The ADB funding may finance transportation and insurance costs.

B. Key Assumptions

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

- (i) Exchange rate Nepalese Rupee (NPR) 107.2 = \$1.00 (as of February 2017)
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 8: Escalation Rates for Price Contingency Calculation
(%)

Item	2017	2018	2019	2020	2021	2022	2023	Average
Foreign rate of price inflation	1.4	2.9	4.5	6.0	7.6	9.2	10.9	6.1
Domestic rate of price inflation	8.5	17.18	25.97	34.79	44.22	54.32	65.12	35.7

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

29. By 2050 it is projected that the project area will receive additional rainfall in the range of 3-16% during the monsoon. Climate change adaptation for drainage, solid waste, and soft support are estimated to cost \$14.7 million and mitigation through improved solid waste management is expected to cost \$6.1 million. ADB will finance 76% of the climate change adaptation and mitigation costs.¹⁶ Details are in Appendix 4.

¹⁶ Appendix 4 of the Project Administration Manual provides an explanation of how the climate adaptation costs were calculated.

C. Detailed Cost Estimates by Expenditure Category

Table 9: Detailed Cost Estimates by Expenditure Category
(\$ million)

Item	Foreign Exchange	Local Currency	Total Cost	Total Net Cost	Tax	% of Total Base Cost
A. Investment Costs						
1 Civil Works	45.1	105.1	150.2	132.9	17.3	83.2%
a. Roads and drainage	34.4	80.2	114.6	101.4	13.2	63.5%
b. Solid waste management	5.2	12.1	17.3	15.3	2.0	9.6%
c. Wastewater management	4.9	11.5	16.4	14.5	1.9	9.1%
d. Municipal buildings	0.5	1.3	1.8	1.6	0.2	1.0%
2 Vehicles and equipment	0.7	-	0.7	0.6	0.1	0.4%
3 Resettlement	-	6.0	6.0	6.0	-	3.3%
a. Land acquisition	-	3.0	3.0	3.0	-	1.7%
b. Social mitigation	-	3.0	3.0	3.0	-	1.6%
4 Consultancy services	4.2	9.8	14.0	14.0	-	7.8%
5 Performance-based Socioeconomic Development Program (PBSEDP)	-	4.1	4.1	4.1	-	2.3%
Subtotal (A)	49.9	125.0	174.9	157.6	17.4	96.9%
B. Recurrent Costs						
1 Incremental recurrent costs	-	5.6	5.6	5.6	-	3.1%
Subtotal (B)	-	5.6	5.6	5.6	-	3.1%
Total Base Cost	49.9	130.6	180.5	163.1	17.4	100.0%
C. Contingencies						
1 Physical contingencies	3.8	10.6	14.4	14.4	-	8.0%
2 Price contingencies	-	12.9	12.9	12.9	-	7.2%
Subtotal (C)	3.8	23.5	27.3	27.3	-	15.1%
D. Financing Charges						
1 Interest curing implementation	6.2	-	6.2	6.2	-	3.4%
Subtotal (D)	6.2	-	6.2	6.2	-	3.4%
Total Project Cost (A+B+C+D)	60.0	154.0	214.0	196.6	17.4	118.6%

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

2. The costs of the technical and financial audits of the project are minor and will be borne by the government.

3. Minor environmental monitoring and implementation of resettlement plan and gender action plan cost are absorbed in B1. ADB will not finance land acquisition cost.

4. Trainings and workshops are included under the performance-based socioeconomic development program (PBSDP), consultancies and incremental administrative costs.

5. PBSEDP may be used to finance small works, equipment, and incremental recurrent costs.

Source: Asian Development Bank estimates.

D. Allocation and Withdrawal of Loan Proceeds**Table 10: Allocation and Withdrawal of Loan Proceeds**

Category		ADB Financing Basis	
No	Item	Total Amount Allocated for ADB Financing (\$)	Percentage of ADB Financing from the Loan Amount
1	Civil works	106,337,000	71% of the total expenditure claimed
2	Vehicles and equipment	600,000	89% of the total expenditure claimed
3	Consultancy services	14,000,000	100% of the total expenditure claimed
4	Performance-based Socioeconomic Development Program	3,260,000	80% of the total expenditure claimed
5	Incremental Recurrent costs	2,782,000	50% of the total expenditure claimed
6	Interest during construction	6,216,000	100% of amount due
7	Unallocated	16,805,000	
Total		150,000,000	

Source: Asian Development Bank estimates.

E. Detailed Cost Estimates by Financier

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

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipalities	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil Works	150.2	106.3	70.8%	17.3	20.6	37.9	25.2%	5.9	4.0%
a. Roads and drainage	114.6	81.2	70.8%	13.2	15.6	28.8	25.1%	4.7	4.1%
b. Solid waste management	17.3	12.3	70.8%	2.0	2.6	4.6	26.4%	0.5	2.8%
c. Wastewater management	16.4	11.6	70.8%	1.9	2.2	4.1	25.0%	0.7	4.2%
d. Municipal buildings	1.8	1.3	70.8%	0.2	0.2	0.4	24.8%	0.1	4.4%
2 Vehicles and equipment	0.7	0.6	88.5%	0.1	-	0.1	11.5%	-	-
3 Resettlement	6.0	-	-	-	5.7	5.7	95.0%	0.3	5.0%
a. Land acquisition	3.0	-	-	-	2.7	2.7	90.0%	0.3	10.0%
b. Social mitigation	3.0	-	-	-	3.0	3.0	100.0%	-	-
4 Consultancy services	14.0	14.0	100.0%	-	-	-	-	-	-
5 Performance-based Socioeconomic Development Program (PBSEDP)	4.1	3.3	80.0%	-	0.6	0.6	15.0%	0.2	5.0%
Subtotal (A)	174.9	124.2	71.0%	17.4	26.9	44.3	25.3%	6.5	3.7%
B. Recurrent Costs									
1 Incremental recurrent costs	5.6	2.8	50.0%	-	1.8	1.8	33.1%	0.9	16.9%
Subtotal (B)	5.6	2.8	50.0%	-	1.8	1.8	33.1%	0.9	16.9%
Total Base Cost	180.5	127.0	70.4%	17.4	28.8	46.1	25.6%	7.4	4.1%
C. Contingencies									
1 Physical contingencies	14.4	8.8	61.4%	-	5.0	5.0	34.9%	0.5	3.6%
2 Price contingencies	12.9	8.0	61.9%	-	4.9	4.9	38.1%	-	-
Subtotal (C)	27.3	16.8	61.7%	-	9.9	9.9	36.4%	0.5	1.9%
D. Financing Charges									
1 Interest during implementation	6.2	6.2	100.0%	-	-	-	-	-	-
Subtotal (D)	6.2	6.2	100.0%	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	214.0	150.0	70.1%	17.4	38.7	56.1	26.2%	7.9	3.7%

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

2. The costs of the technical audits of the Project are minor and will be borne by the government.

3. Minor environmental monitoring and implementation of resettlement plan and gender action plan cost are absorbed in B1. ADB will not finance land acquisition cost.

4. Trainings and workshops are included under the PBSEDP, consultancies and incremental administrative costs.

5. PBSEDP may be used to finance small works, equipment, and incremental recurrent costs.

Source: Asian Development Bank estimates.

**Table 12a: Detailed Cost Estimates by Financer–Biratnagar Sub-metropolitan City
(\$ million)**

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality		
		\$	%	Tax	Non-Tax	Total	%	Total	%	
A. Investment Costs										
1	Civil works	24.3	17.2	70.8%	2.8	2.8	5.6	23.0%	1.5	6.2%
	a. Roads and drainage	20.0	14.1	70.8%	2.3	2.3	4.6	23.0%	1.2	6.2%
	b. Solid waste management	-	-	-	-	-	-	-	-	-
	c. Wastewater management	4.4	3.1	70.8%	0.5	0.5	1.0	23.0%	0.3	6.2%
	d. Municipal buildings	-	-	-	-	-	-	-	-	-
2	Vehicles and equipment	-	-	-	-	-	-	-	-	-
3	Resettlement	-	-	-	-	-	-	-	-	-
	a. Land acquisition	-	-	-	-	-	-	-	-	-
	b. Social mitigation	-	-	-	-	-	-	-	-	-
4	Consultancy services	0.7	0.7	100.0%	-	-	-	-	-	-
	Performance-based									
5	Socioeconomic Development Program	-	-	-	-	-	-	-	-	-
	Subtotal (A)	25.1	18.0	71.7%	2.8	2.8	5.6	22.3%	1.5	6.0%
B. Recurrent costs										
1	Incremental recurrent costs	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
	Subtotal (B)	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
	Total Base Cost	25.7	18.3	71.1%	2.8	2.9	5.7	22.3%	1.7	6.6%
C. Contingencies										
1	Physical contingencies ^a	2.1	1.5	71.7%	-	0.5	0.5	22.3%	0.1	6.0%
2	Price contingencies	1.8	1.1	62.0%	-	0.7	0.7	38.0%	-	-
	Subtotal (C)	4.0	2.7	67.2%	-	1.2	1.2	29.6%	0.1	3.2%
D. Financing Charges										
1	Interest during implementation	-	-	-	-	-	-	-	-	-
	Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)		29.7	21.0	70.6%	2.8	4.1	6.9	23.2%	1.8	6.2%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

**Table 12b: Detailed Cost Estimates by Financer–Birgunj Sub-metropolitan City
(\$ million)**

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil works	20.4	14.5	70.8%	2.3	2.3	4.7	23.0%	1.3	6.2%
a. Roads and drainage	20.4	14.5	70.8%	2.3	2.3	4.7	23.0%	1.3	6.2%
b. Solid waste management	-	-	-	-	-	-	-	-	-
c. Wastewater management	-	-	-	-	-	-	-	-	-
d. Municipal buildings	-	-	-	-	-	-	-	-	-
2 Vehicles and equipment	-	-	-	-	-	-	-	-	-
3 Resettlement	-	-	-	-	-	-	-	-	-
a. Land acquisition	-	-	-	-	-	-	-	-	-
b. Social mitigation	-	-	-	-	-	-	-	-	-
4 Consultancy services	0.5	0.5	100.0%	-	-	-	-	-	-
Performance-based Socioeconomic Development Program	-	-	-	-	-	-	-	-	-
Subtotal (A)	20.9	14.9	71.5%	2.3	2.3	4.7	22.5%	1.3	6.1%
B. Recurrent costs									
1 Incremental recurrent costs	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
Subtotal (B)	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
Total Base Cost	21.5	15.3	70.8%	2.3	2.5	4.8	22.4%	1.5	6.8%
C. Contingencies									
1 Physical contingencies ^a	1.8	1.2	68.4%	-	0.5	0.5	25.6%	0.1	6.1%
2 Price contingencies	1.5	1.0	62.0%	-	0.6	0.6	38.0%	-	0.0%
Subtotal (C)	3.3	2.2	65.4%	-	1.0	1.0	31.3%	0.1	3.2%
D. Financing Charges									
1 Interest during implementation	-	-	-	-	-	-	-	-	-
Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	24.9	17.4	70.1%	2.3	3.5	5.9	23.6%	1.6	6.3%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

**Table 12c: Detailed Cost Estimates by Financer–Nepalgunj Sub-metropolitan City
(\$ million)**

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality		
		\$	%	Tax	Non-Tax	Total	%	Total	%	
A. Investment Costs										
1	Civil works	15.3	10.8	70.8%	1.8	1.8	3.5	23.0%	0.9	6.2%
	a. Roads and drainage	15.3	10.8	70.8%	1.8	1.8	3.5	23.0%	0.9	6.2%
	b. Solid waste management	-	-	-	-	-	-	-	-	-
	c. Wastewater management	-	-	-	-	-	-	-	-	-
	d. Municipal buildings	-	-	-	-	-	-	-	-	-
2	Vehicles and equipment	0.1	0.1	88.5%	0.1	-	0.1	11.5%	-	-
3	Resettlement	-	-	-	-	-	-	-	-	-
	a. Land acquisition	-	-	-	-	-	-	-	-	-
	b. Social mitigation	-	-	-	-	-	-	-	-	-
4	Consultancy services	0.5	0.5	100.0%	-	-	-	-	-	-
	Performance-based									
5	Socioeconomic Development Program	-	-	-	-	-	-	-	-	-
	Subtotal (A)	15.7	11.3	71.7%	1.8	1.8	3.5	22.3%	0.9	6.0%
B. Recurrent Costs										
1	Incremental recurrent costs	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
	Subtotal (B)	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
	Total Base Cost	16.4	11.6	70.8%	1.8	1.9	3.6	22.2%	1.1	7.0%
C. Contingencies										
1	Physical contingencies ^a	1.3	0.9	62.7%		0.4	0.4	26.3%	0.1	6.0%
2	Price contingencies	1.2	0.7	62.0%	-	0.4	0.4	38.0%	-	-
	Subtotal (C)	2.5	1.6	65.1%	-	0.8	0.8	31.7%	0.1	3.2%
D. Financing Charges										
1	Interest during implementation	-	-	-	-	-	-	-	-	-
	Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)		18.9	13.2	70.0%	1.8	2.7	4.4	23.5%	1.2	6.5%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

**Table 12d: Detailed Cost Estimates by Financer–Siddharthanagar Municipality
(\$ million)**

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil works	20.2	14.3	70.8%	2.3	2.3	4.6	23.0%	1.3	6.2%
a. Roads and drainage	20.2	14.3	70.8%	2.3	2.3	4.6	23.0%	1.3	6.2%
b. Solid waste management	-	-	-	-	-	-	-	-	-
c. Wastewater management	-	-	-	-	-	-	-	-	-
d. Municipal buildings	-	-	-	-	-	-	-	-	-
2 Vehicles and equipment	0.1	0.1	88.5%	0.1	-	0.1	11.5%	-	-
3 Resettlement	-	-	-	-	-	-	-	-	-
a. Land acquisition	-	-	-	-	-	-	-	-	-
b. Social mitigation	-	-	-	-	-	-	-	-	-
4 Consultancy services	0.4	0.4	100.0%	-	-	-	-	-	-
Performance-based Socioeconomic Development Program	-	-	-	-	-	-	-	-	-
Subtotal (A)	20.7	14.7	71.4%	2.3	2.3	4.6	22.5%	1.3	6.1%
B. Recurrent Costs									
1 Incremental recurrent costs	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
Subtotal (B)	0.6	0.3	50.0%	-	0.1	0.1	20.0%	0.2	30.0%
Total Base Cost	21.3	15.1	70.8%	2.3	2.5	4.8	22.4%	1.4	6.8%
C. Contingencies									
1 Physical contingencies ^a	1.8	1.2	68.5%	-	0.4	0.4	25.4%	0.1	6.1%
2 Price contingencies	1.5	0.9	62.0%	-	0.6	0.6	38.0%	-	-
Subtotal (C)	3.3	2.1	65.5%	-	1.0	1.0	31.3%	0.1	3.2%
D. Financing Charges									
1 Interest during implementation	-	-	-	-	-	-	-	-	-
Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	24.6	17.2	70.1%	2.3	3.5	5.8	23.6%	1.6	6.3%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

Table 12e: Detailed Cost Estimates by Financer—Godawari Municipality
(\$ million)

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil works	15.2	10.7	70.8%	1.7	2.6	4.4	28.9%	0.1	0.3%
a. Roads and drainage	8.4	6.0	70.8%	1.0	1.5	2.5	29.2%	-	-
b. Solid waste management	4.2	3.0	70.8%	0.5	0.7	1.2	29.2%	-	-
c. Wastewater management	1.5	1.0	70.8%	0.2	0.3	0.4	29.2%	-	-
d. Municipal buildings	1.1	0.7	70.8%	0.1	0.1	0.3	24.8%	0.1	4.4%
2 Vehicles and equipment	0.1	0.1	88.5%	0.1	-	0.1	11.5%	-	-
3 Resettlement	-	-	-	-	-	-	-	-	-
a. Land acquisition	-	-	-	-	-	-	-	-	-
b. Social mitigation	-	-	-	-	-	-	-	-	-
4 Consultancy services	-	-	-	-	-	-	-	-	-
Performance-based									
5 Socioeconomic Development Program	0.8	0.7	80.0%	-	0.1	0.1	15.0%	0.1	5.0%
Subtotal (A)	16.1	11.5	71.4%	1.8	2.8	4.5	28.1%	0.1	0.5%
B. Recurrent Costs									
1 Incremental recurrent costs	0.3	0.1	50.0%	-	0.1	0.1	40.0%	0.1	10.0%
Subtotal (B)	0.3	0.1	50.0%	-	0.1	0.1	40.0%	0.1	10.0%
Total Base Cost	16.3	11.6	71.0%	1.8	2.9	4.6	28.3%	0.1	0.7%
C. Contingencies									
1 Physical contingencies ^a	1.4	1.0	71.4%	-	0.4	0.4	28.1%	0.1	0.5%
2 Price contingencies	1.2	0.7	62.0%	-	0.4	0.4	38.0%	-	-
Subtotal (C)	2.5	1.7	67.0%	-	0.8	0.8	32.7%	0.1	0.3%
D. Financing Charges									
1 Interest during implementation	-	-	-	-	-	-	-	-	-
Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	18.9	13.3	70.5%	1.8	3.7	5.5	28.9%	0.1	0.6%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

Table 12f: Detailed Cost Estimates by Financer– Bheemdatt Municipality
(\$ million)

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil works	24.4	17.3	70.8%	2.8	3.9	6.7	27.4%	0.4	1.8%
a. Roads and drainage	14.3	10.1	70.8%	1.6	2.5	4.2	29.2%	-	-
b. Solid waste management	5.3	3.7	70.8%	0.6	0.7	1.3	24.8%	0.2	4.4%
c. Wastewater management	4.8	3.4	70.8%	0.6	0.6	1.2	24.8%	0.2	4.4%
d. Municipal buildings	-	-	-	-	-	-	-	-	-
2 Vehicles and equipment	0.1	0.1	88.5%	0.1	-	0.1	11.5%	-	-
3 Resettlement	-	-	-	-	-	-	-	-	-
a. Land acquisition	-	-	-	-	-	-	-	-	-
b. Social mitigation	-	-	-	-	-	-	-	-	-
4 Consultancy services	-	-	-	-	-	-	-	-	-
Performance-based Socioeconomic Development Program	1.2	1.0	80.0%	-	0.2	0.2	15.0%	0.1	5.0%
Subtotal (A)	25.7	18.3	71.3%	2.8	4.1	6.9	26.7%	0.5	2.0%
B. Recurrent Costs									
1 Incremental recurrent costs	0.3	0.1	50.0%	-	0.1	0.1	30.0%	0.1	20.0%
Subtotal (B)	0.3	0.1	50.0%	-	0.1	0.1	30.0%	0.1	20.0%
Total Base Cost	26.0	18.4	71.1%	2.8	4.1	7.0	26.8%	0.6	2.2%
C. Contingencies									
1 Physical contingencies ^a	2.2	1.6	71.3%	-	0.6	0.6	26.7%	0.1	2.0%
2 Price contingencies	1.9	1.2	62.0%	-	0.7	0.7	38.0%	-	-
Subtotal (C)	4.0	2.7	67.0%	-	1.3	1.3	31.9%	0.1	1.1%
D. Financing Charges									
1 Interest during implementation	-	-	-	-	-	-	-	-	-
Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	30.0	21.2	70.5%	2.8	5.4	8.2	27.5%	0.6	2.0%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

**Table 12g: Detailed Cost Estimates by Financer–Dhangadhi Sub-metropolitan city
(\$ million)**

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil works	22.9	16.2	70.8%	2.6	3.6	6.2	27.2%	0.5	2.0%
a. Roads and drainage	12.6	9.0	70.8%	1.5	2.2	3.7	29.2%	-	0.0%
b. Solid waste management	5.7	4.0	70.8%	0.7	0.8	1.4	24.8%	0.3	4.4%
c. Wastewater management	4.5	3.2	70.8%	0.5	0.6	1.1	24.8%	0.2	4.4%
d. Municipal buildings	-	-	-	-	-	-	-	-	-
2 Vehicles and equipment	0.1	0.1	88.5%	0.1	-	0.1	11.5%	-	-
3 Resettlement	3.0	-	-	-	2.7	2.7	90.0%	0.3	10.0%
a. Land acquisition	3.0	-	-	-	2.7	2.7	90.0%	0.3	10.0%
b. Social mitigation	-	-	-	-	-	-	-	-	-
4 Consultancy services	-	-	-	-	-	-	-	-	-
Performance-based									
5 Socioeconomic Development Program	1.6	1.3	80.0%	-	0.2	0.2	15.0%	0.1	5.0%
Subtotal (A)	27.5	17.5	63.7%	2.6	6.5	9.2	33.3%	0.8	3.0%
B. Recurrent Costs									
1 Incremental recurrent costs	0.3	0.1	50.0%	-	0.1	0.1	30.0%	0.1	20.0%
Subtotal (B)	0.3	0.1	50.0%	-	0.1	0.1	30.0%	0.1	20.0%
Total Base Cost	27.8	17.7	63.5%	2.6	6.6	9.3	33.3%	0.9	3.2%
C. Contingencies									
1 Physical contingencies ^a	2.1	1.5	71.4%	-	0.6	0.6	26.4%	0.0	2.2%
2 Price contingencies	2.0	1.2	62.0%	-	0.8	0.8	38.0%	-	-
Subtotal (C)	4.1	2.7	66.8%	-	1.3	1.3	32.1%	0.0	1.1%
D. Financing Charges									
1 Interest during implementation	-	-	-	-	-	-	-	-	-
Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	31.9	20.4	63.9%	2.6	7.9	10.6	33.1%	0.9	2.9%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

Table 12h: Detailed Cost Estimates by Financer–Shuklaphanta Municipality
(\$ million)

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil Works	7.5	5.3	70.8%	0.9	1.3	2.2	28.8%	0.1	0.4%
a. Roads and drainage	3.4	2.4	70.8%	0.4	0.6	1.0	29.2%	-	-
b. Solid waste management	2.2	1.5	70.8%	0.2	0.4	0.6	29.2%	-	-
c. Wastewater management	1.3	0.9	70.8%	0.1	0.2	0.4	29.2%	-	-
d. Municipal buildings	0.7	0.5	70.8%	0.1	0.1	0.2	24.8%	0.1	4.4%
2 Vehicles and Equipment	0.1	0.1	88.5%	0.1	-	0.1	11.5%	-	0.0%
3 Resettlement	-	-	-	-	-	-	-	-	-
a. Land acquisition	-	-	-	-	-	-	-	-	-
b. Social mitigation	-	-	-	-	-	-	-	-	-
4 Consultancy Services	-	-	-	-	-	-	-	-	-
Performance-based Socioeconomic Development Program	0.5	0.4	80.0%	-	0.1	0.1	15.0%	0.1	5.0%
Subtotal (A)	8.1	5.8	71.5%	0.9	1.4	2.2	27.8%	0.1	0.7%
B. Recurrent Costs									
1 Incremental recurrent costs	0.3	0.1	50.0%	-	0.1	0.1	40.0%	0.1	10.0%
Subtotal (B)	0.3	0.1	50.0%	-	0.1	0.1	40.0%	0.1	10.0%
Total Base Cost	8.4	5.9	70.8%	0.9	1.5	2.4	28.2%	0.1	1.0%
C. Contingencies									
1 Physical contingencies ^a	0.7	0.5	71.5%	-	0.2	0.2	27.8%	0.1	0.7%
2 Price contingencies	0.6	0.4	62.0%	-	0.2	0.2	38.0%	-	-
Subtotal (C)	1.3	0.9	67.1%	-	0.4	0.4	32.5%	0.1	0.4%
D. Financing Charges									
1 Interest during implementation	-	-	-	-	-	-	-	-	-
Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	9.7	6.8	70.3%	0.9	1.9	2.8	28.8%	0.1	0.9%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

Table 12i: Detailed Cost Estimates by Financer–Project Coordination Office (PCO)
(\$ million)

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil Works	-	-	0.0%	-	-	-	0.0%	-	0.0%
a. Roads and drainage	-	-	0.0%	-	-	-	0.0%	-	0.0%
b. Solid waste management	-	-	0.0%	-	-	-	0.0%	-	0.0%
c. Wastewater management	-	-	0.0%	-	-	-	0.0%	-	0.0%
d. Municipal buildings	-	-	0.0%	-	-	-	0.0%	-	0.0%
2 Vehicles and Equipment	0.2	0.2	88.5%	0.1	-	0.1	11.5%	-	0.0%
3 Resettlement	3.0	-	0.0%	-	2.7	2.7	90.0%	0.3	10.0%
a. Land Acquisition	-	-	0.0%	-	-	-	0.0%	-	0.0%
b. Social Mitigation ^a	3.0	-	0.0%	-	2.7	2.7	90.0%	0.3	10.0%
4 Consultancy Services Performance-based	7.6	7.6	100.0%	-	-	-	-	-	0.0%
5 Socioeconomic Development Program	-	-	0.0%	-	-	-	0.0%	-	0.0%
Subtotal (A)	10.7	7.7	99.7%	0.1	2.7	2.8	33.3%	0.3	2.8%
B. Recurrent Costs									
1 Incremental Recurrent Costs	1.1	0.6	50.0%	-	0.6	0.6	50.0%	-	0.0%
Subtotal (B)	1.1	0.6	50.0%	-	0.6	0.6	50.0%	-	0.0%
Total Base Cost	11.9	8.3	93.4%	0.1	3.2	3.3	34.9%	0.3	2.5%
C. Contingencies									
1 Physical Contingencies ^b	0.7	-	-	-	0.9	0.9	11.5%	-	0.0%
2 Price Contingencies	0.8	0.5	62.0%	-	0.3	0.3	38.0%	-	0.0%
Subtotal (C)	1.5	0.5	13.9%	-	1.2	1.2	26.4%	-	0.0%
D. Financing Charges									
1 Interest during implementation	6.2	6.2	100.0%	-	-	-	0.0%	-	0.0%
Subtotal (D)	6.2	6.2	100.0%	-	-	-	0.0%	-	0.0%
Total Project Cost (A+B+C+D)	19.6	14.7	75.0%	0.1	4.4	4.5	23.0%	0.3	2.0%

^a Municipality will share 10% of social mitigation cost as per agreement among the parties at the project implementation.

^b 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

Table 12j: Detailed Cost Estimates by Financer – Regional Project Implementation Unit (R-PIU) (\$ millions)

Item	Total Cost	ADB (OCR Concessional)		Government of Nepal				Municipality	
		\$	%	Tax	Non-Tax	Total	%	Total	%
A. Investment Costs									
1 Civil Works	-	-	-	-	-	-	-	-	-
a. Roads and Drainage	-	-	-	-	-	-	-	-	-
b. Solid Waste Management	-	-	-	-	-	-	-	-	-
c. Waste Water Management	-	-	-	-	-	-	-	-	-
d. Municipal Buildings	-	-	-	-	-	-	-	-	-
2 Vehicles and Equipment	0.1	0.1	88.5%	0.1	-	0.1	11.5%	-	-
3 Resettlement	-	-	-	-	-	-	-	-	-
a. Land Acquisition	-	-	-	-	-	-	-	-	-
b. Social Mitigation	-	-	-	-	-	-	-	-	-
4 Consultancy Services	4.3	4.3	100.0%	-	-	-	-	-	-
Performance-based Socioeconomic Development Program	-	-	-	-	-	-	-	-	-
Subtotal (A)	4.5	4.0	88.5%	0.5	-	0.5	11.5%	-	-
B. Recurrent Costs									
1 Incremental Recurrent Costs	0.7	0.4	50.0%	-	0.4	0.4	50.0%	-	-
Subtotal (B)	0.7	0.4	50.0%	-	0.4	0.4	50.0%	-	-
Total Base Cost	5.2	4.3	83.0%	0.5	0.4	0.9	17.0%	-	-
C. Contingencies									
1 Physical Contingencies ^a	0.4	-	88.5%	-	0.5	0.0	11.5%	-	-
2 Price Contingencies	0.4	0.2	62.0%	-	0.1	0.1	38.0%	-	-
Subtotal (C)	0.8	0.6	75.4%	-	0.2	0.2	24.6%	-	-
D. Financing Charges									
1 Interest During Implementation	-	-	-	-	-	-	-	-	-
Subtotal (D)	-	-	-	-	-	-	-	-	-
Total Project Cost (A+B+C+D)	6.0	4.9	82.1%	0.5	0.6	1.1	17.9%	-	0.0%

^a 8.5% of civil works, vehicles and equipment, consultancies and PBSDP.

Source: Asian Development Bank estimates.

F. Detailed Cost Estimates by Outputs

Table 13: Detailed Cost Estimates by Outputs
(\$ million)

Items	Total Cost	Output 1: Urban Infrastructure		Output 2: Municipal Capacity Strengthened		Output 3: Project Preparation Improved	
		\$	%	\$	%	\$	%
A. Investment Costs							
1 Civil works	150.2	148.4	98.8%	1.8	1.2%	-	-
a. Roads and Drainage	114.6	114.6	100.0%	-	-	-	-
b. Solid Waste Management	17.3	17.3	100.0%	-	-	-	-
c. Waste Water Management	16.4	16.4	100.0%	-	-	-	-
d. Municipal Buildings	1.8	-	-	1.8	100.0%	-	-
2 Vehicles and equipment	0.7	-	-	0.7	96.2%	0.1	3.8%
3 Resettlement	6.0	6.0	100.0%	-	-	-	-
a. Land acquisition	3.0	3.0	100.0%	-	-	-	-
b. Social mitigation	3.0	3.0	100.0%	-	-	-	-
4 Consultancy services Performance-based	14.0	6.2	44.2%	1.8	13.0%	6.1	42.8%
5 Socioeconomic Development Program (PBSEDP)	4.1	-	-	4.1	100.0%	-	0.0%
Subtotal (A)	174.9	160.6	91.8%	8.3	4.8%	6.1	3.4%
B. Recurrent Costs							
1 Incremental recurrent costs	5.6	-	-	5.6	100.0%	-	-
Subtotal (B)	5.6	-	-	5.6	100.0%	-	-
Total Base Cost	180.5	160.6	89.0%	13.9	7.7%	6.1	3.3%
C. Contingencies							
1 Physical contingencies	14.4	13.1	91.5%	0.7	4.9%	0.5	3.6%
2 Price contingencies	12.9	11.5	89.1%	1.0	7.5%	0.4	3.4%
Subtotal (C)	27.3	24.7	90.4%	1.7	6.2%	0.9	3.5%
D. Financing Charges							
1 Interest during implementation	6.2	5.5	89.1%	0.5	7.5%	0.2	3.4%
Subtotal (D)	6.2	5.5	89.1%	0.5	7.5%	0.2	3.4%
Total Project Cost (A+B+C+D)	214.0	190.8	89.1%	16.1	7.5%	7.2	3.4%

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

2. The costs of the technical and financial audits of the Project are minor and will be borne by the government.

3. Minor environmental monitoring and implementation of resettlement plan and gender action plan cost are absorbed in B1. ADB will not finance land acquisition cost.

4. Trainings and workshops are included under the PBSEDP, consultancies and incremental administrative costs.

5. PBSEDP may be used to finance small works, equipment, and incremental recurrent costs.

Source: Asian Development Bank estimates.

G. Detailed Cost Estimates by Year

Table 14: Detailed Cost Estimates by Year
(\$ million)

Item	Total	2017	2018	2019	2020	2021	2022	2023
A. Investment Costs								
1 Civil works	150.2	12.3	24.9	42.3	35.0	28.9	6.9	-
a. Roads and drainage	114.6	11.4	22.8	34.3	26.8	17.4	1.9	-
b. Solid waste management	17.3	-	-	3.5	3.5	6.1	4.3	-
c. Wastewater management	16.4	0.9	1.8	4.2	3.6	5.4	0.6	-
d. Municipal buildings	1.8	-	0.4	0.4	1.1	-	-	-
2 Vehicles and equipment	0.7	0.1	0.6	-	-	-	-	-
3 Resettlement	6.0	3.0	-	0.6	0.9	1.3	0.1	-
a. Land acquisition	3.0	3.0	-	-	-	-	-	-
b. Social mitigation	3.0	-	-	0.6	0.9	1.3	0.1	-
4 Consultancy services	14.0	1.9	4.2	5.8	1.2	0.7	0.2	-
5 Performance-based Socioeconomic Development Program (PBSEDP)	4.1	0.4	1.0	1.0	1.0	0.6	-	-
Subtotal (A)	174.9	17.7	30.7	49.7	38.1	31.6	7.2	-
B. Recurrent Costs								
1 Incremental recurrent costs	5.6	0.5	1.3	1.3	1.0	0.7	0.5	0.2
Subtotal (B)	5.6	0.5	1.3	1.3	1.0	0.7	0.5	0.2
Total Base Cost	180.5	18.2	32.0	51.0	39.1	32.3	7.7	0.2
C. Contingencies								
1 Physical contingencies	14.4	1.2	2.6	4.2	3.2	2.6	0.6	-
2 Price contingencies	12.9	0.6	1.6	3.4	3.2	3.2	0.9	0.0
Subtotal (C)	27.3	1.8	4.2	7.6	6.4	5.8	1.5	0.0
D. Financing Charges								
1 Interest during implementation	6.2	0.1	0.3	0.6	1.0	1.3	1.5	1.5
Subtotal (D)	6.2	0.1	0.3	0.6	1.0	1.3	1.5	1.5
Total Project Cost (A+B+C+D)	214.0	20.1	36.5	59.2	46.5	39.4	10.6	1.8

- Note:
1. Numbers may not sum precisely because of rounding.
 2. The costs of the technical and financial audits of the Project are minor and will be borne by the government.
 3. Minor environmental monitoring and implementation of resettlement plan and gender action plan cost are absorbed in B1. ADB will not finance land acquisition cost.
 4. Trainings and workshops are included under the PBSEDP, consultancies and incremental administrative costs.
 5. PBSEDP may be used to finance small works, equipment, and incremental recurrent costs.

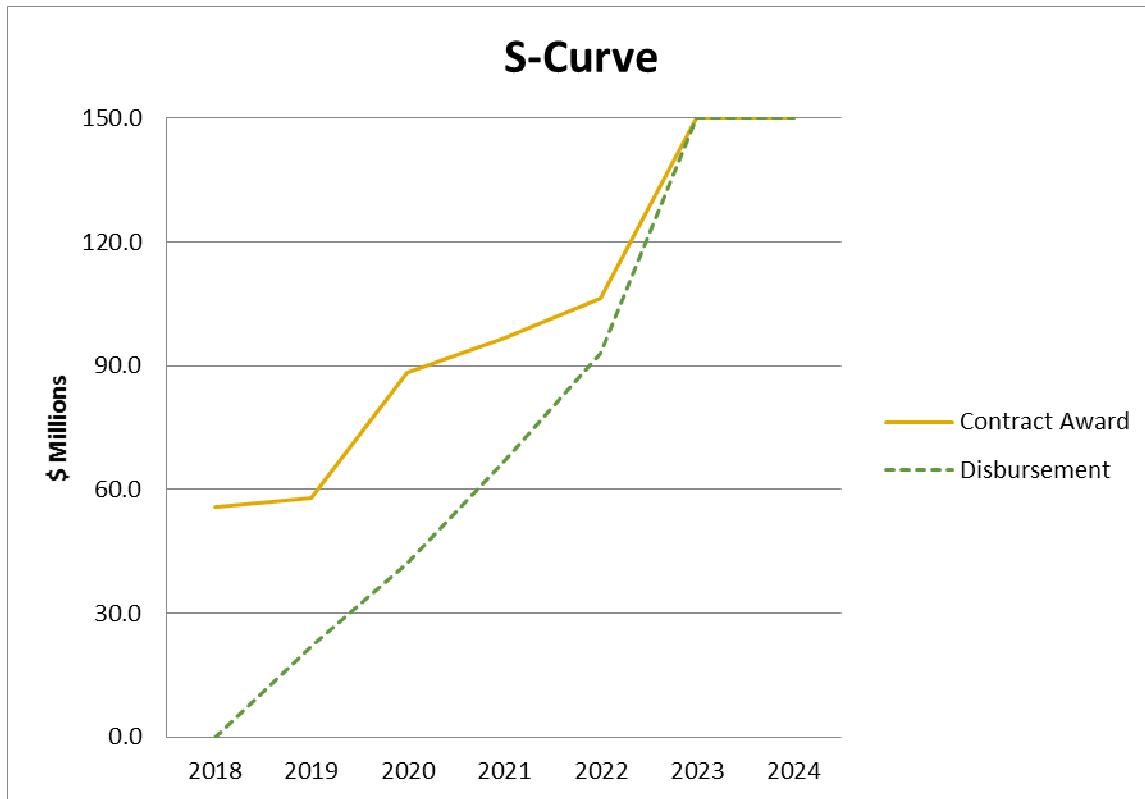
Source: Asian Development Bank estimates.

H. Contract and Disbursement S-Curve

Table 15: Contract Awards and Disbursement

	2018	2019	2020	2021	2022	2023	Total
Contract Awards	55.8	2.0	30.4	8.5	9.5	43.8	150.0
Disbursement	8.0	14.0	20.0	25.0	26.0	57	150.0

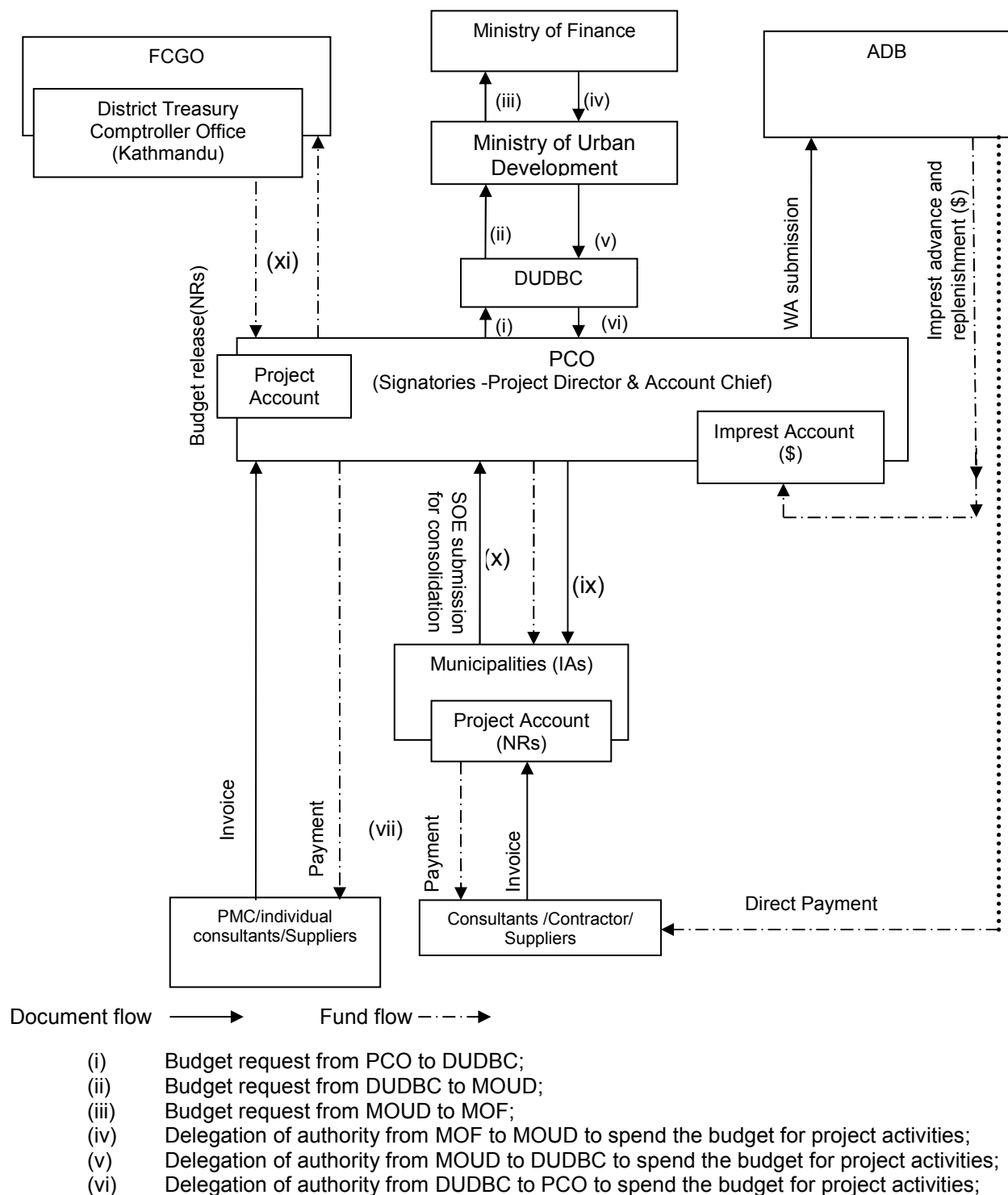
Figure 7: Contract and Disbursement S-Curve



I. Fund Flow Diagram

30. The fund flow from ADB and the government to implement project activities in non-Province 7 municipalities is shown in Figure 8.

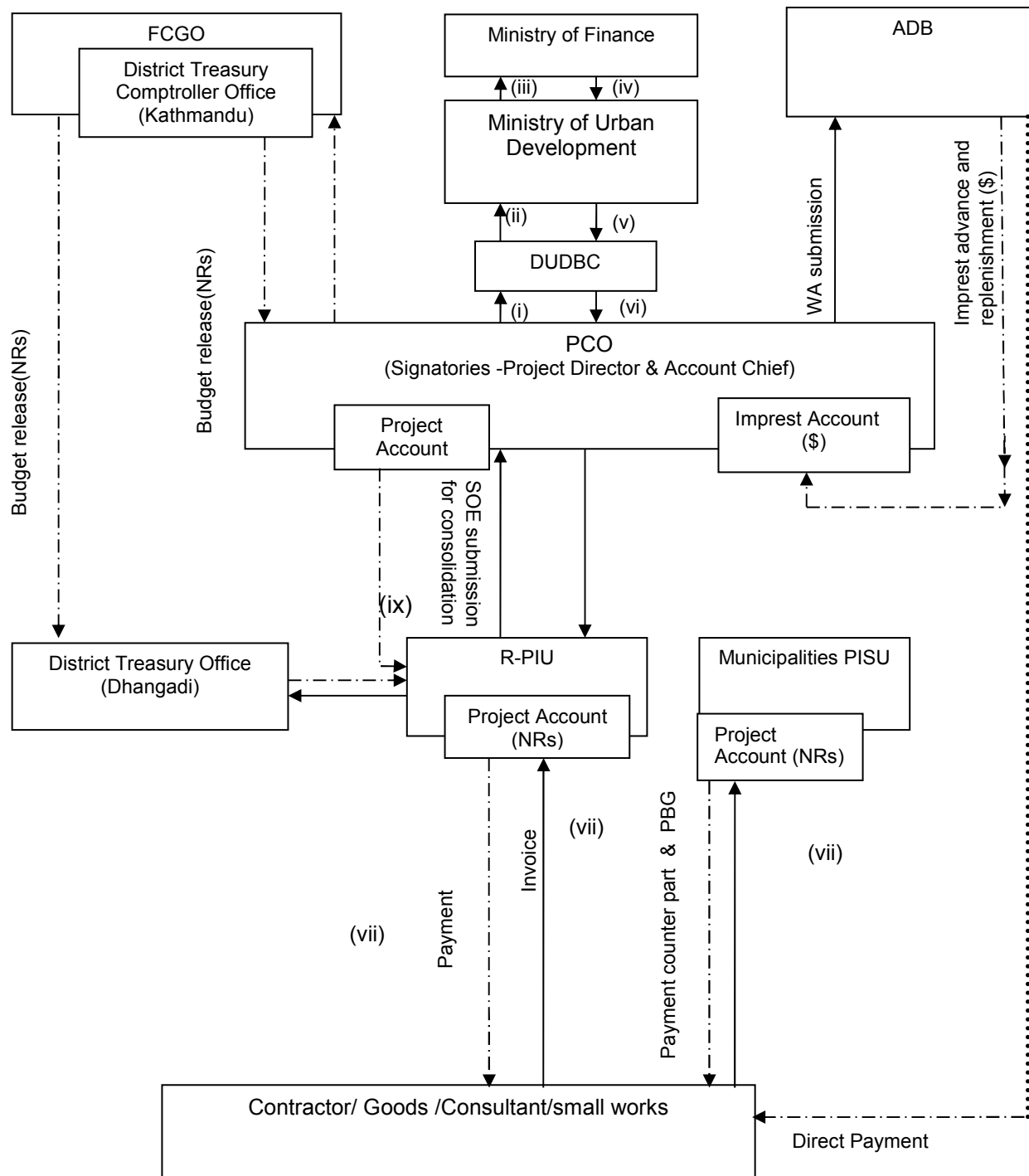
Figure 8: Fund Flow Arrangement for Non-Province 7 Municipalities



- (vii) Submission of interim payment statement by contractors, claims by DSC and invoices by suppliers to PIU;
- (viii) Payment to contractors, consultant and supplier by PIU or forward the certified invoices of contractors to PCO for direct payment either from imprest account or ADB;
- (ix) Delegation of authority for expenditure from PCO to each non-Province 7 municipality and to project manager, PIU;
- (x) Fund transfer to each non-Province 7 municipality and to project manager, PIU;
- (xi) Fund (expenditure incurred-ADB financing portion) transfer from imprest account to FCGO; and
- (xii) Submit WA to ADB for either replenishments of imprest account or reimbursement or direct payment.

ADB = Asian Development Bank, DUDBC = Department of Urban Development and Building Construction, FCGO = Financial Comptroller General Office, MOF = Ministry of Finance, MOUD = Ministry of Urban Development, PCO = project coordination office.

Figure 9: Fund Flow for Province 7 Municipalities



DUDBC = Department of Urban Development and Building Construction, FCGO = Financial Comptroller General Office, PCO = project coordination office, PISU = project implementation support unit, R-PIU = regional project implementation unit

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

31. A financial management assessment was undertaken for DUDBC, DUDBC Division Office Kailali (DOK), and 8 project municipalities. While the overall risk assessment for the project is “Substantial”, with the ongoing actions of the executing agency and implementing agencies and the proposed measures (Financial Management Action Plan, i.e. Table 13, 14 and 15), the financial management arrangements are expected to be satisfactory. The key findings and the agreed action plans are summarized below.

a. MOUD and/or DUDBC

32. DUDBC will execute the project on behalf of the MOUD. The DUDBC has satisfactory financial management systems in place. It has sufficient experience in managing externally financed projects. It has executed and completed the ADB-funded Urban Environment Improvement Project (UEIP) in 9 municipalities. Two ADB-financed urban development projects are under implementation at time of project processing: (i) Loan 2650-NEP: Secondary Towns Integrated Urban Environment Improvement Project (STIUEIP) in 3 municipalities; and (ii) Loan 2851-NEP: Integrated Urban Development Project (IUDP) in 4 municipalities. DUDBC is also implementing the World Bank-financed Urban Governance and Development Project (UDGP) in 6 municipalities. The regular financial administration functions of the project will be carried out by the financial administration unit in PCO. The project will follow the entity accounting system which is based on the standard government accounting system directed by the FCGO. District treasury control officer under FCGO is responsible for internal audit of DUDBC and/or PCO. The statutory audit of DUDBC and PCO is conducted after the end of each fiscal year by the staff appointed by the Office of the Auditor General. Audit is conducted according to Nepalese Auditing Standards which are in compliance with International Auditing Standards. There is no computerized financial management system. The audited project financial statements under L-2650 and L-2851 were received on time. However, the audit report for L-2650 was qualified and there were various control issues highlighted in the management letter under L-2851 (FY 2015/16).

b. DUDBC DOK

33. The DUDBC DOK will be one of the implementing agencies and will host the R-PIU. It is currently implementing two externally financed projects, namely: (i) Custom Improvement Program, and (ii) Integrated District Health Program. Both programs are being implemented through donor pool funds. DUDBC DOK Accounts Section will be responsible for financial management function of the R-PIU. The accounting and auditing systems for DUDBC DOK are like DUDBC. There is no computerized financial system within the agency. Thus, the account section staffing needs to be strengthened by deputing a full-time accountant. This will ensure a sound accounting and financial reporting of all transactions under the project.

c. Municipalities

34. For the purpose of project implementation, the municipalities are grouped into 2: (i) non-Province 7 municipalities, which have ongoing ADB-financed projects composed of Biratnagar and Birgunj under STIUEIP and Nepalgunj and Siddharthanagar under IUDP; and (ii) 4 Province 7 municipalities-Godawari, Bheemdatt, Dhangadhi and Shuklaphanta. In addition to the R-PIU at the DUDBC DOK for Province 7 municipalities, the 4 non-Province 7 project municipalities will

likewise be the implementing agencies for the project. The Province 7 municipalities have no experience in the implementation of ADB projects. Thus, R-PIU will be responsible for implementing project activities for these municipalities and extended office of R-PIU will be established in each municipality of Province 7 municipalities as a PISU. The project municipalities are governed by Local Self Governance Act (LSGA), Local Self Governance Regulations (LSGR) and Local Bodies Financial Administration Regulations (LBFAR). Implementing agencies follow prescribed cash-based accounting system and procedures. The duties of authorization, execution, and recording of transactions are segregated. All municipalities are using accounting software for regular revenue and expenditure accounting and financial reporting. However, safeguard measures are considered inadequate and more user-friendly software system is required. The municipality appoints an independent external auditor licensed by the Institute of Chartered Accountant of Nepal (ICAN). The statutory audits are conducted within six months after the end of each fiscal year. Audit is conducted according to Nepalese Auditing Standards which is in accordance to the International Organization for Supreme Audit Institutions (INTOSAI) and fundamental accounting principles. No major accountability issues have been reported in recent years for the implementing agencies with project implementation experience. Improvements in the application of a project financial system through the provision of a financial management manual and training on ADB financial management, disbursement, and project administration to staff are essential and planned under the project.

35. The performance-based grant will incentivize governance and institutional improvements in the Province 7 municipalities by linking grant funds with the achievement of set targets (see Appendix 1).

36. MOUD and ADB have agreed to an action plan to address the following issues that the financial management assessment identified.

Table 16: Financial Management Action Plan for Project Coordination Unit and Project Implementation Unit

Potential Risk Event	Suggested Action	Target Date for Implementation	Responsibility
Inadequate funds / poor cash management	Preparation of financial operating plan prior to formulation of budget	Annually from December 2016	project municipalities
Improve own source revenue collection and timely counterpart contribution	Implementation of the Comprehensive Financial Management Improvement Plan (CFMIP), ^a and monitoring of status, particularly for non-Province 7 municipalities	Bi-annual basis from April 2017	ADB, PCO, DOK, project municipalities
None of the four Province 7 municipalities or DUDBC DOK have experience in implementing ADB-funded projects.	Extending full training and capacity building support with the help of PMC for strengthening the financial management capacity of DUDBC DOK and Province 7	From January 2017	ADB and PCO

Potential Risk Event	Suggested Action	Target Date for Implementation	Responsibility
	municipalities		
Manual and non-uniform record keeping and reporting mechanisms lead to errors, delays, duplication, and poor reporting for decision making	Development of a computerized accounting system for use of the PCO, PIUs, and PISUs;	June 2017	PCO
	Project Financial Management Manual will be prepared	April 2017	PCO to prepare and municipalities to implement
Weak internal audit framework	Establishment of an internal audit section	November 2017	Godawari and Shuklaphanta municipalities
	Strengthening internal audit with the appointment of qualified internal auditors	Annual basis from August 2017	Biratnagar and Birgunj municipalities
	Inclusion of Project in Work Plan for all internal audit	Annual basis from August 2017	All municipalities
Strengthening accounts section	Appointing additional staff in account/ financial administration section	April 2017	Godawari and Shuklaphanta municipalities.
	CGAS Implementation by DUDBC	by FY 2017/18	DUDBC with the support of FCGO
	NEPSAS Compliant DUDBC financial statements	by FY 2017/18	DUDBC, with the support of FCGO
The continuity of the financial management process of the project is hampered due to frequent transfer of staff	Reorientation for the new staff is necessary. Job descriptions of all staff including accounts needs to be defined for PCO and all PIUs.	Once in every two year from FY 2017/18	PCO

ADB = Asian Development Bank, CFMIP = Comprehensive Financial Management Improvement Plan, CGAS = Computerized Government Accounting System, DUDBC = Department of Urban Development and Building Construction, DOK = Divisional Office Kailali, NEPSAS = Nepal Public Sector Accounting Standards, PCO = Project Coordination Office, PISU = project implementation support unit, PIU = Project Implementation Unit, PMC = Project Management Consultant

^a CFMIP includes tailored and specific municipality targets for improving performance in several areas related to financial management, including (but not limited to): own-source revenue collection efficiency and coverage; accounting system; internal audit; valuation of municipal assets; and automation. It also identifies the required capacity development support.

Table 17: Financial Management Action Plan–Non-Province 7 Municipalities

Issue	Current Scenario	Risks	Mitigation Measure Suggested	Target Date
Accounting policy and procedures	All receipts and expenditure of the project is not integrated in	Incomplete accounting and financial reporting reports of the	The municipalities to follow project management manual of the project.	April 2017

Issue	Current Scenario	Risks	Mitigation Measure Suggested	Target Date
	municipal financial reports (Biratnagar and Birgunj).	municipality.		
Funds flow	Evidence of delay in payment to contractors from municipal matching contribution.	Default to make payment to contractors as agreed may cause extra financial burden.	Approve and implement CFMIP. Prepare mid-term business plan of the municipality and prepare annual budget based on business plan.	Annual basis from April 2017
Internal Audit	Lack of staff and knowledge in internal audit section and internal audit of project account.	Delay in external audit process.	Appoint qualified internal auditor and include project account in the internal auditors work program.	Annual basis from Aug 2017

CFMIP = Comprehensive Financial Management Improvement Plan

Table 18: Financial Management Action Plan–Province 7 Municipalities

Issue	Current Scenario	Risks	Mitigation Measure Suggested	Target Date
Implementing agency	The municipalities are not experienced in managing ADB funded projects.	Chances of errors and delay in accounting Statement of Expenditures and financial reporting.	(i) The municipalities to follow project management manuals, and (ii) Establish support mechanism at PIU and provide trainings.	May 2017 and every two-years
Staffing	Lack of adequate accounts staff in Godawari and Shuklaphanta municipality.	Delay in regular financial management activities.	Appoint one additional accounts staff at accounts section.	April 2017
Cash management	Chances of commitment of over expenditure than actual revenue.	Default to make payment to contractors as agreed may cause extra financial burden.	Prepare mid-term FOP of the municipality and prepare annual budget based on the FOP.	Annual basis from July 2017
Internal Audit	Absence of internal audit section and staff in Godawari and Shuklaphanta municipalities.	Delay in external audit process.	Establish internal audit section and appoint qualified internal auditor.	Aug 2017

B. Disbursement

1. Disbursement Arrangements for ADB

37. The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time), and detailed arrangements agreed upon between the government and ADB. Online training for project staff on disbursement policies and

procedures is available.¹⁷ Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

38. Pursuant to ADB's Safeguard Policy Statement (SPS), 2009,¹⁸ ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth in Appendix 5 of the SPS. All financial institutions will ensure that their investments are following applicable national laws and regulations and will apply the prohibited investment activities list to subprojects financed by ADB.

39. PCO will be responsible for (i) preparing disbursement projections; (ii) requesting budgetary allocations for counterpart funds; (iii) collecting supporting documents; and (iv) preparing and sending withdrawal applications to ADB.

40. **Advance fund procedure.** Separate advance account should be established and maintained by PCO for each funding source. The currency of the advance account(s) is the US dollar. The advance account is to be used exclusively for ADB's share of eligible expenditures. The PCO who established the advance account in its name is accountable and responsible for proper use of advances to the advance account.

41. 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 PCO may request for initial and additional advances to the advance account based on an Estimate of Expenditure Sheet¹⁹ 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 borrower in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing the advance account.

42. **Statement of expenditure procedure.**²⁰ The SOE procedure may be used for reimbursement of eligible expenditures or liquidation of advances to the advance account. 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 missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.

43. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the PCO 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 \$100,000 equivalent. Individual payments below this amount should be paid (i) by and subsequently claimed to ADB through reimbursement, or (ii) through the advance fund procedure, unless otherwise accepted by ADB.

44. **Direct Payment Procedure.** Some payments to the contractors and consultants will be made directly by ADB, for which PCO will be required to submit approved invoices and other documents to ADB in accordance with ADB's *Loan Disbursement Handbook* (2017, as

¹⁷ Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning

¹⁸ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>.

¹⁹ ADB. 2015. *Loan Disbursement Handbook*. 10B.

²⁰ SOE forms are available in Appendix 9B and 9C of ADB's *Loan Disbursement Handbook* (2015, as amended from time to time).

amended from time to time). Such direct payment procedure will be used whenever practical for quick, efficient, and economic disbursement.

2. Disbursement Arrangements for Counterpart Fund

45. PCO should submit to ADB, annual contract awards and disbursement projections at least a month before the start of each calendar year using the templates in ADB's Loan Disbursement Handbook. PCO is responsible for (i) requesting budgetary allocations for counter funds, (ii) collecting supporting documents, and (iii) preparing and sending withdrawal applications to ADB. Disbursements procedure under imprest account and SOE method in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

46. The PCO, R-PIU, PIUs and PISUs will maintain a project account. All project municipalities will open a bank account (current account) for the project in a commercial bank. The DUDBC in consultation with PCO will prepare the annual budget based on the policy of medium-term expenditure framework. The government will generally pre-finance the ADB share of funds. The District Treasury Office of Kathmandu releases one third of the project budget (ADB share of funds and government Counterpart funds) to PCO's project account in the beginning of each fiscal year after approval of the government budget. Based on the approved annual program, PCO authorizes R-PIU for expenditures and transfers funds to Province 7 and non-Province 7 municipalities. Municipalities will then immediately transfer the allocated budget to the project account operated by PIUs of non-Province 7 municipalities and PISUs of Province 7 municipalities. Municipality will make arrangements for municipal counterpart fund. With regard to Province 7 municipalities, the District Treasury Office of Kailali release one-third of the project budget (ADB share of funds and government counterpart funds) to R-PIU's project account in the beginning of each fiscal year after approval of the government budget.

47. R-PIU consolidates a statement of expenditures from each Province 7 project municipality on their expenses with regard to the performance-based grant, payment of counterpart fund of works contracts, and recurrent expenses. A monthly consolidated statement of all expenditures made by R-PIU and Province 7 project municipalities of the project will be submitted by R-PIU to PCO.

C. Accounting

48. The PCO, R-PIU, PIUs, and PISUs will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. The PCO will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices. Project financial statements shall include at a minimum, a statement of receipts and payments with accompanying notes and schedules. These shall be prepared to ensure maximum alignment to international accounting standards and Government of Nepal's Financial Regulations.

D. Auditing and Public Disclosure

49. The PCO will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit

regulations, by an independent auditor acceptable to ADB.²¹ The audited project financial statements will be submitted in the English language to ADB within six months of the end of the fiscal year by the MOUD. Audited project financial statements will be prepared from the date when expenditures that were approved for retroactive financing were incurred.

50. The DUDBC will also cause the entity-level financial statements of each of the 8 municipalities to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited entity-level financial statements, together with the auditors' report and management letter, will be submitted in the English language to ADB within one month after their approval by the competent authority.²²

51. The audit report for the project financial statements will include audit opinions 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 loan proceeds were used only for the purposes of the project or not; and (iii) the level of compliance for each financial covenant contained in the legal agreements for the project. A management letter shall also be provided, unless already provided with the entity-level financial statements.

52. 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.

53. The government and project municipalities have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.²³ 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.

54. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Public Communications Policy 2011.²⁴ After the review, ADB will disclose the audited project financial statements and

²¹ The Statement of Audit Needs Template agreed with the Office of the Auditor General Nepal in 2015 should be used.

²² A detailed statement of audit needs has been agreed with Government of Nepal and Office of Auditor General in August 2015. This may be referred to for further details.

²³ ADB approach on delayed submission of audited project financial statements:

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

²⁴ Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

the opinion of the auditors on the financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity level financial statements will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

55. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines²⁵ (2015, as amended from time to time) and ADB's Guidelines on the Use of Consultants²⁶ (2013, 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 government, MOUD, DUDBC, PCO and project municipalities have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

56. **Advance contracting.** The government has requested ADB's approval of advance contracting for the procurement of civil works for (i) drainage and road improvement of Nepalgunj, Siddharthnagar and Birgunj; (ii) sewerage, drainage and road improvement work of Biratnagar; and the recruitment of (iii) design and supervision consultant for Province 7 project municipalities and design and supervision consultant for Biratnagar; (iv) construction supervision consultants (3) for Birgunj, Nepalgunj, Siddharthnagar respectively; (v) project management support consultant at PCO; (vi) institutional development consultant for Province 7 project municipalities; and (vii) individual consultants.

57. **Retroactive financing.** Maximum amount of eligible expenditures up to 20% of the total ADB loan, incurred for works, goods, and services before loan effectiveness, but not more than 12 months before the loan signing date.

B. Procurement of Goods, Works and Consulting Services

58. All procurement of goods and works will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).

59. International competitive bidding (ICB) procedures will be used for any civil works contract estimated to cost \$5 million or more, and any goods contract estimated to cost \$2 million or more. National competitive bidding (NCB) procedures will be used for any civil works contract estimated to cost below \$5 million and any goods contract estimated to cost below \$2 million. Shopping will be used for any civil works or goods contract estimated to cost below \$100,000. Before the start of any procurement, ADB and the government will review the public procurement laws of the government to ensure consistency with ADB's Procurement Guidelines (2015, as amended from time to time).

60. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

61. All consultants will be recruited per ADB's Guidelines on the Use of Consultants (2013,

²⁵ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>.

²⁶ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>.

as amended from time to time).²⁷ The terms of reference for all consulting services are summarized in Section D.

62. An estimated 2,290 person-months (through firms 2,263 person-month and individual 27 person-months) are required to (i) facilitated project management and coordination, (ii) design and supervisions, and (iii) strengthen the institutional and operational capacity of implementing agencies. Consulting firms will be engaged the quality-and cost-based selection (QCBS) method with a quality-cost ratio of 90:10.

C. Procurement Plan

63. The procurement plan below is prepared in accordance with the generic templates prepared by the Operations Services and Financial Management Department.²⁸

Procurement Plan

Basic Data

Project Name: Regional Urban Development Project	
Project Number:	Approval Number:
Country: NEPAL	Executing Agency: Ministry of Urban Development
Project Procurement Classification: B	Implementing Agency: (i) Department of Urban Development and Building Construction; and (ii) Municipalities (Biratnagar, Birgunj, Nepalgunj, Siddharthanagar)
Procurement Risk: Substantial/Moderate	
Project Financing Amount: \$214 million ADB Financing: \$150 million Cofinancing (ADB Administered): NA Non-ADB Financing: \$64 million	Project Closing Date: 20 June 2023
Date of First Procurement Plan {loan approval date}:	Date of this Procurement Plan: 7 July 2017

A. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

64. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding (ICB) for Works	\$5,000,000	Prior review
International Competitive Bidding for Goods	\$2,000,000	
National Competitive Bidding (NCB) for Works	Beneath that stated for ICB, Works	
National Competitive Bidding for Goods	Beneath that stated for ICB, Goods	
Shopping for Works	Below \$100,000	First package – prior
Shopping for Goods	Below \$100,000	First package –

²⁷ 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/>.

²⁸ Procurement plan template: http://wpqr2.asiandevbank.org/LotusQuickr/cosopedia/PageLibrary48257599000668D1.nsf/h_Toc/5EA6EACF755AA652482575D9002FCB8F?OpenDocument.

Procurement of Goods and Works		
		prior
Community Procurement	\$30,000	First package – prior
Consulting Services		
Method	Comments	
Quality and Cost Based Selection (QCBS)	Quality-Cost ratio 90:10	
Individual Consultants Selection	for Individual Consultant	

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

65. The following table lists goods and works contracts for which the procurement activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$million)*	Procurement Method	Review [Prior/Post/Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
RUDP/ ICB/ BRJ/ 1	Birgunj drainage, road, footpath, road furniture, bypass road, bus bays	18.07	ICB	Prior	1S2E	Q2/2017	Domestic preference applicable, Works Large
RUDP/ ICB/ BRT/ 2	Biratnagar sewerage, drainage, road, footpath and road furniture	21.55	ICB	Prior	1S2E	Q1/2017	Domestic preference applicable, Works Large
RUDP/ ICB/ NEG/ 3	Nepalgunj drainage, road, footpath, and road furniture	13.51	ICB	Prior	1S2E	Q1/2017	Domestic preference applicable, Works Large
RUDP/ ICB/ SN/ 4	Siddarthanagar drainage, roads, footpath, and road furniture	17.88	ICB	Prior	1S2E	Q1/2017	Domestic preference applicable, Works Large
RUDP/ ICB/ KC/ 5	Kanchanpur (Bheemdatt and Shuklaphanta) drainage, roads, footpath, and WWM	21.03	ICB	Prior	1S2E	Q4/2018	Domestic preference applicable, Works Large
RUDP/ ICB/ KL/ 6	Kailali (Dhangadhi and Godawari) drainage, roads, footpath &	23.96	ICB	Prior	1S2E	Q1/2019	Domestic preference applicable, Works Large

Package Number	General Description	Estimated Value (\$million)*	Procurement Method	Review [Prior/ Post/Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/ year)	Comments
	WWM						
RUDP/ ICB/ BD/ 7	Bheemdatt and Shuklaphanta ISWM	6.57	ICB	Prior	1S2E	Q4/2018	Domestic preference applicable, Works Small
RUDP/8	Dhangadhi and Shuklaphanta ISWM	8.76	ICB	Prior	1S2E	Q4/2018	Domestic preference applicable, Works Small
RUDP/NC B/AJ/B	Godawari and Shuklaphanta Municipal Building	1.59	NCB	Prior	1S2E	Q3/2017	

*The value does not include tax and contingencies.

ICB = International Competitive Bidding, NCB = National Competitive Bidding, RUDP = Regional Urban Development Project

3. Consulting Services Contracts Estimated to Cost \$100,000 or More

66. The following table lists consulting services contracts for which the recruitment activity is either ongoing or expected to commence within the next 18 months.

Package Number	General Description	Estimated Value (\$million)*	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/ year)	Type of Proposal	Comments
RUDP/DSC/1	Design and Supervision Consultant for Province 7 project municipalities	2.21	QCBS	Prior	Q3/2016	Full	Quality-Cost ratio 90:10
RUDP/ \PMC/1	Project Management Consultant	1.24	QCBS	Prior	Q3/2016	Full	Quality-Cost ratio 90:10
RUDP/IDC/1	Institutional Development Consultant for Province 7 project municipalities	1.62	QCBS	Prior	Q4/2016	Full	Quality-Cost ratio 90:10
RUDP/CSC/BRJ/1	Construction & supervision consultant for Birgunj municipal drainage, roads & footpath	0.42	QCBS	Prior	Q4/2016	Biodata	Quality-Cost ratio 90:10

Package Number	General Description	Estimated Value (\$million)*	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/ year)	Type of Proposal	Comments
	improvement works						
RUDP-DSC/BRT/2	Design & construction supervision consultant for Biratnagar sewerage, roads, drainage works & ISWM design	0.66	QCBS	Prior	Q4/2016	STP	Quality-Cost Ratio 90:10
RUDP/CSC/NEG/2	Construction supervision consultant for Nepalgunj drainage, roads, and footpath improvement works	0.40	QCBS	Prior	Q4/2016	Biodata	Quality-Cost ratio 90:10
RUDP/CSC/SN/3	Construction supervision consultant for Siddathanagar drainage, roads, and footpath improvement works	0.39	QCBS	Prior	Q4/2016	Biodata	Quality-Cost ratio 90:10
RUDP/DUDBC/PDC/1	Project bank design consultant– Feasibility study	1.50	QCBS	Prior	Q3/2017	Full	Quality-Cost ratio 90:10
RUDP/DUDBC/PDC/2	Project bank design consultant– Detail design	3.81	QCBS	Prior	Q1/2018	Full	Quality-Cost ratio 90:10

*The value does not include tax and contingencies.

CSC = construction supervision consultant, DSC = design and supervision consultant, DUDBC = Department of Urban Development and Building Construction, IDC = institutional development consultant, PDC = project development consultant, PMC = project management consultant, RUDP = Regional Urban Development Project.

4. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

67. The following table groups smaller-value goods, works and consulting services contracts for which the activity is either ongoing or expected to commence within the next 18 months.

Goods and Works								
Package Number	General Description	Estimated Value (\$million)	Number of Contracts	Procurement Method	Review [Prior/ Post/ Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/ year)	Comments
RUDP/ PCO/ G 1	Vehicles (PCO, R-PIU, PISUs, PIUs)	0.58	1	ICB	Prior	1S1E	Q2/17	
RUDP/ PCO/ G 2	Motorcycles (PCO, R-PIU, PISUs, PIUs)	0.05	1	Shopping	Post		Q2/17	First package-prior
RUDP/ PCO/ G 3	Office furniture-PCO	0.04	1	Shopping	Post		Q2/17	
RUDP/ PCO/ G 4	Office equipment-PCO	0.09	2	Shopping	Post		Q2/17	
RUDP/ R-PIU/ G1	Office equipment (R-PIU, PISUs)	0.12	5	Shopping	Post		Q2/17	
RUDP/ Province 7/ CP/ 1-20	Community Participation - Small works	1.5	40	Community procurement	Post		Q3/18	First package-prior

*The value does not include tax and contingencies.

PCO = project coordination office, PISU = project implementation support unit, PIU = project implementation unit, R-PIU = regional project implementation unit, RUDP = Regional Urban Development Project.

Consulting Services								
Package Number	General Description	Estimated Value (\$)*	Number of Contracts	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/ year)	Type of Proposal	Comments
RUDP/ PCO/ ICS 1	National Procurement Specialist	20,000	2	ICS	Prior	Q1/2017	Resume	Support for advance procurement
RUDP/ PCO/ ICS 2	National Safeguard Specialist	20,000	1	ICS	Prior	Q1/2017	Resume	Support for advance compliance with ADB's

D. Non-ADB Financing

70. The following table lists goods, works and consulting services contracts over the life of the project, financed by non-ADB sources.

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments

Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments

E. National Competitive Bidding

71. National competitive bidding (NCB) shall be in accordance with that described as "by inviting bids and a national level" as set forth in "The Public Procurement Act, 2007" (PPA) and "The Public Procurement Regulations, 2007" (PPR) and subject to the following:

72. The first NCB document for both goods and works procurement shall be reviewed and approved by Asian Development Bank (ADB) prior to issue. These will be used for all NCB procurement under the project. The document shall include qualification and evaluation criteria and ADB's right to audit and inspect in accordance with para 1.14 of ADB's Procurement Guidelines (March 2013, as amended from time to time). No other criteria other than that described in the bidding document may be used to determine the lowest evaluated responsive bidder and no form of domestic preference may be employed. A positive assessment of a bidder's qualifications to perform a contract will be a pre-requisite to an award.

73. All qualified ADB member bidders and ADB member produced goods, services and works shall be eligible. Registration and licensing shall be permitted only as a condition of contract award and not participation in bidding. No award may be withdrawn for failure to obtain tax registration; license or fulfill any similar requirement without ADB's prior concurrence. No bidder will be held ineligible based on provision 63 of the PPA without ADB prior concurrence.

74. Invitations to bid shall be advertised in at least one widely circulated national daily newspaper or freely accessible, nationally-known website allowing a minimum of twenty-eight (28) days for the preparation and submission of bids. Invitations for bids for contracts estimated at \$500,000 or more for goods and \$1,000,000 or more for civil works shall be advertised on ADB's website. No restriction will be placed on the sale of bidding documents.

75. The approved Standing List of a Procuring Entity prepared in accordance with the law shall only be accepted to supplement an advertised open pre-qualification exercise for the specific contract provided that those on the standing list meet the qualification criteria.

76. Bids shall be opened at a single location immediately after the deadline for submission. Multiple locations for submission and opening are not acceptable.

77. Government-owned enterprises in Nepal shall be eligible to participate only if they meet the conditions of para 1.8 (c) of ADB's Procurement Guidelines (March 2013, as amended from time to time).

78. Extension of bid validity of more than 4 weeks beyond the original validity shall not be allowed without the prior concurrence of ADB.

79. Cancellation of bidding and re-bidding shall not be carried out without the prior concurrence of ADB.

80. Percentage variations from rates fixed by a district rate fixation committee shall not be used for the purpose of evaluating bids.

D. Consultant's Terms of Reference

81. Five types of consultant services are planned to be recruited under the project, which are as follows:

- (i) The project management consultant (PMC) will be engaged to support the project coordination office (PCO) to undertake monitoring and evaluation, reporting, overall planning, risk management, institutional development support, and coordination, to ensure that project implementation is in compliance with financing agreement to be signed between Government of Nepal and ADB. The PMC will also assist the PCO in meeting the relevant requirements of the government and ADB for project implementation. The PMC will also provide institutional development assistance and guidance to the non-Province 7 municipalities;
- (ii) The design and supervision consultant for Province 7 project municipalities will be engaged to design and supervise all subprojects to be implemented in the municipalities;
- (iii) Design of solid waste management (SWM) subproject and overall construction supervision consultant will be engaged by Biratnagar PIU to undertake detailed engineering design of SWM subproject, environmental and social due diligence, document for procurement activities, and preparation of a 20-year SWM management plan and to supervise works contract for the improvement of road and drainage system;
- (iv) The construction supervision consultant will be engaged for each non-Province 7 municipality (Nepalgunj, Birgunj, and Siddharthnagar) to supervise works contract for the improvement of road and drainage system; and
- (v) Institutional development support consultant (IDC) for Province 7 project municipalities will be engaged to strengthen the capacity of the Province 7 project municipalities (Bheemdatt, Godawari, Dhangadhi, and Shuklaphanta) for improved municipal asset management, strengthen municipal revenue mobilization and financial management capacity and improve urban planning. The IDC in association with the municipalities will be responsible for the gender equality and social inclusion mainstreaming, and implementing performance based socioeconomic development program (PBSDP) including public awareness campaigns associated with the Project.

82. Final and draft outline terms of reference for consulting services are available in Appendix 5 to Appendix 11.²⁹

VII. SAFEGUARDS

83. R-PIU, PIUs and PISUs will be responsible to implement the actions identified in the relevant safeguard plans. These plans include: (i) the environmental management plan (EMP) and/or environmental assessment and review framework (EARF); and (ii) the resettlement plans and/or combined resettlement and indigenous people planning framework. Refer to the respective safeguard action plans for the detailed implementation guidance.³⁰ See Section IX.B for safeguards monitoring.

84. An EARF and 4 initial environmental examinations (IEEs) with EMPs have been prepared in accordance with ADB's Safeguard Policy Statement (2009) and government laws. The documents were disclosed on ADB's website and relevant information disclosed to project communities. The R-PIU and PIUs with assistance from the design and supervision consultant (DSC)³¹ is to do the following: (i) screen all subprojects for environmental impacts and categorization; (ii) prepare IEEs for any subprojects defined after Board approval; (iii) confirm the IEE and/or EMP is updated based on detailed designs; (iv) confirm whether EMPs are included in bidding documents and civil works contracts; (v) provide oversight on environmental management aspects of the project and ensure EMPs are implemented by R-PIU, PISUs, DSCs, CSCs, and contractors; (vi) facilitate and confirm overall compliance with all government rules and regulations regarding forest and road permits as well as any other approvals as relevant; (vii) supervise and provide guidance to the contractors to properly carry out the environmental assessments; (viii) review, monitor and evaluate the effectiveness with which the EMPs are implemented, and recommend necessary corrective actions to be taken as necessary; (ix) consolidate quarterly environmental monitoring reports from DSC and submit quarterly/semi-annual monitoring report to ADB; (x) ensure timely disclosure of final IEEs and/or EMPs in locations and forms accessible to the public; and (xi) take corrective actions when necessary to ensure no environmental impacts. Environmental safeguards documents are available as linked documents to the Report and Recommendation of the President. Consultation and public participation will continue throughout project implementation, and any environmental grievances will be handled in accordance with the grievance redress mechanism established for the project.

85. The PISU with assistance from institutional development consultant (IDC) is to screen all small infrastructure (under the performance-based grant) for environmental impacts.

86. **Social safeguards.** A combined resettlement and indigenous peoples planning framework (CRIPPF)³² and three due diligence reports (DDRs)³³ have been prepared in accordance with ADB Safeguard Policy Statement 2009 to mitigate negative impacts. The entitlement matrix includes measures to ensure compensation at replacement cost,

²⁹ Final terms of reference, where available, are included in the appendices.

³⁰ See linked documents to the Report and Recommendation of the President for safeguards reports.

³¹ For non-Province 7 municipalities, detailed designs and safeguards documents have been prepared by consultants financed under ongoing ADB supported projects. For Province 7 project municipalities, DSC will be recruited through RUDP for detailed design and finalization of safeguard documents.

³² CRIPPF prepared since detailed designs are not yet complete for all packages.

³³ CRIPP for landfill site in Dhangadhi sub-metropolitan city; DDRs for subprojects in Biratnagar and Siddharthangar sub-metropolitan cities; and Godawari, Bheemdatt, and Shuklaphanta municipalities.

rehabilitation assistance and special measures for vulnerable households, and criteria for accepting voluntary demolition of minor structures. Any subproject that will cause significant impacts on involuntary resettlement and indigenous peoples will be excluded from project financing. Prepared social safeguards projects documents are available as linked documents to the RRP. The PCO, R-PIU, Province 7 and non-Province 7 municipalities are to ensure that affected persons are compensated prior to displacement. The cost related to resettlement and social mitigation cost will be borne by the government and municipalities.

87. Indigenous peoples live in the project area. No confirmed negative impacts have been identified except for land acquisition of a few indigenous peoples households. Indigenous peoples living within the project area are likely to experience positive impacts due to improved roads, SWM and drainage system. The PBSDP will include an indigenous peoples focused awareness program. The CRIPPF will guide preparation of indigenous peoples plans during detailed design phase, if required. Indigenous peoples participation will be ensured during subproject design and implementation. The following are institutional roles and responsibilities to ensure resettlement plans and indigenous peoples plans are implemented during design and construction stages.

88. The R-PIUs and PIUs are to (i) screen any projects for resettlement impacts; (ii) prepare resettlement plans as necessary; (iii) ensure all resettlement plans are updated prior to contract award and based on detailed designs, if required; (iv) engage in ongoing meaningful consultations with stakeholders and affected persons; (v) implement resettlement plans with support from project consultant; (vi) provide timely payments to affected persons before displacement; (vii) ensure all grievances are addressed through the grievance redress mechanism; (viii) take corrective actions where necessary; (ix) submit semi-annual reports on the status of resettlement plan implementation and the status of affected persons throughout the project period; and (x) conduct internal monitoring of the resettlement process to ensure smooth implementation.

89. The PCO, R-PIU and PIUs will ensure that civil works contracts and bidding documents under the project include specific provisions requiring contractors to comply with all applicable labor laws and core labor standards on (i) prohibition of child labor as defined in national legislation for construction and maintenance activities; (ii) equal pay for equal work of equal value regardless of gender, ethnicity or caste; (iii) elimination of forced labor; and (iv) the requirement to disseminate information on sexually transmitted diseases including HIV/AIDS to employees and local communities surrounding the project sites.

90. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement (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 Safeguard Policy Statement (2009).

91. **Grievance redress mechanism.** The project will form its own mechanism to hear grievances and concern raised from affected persons and project beneficiaries in addition to grievance redress mechanism (GRM) provisions specified in land acquisition act 1977. The project will establish two tiers of grievance redress mechanism (GRM) at the local (project municipality) & central (PCO) level respectively.

92. **Municipality Level Grievance Redress Committee (GRC).** The GRC comprising five members headed by mayor/ executive officer will be formed in each project municipality. Members of the GRC will include PIU chief, representatives of affected persons with one male and one female (a representative of Indigenous people, in case of indigenous people related

issues), social safeguard focal person. The social safeguard focal person representing PSIU in each municipality will be the member secretary of the GRC. The GRC will meet as needed to determine the merit of each grievance, and resolve it within 7 days of receiving the complaint. The committee thus appointed should be sanctioned by the municipal board. The responsibilities of the GRC at municipality will be:

- (i) to conduct subproject level public awareness campaign regarding grievance redress mechanism of the project. The social safeguards expert of the DSC will support the GRC by preparing and providing information/awareness material etc. to conduct the awareness campaign. The campaign will ensure participation of poor and vulnerable groups in the awareness campaign. The campaigns also cover information on entitlements policy provisions and their application; and
- (ii) to hear complaints and grievances at local level. The local people can approach the committee with their grievances related to the project which will be registered, categorized and discussed in the committee with the aim of amicable settlement. It is expected that the committee will provide an accessible forum for receiving and facilitating resolution grievances related to the project and grievances will be redressed within one week from the date of lodging the complaints. The social safeguard focal person representing PSIU in each municipality assisted by the DSC social expert will be responsible for processing and placing all papers before the GRC, recording decisions, issuing minutes of the meetings and taking follow up action to see that formal orders are issued and the decisions carried out. Any unresolved or major issues at municipality level will be referred to the PCO level GRC for resolution.

93. **The Project Coordination Office Level Grievance Redress Committee:** A GRC will be formed at PCO under the chair of project director comprising of deputy project director and chief of social development unit of MOUD as members. The social development expert of PMC under PCO shall act as member secretary of the GRC and responsible for processing and placing all papers before the GRC, recording decisions, issuing minutes of the meetings and taking follow up action to see that formal orders are issued and the decisions carried out.

94. The unresolved or major issues forwarded by the municipality level GRC will be reviewed at PCO level GRC for final solution. Decision has to be made within 15 days of receipt of complaint at this level. The PCO level GRC shall refer the complaints registered at the PCO to the concerned municipality level GRC for initial hearing within 7 days of registration.

95. 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.

96. As per Clause 11 of the Land Acquisition Act, 2034 (1977), any grievances will be referred to the CDO. Clause 7 of the act assigns the CDO as the sole responsibility to chair land acquisition and compensation determination activities and to address the grievances related to the amount of compensation. The project will follow the basic process of grievances redressal as prescribe in clause 11 (right of landowner to file complain) of the Act:

- (i) The concerned landowner may file a complaint with the Ministry of Home Affairs, the Government of Nepal through local officer³⁴ within a time-limit of seven days

³⁴ "Local Officer" means an officer designated by Government of Nepal and where no such officer is designated, the chief district officer.

- from the date of the publication of a notice under Section 9, plus the time required for the journey;
- (ii) Before taking a decision on the complaint filed, the Ministry of Home Affairs, the Government of Nepal shall consult the officer responsible for preliminary Action, and, if necessary, the local officer as well;
 - (iii) For the purpose of taking decision in respect to the complaint filed, the Ministry of Home Affairs, the Government of Nepal hearing complains under this Section shall exercise the powers vested in a district court in respect to conducting local investigations (*sarjameen*), summoning witnesses, recording statements or procuring document; and
 - (iv) Decision on complaints to be made shall be pronounced ordinarily within fifteen days from the date of receipt of such complaint.

97. If the established GRM is not able to resolve the issue, the affected person also can use the ADB Accountability Mechanism 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 DMCs. The ADB Accountability Mechanism information will be included in the Project Information Disclosure leaflet to be distributed to the affected communities, as part of the project GRM.

VIII. GENDER AND SOCIAL DIMENSIONS

98. The GESI Action Plan has been prepared for the project to address gender inequality and social exclusion issues in project municipalities. The PCO, R-PIU, PISUs and PIUs are to ensure implementation of the GESI Action Plan and Community Awareness and Participation Plan in Appendix 12, and will be supported by consultants to implement these plans.

Table 19: Gender Equality and Social Inclusion Action Plan

Activities	Indicators and Targets	Responsibility	Time
Outcome: Quality, sustainability, and disaster resilience of urban services, and competitiveness in eight municipalities of the Terai region improved			
Reduced “time poverty” of women in project areas	Qualitative and quantitative analysis conducted using gender tools on reduction in time poverty of women due to improved infrastructure (assessed by project baseline and end line surveys).	PCO supported by PMC	Project Completion
Output 1: Urban infrastructure in eight municipalities constructed or rehabilitated with climate-resilient and sustainable designs			
1.1 Conduct detailed baseline socioeconomic survey of project sites using indicators to identify poverty clusters and vulnerable group households (HHs) and affected populations due to project construction (Province 7 municipalities) ^a	1. Baseline report to include data on (a) time of women and men to access urban services, with disaggregated data; ^b (b) access to municipal services, sanitation status, and solid waste management; and (c) representation in TLOs, WCFs, and community-based organizations with active targeting.	PISU, DSC, IDC, Municipality	Year 1
1.2 Include women, poor, and socially excluded in consultations to build awareness on project objectives, activities, benefits, and grievance redress mechanism	2. Out of all TLOs in project areas, representatives from 30% of the TLOs participate in project-specific consultations (Target: 25% women and 25% representatives from socially excluded HHs). ^c	PISU, DSC, IDC, Municipality	Years 1–3
1.3 a. Construction of infrastructure is based on the consultation and identification of priority needs of the women, poor, and socially excluded groups b. The performance-based grant for socioeconomic development (PBGSED) may also include small infrastructure such as market sheds, improved drinking water, lane and drainage improvement and skills development	3. 148,942 of the poor population [Target: 50% women] of the municipality areas benefit from improved urban infrastructure. ^d 4. Infrastructure designs incorporate women, disabled, elderly, child-friendly designs for safety and security. 5. Criteria for grant support includes preference for poor, excluded groups and women’s participation (Province 7 municipalities). 6. Users’ committees formed to manage small infrastructure contracts with 33% women, and 40% from vulnerable groups. At least 50% women representation in decision-making positions. (Province 7 municipalities)	PISU, Municipality, DSC, CSC, IDC	Years 1–4
1.4 Train users’ committees on small infrastructure identification, design, contract management, O&M, including for women, poor, and socially excluded groups (Province 7 municipalities)	7. All user committee members (Target: 33% women, including from households headed by women), receive operations and maintenance training for small civil works.	PMC, PISU, Municipality, IDC	Year 2

Activities	Indicators and Targets	Responsibility	Time
1.5 PBGSED implemented with a focus on initiatives to benefit women, poor, and socially excluded groups (Province 7 municipalities).	8. Identification of PBGSED-financed small infrastructure based on consultation with and priorities identified by women, poor, women headed households and socially excluded groups. 9. At least 30% of PBSEDP is spent on socioeconomic infrastructure and GESI activities.	PISU, Municipality, IDC	Years 2–4
Output 2: Municipal capacity strengthened			
2.1 Institutional strengthening of municipalities on GESI	10. Community development and/or social development unit established in Godawari and Shuklaphanta led by social development expert with adequate technical capacity, terms of reference, and budget.	PMC, PISU, DSC, CSC, IDC Municipality, GESI joint steering committee ^e	Year 1
2.2 Capacity development of municipalities on GESI	11. Knowledge and skills of 40 municipality staff (33% women) enhanced with 10 staff (3 women) of each municipality receiving training of trainers in GESI approaches (Province 7 municipalities) ^f 12. Participatory annual GESI audits ^g conducted in all project municipalities [8 municipalities (3 years)]		Years 1–3
2.3 Promote GESI-responsive project management	13. GESI action plan adopted and annual action plan for GESI prepared and implemented and monitored and reported in quarterly progress reports	PCO, PISU, Municipality, DSC, CSC, IDC	Years 1–4

CSC = construction supervision consultant, DSC = design and supervision consultant, DUDBC = Department of Urban Development and Building Construction, GESI = gender equality and social inclusion, IDC = institutional development consultant, MOFALD = Ministry of Federal Affairs and Local Development, MOUD = Ministry of Urban Development, O&M = operation and maintenance, PBGSED = performance-based grant for socioeconomic development, PBSEDP = performance-based socioeconomic development program, PCO = project coordination office, PIU = project implementation unit, PISU = project implementation support unit, PMC = project management consultant, PPTA = project preparatory technical assistance, TLO = tole lane organization, WCF = Ward Citizen Forum

^a Province 7 municipalities are Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta; and non-Province 7 municipalities are Biratnagar, Birgunj, Nepalgunj, and Siddharthanagar.

^b Data shall be disaggregated by sex, caste, ethnicity, and vulnerability.

^c Includes vulnerable groups such as HHs headed by women, HHs with physically disabled family member, HHs having senior citizen without an able-bodied family member, and HHs severely affected by disaster.

^d The poor population data estimated from the PPTA report using the Small Area Estimation Survey of CBS (2013) and disadvantaged groups mapping carried out by MOFALD (2016). Central Bureau of Statistics. 2013. *Small Area Estimates of Poverty in Nepal, 2011*. Kathmandu. Ministry of Federal Affairs and Local Development. 2016. *Disadvantaged Group Mapping at Ward Level of Municipalities*. Kathmandu.

^e Members of the committee will tentatively include representatives from GESI and/or planning units in MOUD, DUDBC, MOFALD and Ministry of Finance.

^f DSC-Province 7 will design and administer a structured questionnaire at least 1 year after the training to assess the knowledge gained through project activities on GESI mainstreaming. The survey shall assess whether (i) GESI-targeted funds are allocated in the annual plan and budget of the respective municipality as per MOFALD's GESI policy; (ii) annual GESI budget audit is conducted as per MOFALD's guidelines; and (iii) GESI disaggregated monitoring and evaluation data system has been developed, and is being used in planning and operations at the municipality level.

^g It is a tool for identifying how GESI issues are addressed internally as well as in the program and budget. The municipalities should apply the MOFALD GESI audit guidelines to achieve this indicator.

Source: Asian Development Bank.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Project Design and Monitoring Framework

99. The design and monitoring framework (DMF) of the project is as below.

Table 20: Design and Monitoring Framework

Impacts the Project is Aligned with Sustainable, inclusive, and resilient urban areas developed; and balanced and prosperous subnational urban system achieved (National Urban Development Strategy) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Quality, sustainability, and disaster resilience of urban services, and competitiveness in eight municipalities of the Terai region improved	By 2023: a. Flood inundation period in core areas (24,000 hectares) reduced to less than 1 hour (2016 baseline: average of 5 hours) b. Travel time on project roads in all 8 project municipalities reduced by an average of 50% (2016 baseline: 25 minutes per 10 km) c. Solid waste from at least 65% of households collected, recycled, and disposed of in sanitary landfills in Province 7 project municipalities (2016 baseline: 0%) d. At least 50% of fecal sludge collected and treated in Province 7 project municipalities (2016 baseline: 0) e. Property tax collection to support urban services increased by at least 125% (2016 baseline: non-Province 7 ^b average of NRs45 million; and Province 7 ^b average of NRs12 million)	a–e. Annual reports of DUDBC	Behavioral change takes longer than the project timeline.
Outputs 1. Urban infrastructure in eight municipalities constructed or rehabilitated with climate-resilient and sustainable designs	By 2022: 1a. 200 km of stormwater drains constructed or rehabilitated (2016 baseline: 0) 1b. 240 km of roads improved and at least 40 km of footpaths constructed responsive to the needs of EWCD (2016 baseline: 0) 1c. Four sanitary landfills with at least 30-year lifespan and resource recovery centers constructed with O&M embedded in contracts (2016 baseline: 0) 1d. 20 km of sewers constructed, with 7,500 households connected to sewerage system in Biratnagar (2016 baseline: 0 households)	1a–f. Quarterly project progress reports	For all outputs: Political instability may lead to strikes that delay works. Local political and community opposition during implementation (e.g., stopping work at landfill)

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	<p>1e. Septage treatment facilities constructed in Godawari, Bheemdatt, and Dhangadhi (2016 baseline: 0)</p> <p>1f. At least 30% of the PBSEDP spent on socioeconomic infrastructure and activities related to GESI (2016 baseline: 0%)</p>		sites).
2. Municipal capacity strengthened	<p>By 2022:</p> <p>2a. Urban development plans, and planning and building bylaws with disaster risk resilience and inclusive accessibility and safety features, adopted through municipal council decision in Province 7 municipalities (2016 baseline: n.a.)</p> <p>2b. O&M plan prepared and reflected in annual budget of project municipalities (2016 baseline: 0)</p> <p>2c. GIS operational with 80% house numbering in core areas (2016 baseline: 0)</p> <p>2d. Computerized property tax systems installed in Godawari and Biratnagar with 70% of property records encoded (2016 baseline: not existing in Godawari and Biratnagar)</p> <p>2e. Improved municipal organizational structure, including a social development section, approved by municipal councils of Godawari and Shuklaphanta (2016 baseline: n.a.)</p> <p>2f. 40 municipality staff (33% women) reported increased knowledge on mainstreaming GESI approaches into planning and operation (2016 baseline: 0)^b</p> <p>2g. Municipal office buildings for Godawari and Shuklaphanta constructed following energy-efficient and disaster-resilient standards (2016 baseline: 0)</p>	2a–g. Quarterly project progress reports	
3. Project preparation capacity improved	<p>By 2022:</p> <p>3a. Memo issued by MOUD instructing the use of project development facility guidelines (2016 baseline: n.a.)</p> <p>3b. At least one DPR prepared for multisector, subregional investment program using project development facility (2016 baseline: n.a.)</p> <p>3c. At least two DPRs prepared for SWM, drainage, roads, water supply, and/or sanitation subsectors using project development facility (2016 baseline: n.a.)</p>	<p>3a. Annual reports of the Ministry of Urban Development</p> <p>3b–c. Annual reports of DUDBC</p>	

Key Activities with Milestones
<p>1. Urban infrastructure in eight municipalities constructed or rehabilitated with climate-resilient and sustainable designs</p> <p><u>Non-Province 7 municipalities</u></p> <p>1.1 Award all supervision consulting contracts (Q3 2017).</p> <p>1.2 Award all civil works contracts (Q4 2017).</p> <p>1.3 Complete physical works (Q4 2020).</p> <p><u>Province 7 municipalities</u></p> <p>1.4 Commence surveys and investigations (Q2 2017).</p> <p>1.5 Commence community briefings to raise awareness on integrated SWM approach (Q2 2017).</p> <p>1.6 Finalize land acquisition for landfill sites (Q3 2017).</p> <p>1.7 Approve year 1 programs for the PBSEDP (Q1 2018).</p> <p>1.8 Develop infrastructure master plans and phased capital investment plans (Q3 2018).</p> <p>1.9 Commence procurement of civil works contracts (Q3 2018).</p> <p>1.10 Award all civil works contracts, ensuring gender- and disadvantaged-sensitive designs (Q4 2019).</p> <p>1.11 Complete physical works (Q4 2022).</p> <p>2. Municipal capacity strengthened</p> <p><u>Non-Province 7 municipalities</u></p> <p>2.1 Finalize and adopt asset inventory and management plans (Q4 2018).</p> <p>2.2 Encode 80% of household data (Q3 2020).</p> <p><u>Province 7 municipalities</u></p> <p>2.3 Prepare urban development plans, land use plans, and bylaws for each municipality (Q4 2017).</p> <p>2.4 Computerize municipal revenue administration systems for billing and collection (Q3 2018).</p> <p>2.5 Launch awareness campaign for improving property tax payments (Q4 2018).</p> <p>2.6 Launch community-awareness campaign on reducing, reusing, and recycling solid waste (Q1 2019).</p> <p>3. Project preparation capacity improved</p> <p>3.1 Prepare community and consultation plan for Biratnagar SWM (Q1 2018).</p> <p>3.2 Prepare guidelines for project development facility (Q3 2017).</p> <p>3.3 Mobilize first project development facility consultant (Q1 2019).</p> <p>3.4 Prepare DPRs of urban infrastructure estimated at least \$350 million (Q1 2022).</p>
<p>Inputs</p> <p>Asian Development Bank: \$150.0 million (concessional OCR loan)</p> <p>Government of Nepal: \$64.0 million (includes \$7.9 million contribution from project municipalities)</p>
<p>Assumptions for Partner Financing</p> <p>Not applicable</p>

DPR = detailed project report; DUDBC = Department of Urban Development and Building Construction; EWCD = elderly, women, children, and persons with disabilities; GESI = gender equality and social inclusion; GIS = geographic information system; km = kilometer; MOUD = Ministry of Urban Development; n.a. = not applicable; OCR = ordinary capital resources; O&M = operation and maintenance; PBSEDP = performance-based socioeconomic development program; Q = quarter, SWM = solid waste management.

^a Government of Nepal. 2017. *National Urban Development Strategy*. Kathmandu.

^b The design and supervision consultant for Province 7 project municipalities will design and administer a structured questionnaire at least 1 year after the training to assess the knowledge gained through project activities on GESI mainstreaming. The survey shall assess whether (i) GESI-targeted funds are allocated in the annual plan and budget of the respective municipality as per the Ministry of Federal Affairs and Local Development's GESI policy, (ii) annual GESI budget audit is conducted as per the Ministry of Federal Affairs and Local Development's guidelines, and (iii) GESI disaggregated monitoring and evaluation data system has been developed and is being used in planning and operation at the municipality level.

^c Province 7 municipalities include Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta. Non-Province 7 municipalities include Biratnagar, Birgunj, Nepalgunj, and Siddharthanagar.

^d Unless target area is specified, the indicators cover the core areas of eight project municipalities.

Source: Asian Development Bank.

B. Monitoring

100. **Project performance monitoring.** Within 6 months of loan effectiveness, the PCO will establish a project performance management system using the targets, indicators, assumptions, and risks in the DMF. The PCO with the support of PMC will also expand the DMF into a Monitoring and Evaluation (M&E) Framework taking account the important milestones for each target, and monitoring parameters, in addition to those included in DMF. Disaggregated baseline data for output and outcome indicators and targets set out in the DMF and M&E Framework will be gathered during detailed design stage by each PIU with the support of DSC, will be updated and reported quarterly through the PCO's quarterly progress reports and after each ADB review mission. These quarterly reports will provide information necessary to update ADB's project performance reporting system.³⁵

101. **Compliance monitoring.** The PCO will monitor the compliance of loan assurances—policy, legal, financial, economic, environmental, and others and ensure the compliance. All non-compliance issues, if any, will be updated in quarterly progress reports together with remedial actions. Each ADB review mission (at least twice a year) will also monitor the status of compliance with the loan assurances and raise the noncompliance issues with the government and agree on remedial actions. Status of compliance of loan assurances will be included in the quarterly progress report.

102. **Safeguards monitoring.** The PCO with assistance from PMC will consolidate quarterly environmental and social monitoring reports from R-PIU and PIUs (assisted by DSCs and CSCs) and submit quarterly, semi-annual and annual environmental and social monitoring reports to ADB. Details are provided in Section VII. In each PIU and R-PIU, a social safeguard desk will be established. Social Development Officer of the R-PIU will be responsible to organize meetings at least on monthly basis to review grievances and any social issues arising while implementing the approved resettlement plan. Record of meetings will be shared with the Project Managers and Project Director.

103. **Gender and social dimensions monitoring.** PCO will ensure GESI issues are reflected in monitoring and evaluation formats and reports. R-PIU, PIUs and PISUs will collect data disaggregated by at least gender, caste, ethnicity and economic status. PCO will ensure R-PIUs, PIUs, and PISUs are oriented and trained adequately on GESI to produce accountability. Details are provided in Section VIII. The PCO will consolidate implementation status of the GESI action plan and submit quarterly and semi-annual monitoring reports to ADB.

C. Evaluation

104. The government and ADB will jointly review the project at least twice a year. This includes (i) the performance of the PCO, PIUs, PISUs, consultants and contractors; (ii) physical progress of subprojects and effective safeguards compliance, (iii) progress of the GESI Action Plan; (iv) inclusion of women and vulnerable groups including the poor in performance-based allocation program subproject planning and implementation; (v) compliance with loan/grant assurances; and (vi) assessment of subproject sustainability in technical and financial terms, including progress in implementing the Comprehensive Financial Management Improvement Plans. In addition to the regular loan and/ or grant reviews, the government and ADB will undertake a midterm review in the third year of project implementation to identify problems and

³⁵ ADB's project performance reporting system is available at:
<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

constraints encountered and suggest measures to address them.

105. 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 performance-based allocation 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) any changes recommended. Within 6 months of physical completion of the project, PCO will submit a project completion report to ADB.³⁶

D. Reporting

106. The PCO will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (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, the project accounts together with the associated auditor's report (and audited financial statements), should be adequately reviewed.

E. Stakeholder Communication Strategy

107. The project intends to communicate about the project activities to wider stakeholders for ensuring transparency. The PCO will set up a website within 2 months from the loan effectiveness and disclose all key project-related information, including the scope, cost, and financial and institutional arrangements of the project, project safeguard reports such as IEE and RPs, and project progress such as procurement, contract award and disbursement. The website will include information on project procurement, including the list of participating bidders, name of each winning bidder, basic details on bidding procedures adopted, the value of each contract awarded, and the list and value of goods and/or services procured and the intended utilization of loan and/or grant proceeds under each contract being awarded.

108. The website will also include contact details for the PCO and PIUs' counterpart staff in Nepali and English languages, and will link to ADB's Integrity Unit website at <http://www.adb.org/Integrity/complaint.asp> for reporting to ADB any grievances or allegations of corrupt practices arising out of the project and/or project activities. The government will cause the executing agency to ensure that all project staff are fully aware of ADB's procedures, including, but not limited to, procedures for implementation, procurement, use of consultants, disbursements, reporting, monitoring, and prevention of fraud and corruption. R-PIU and each PIU will also fully disclose relevant project-related information through municipality's information center—such as subproject cost, cost-sharing arrangement, contractor's name, contract price, progress of construction, financial status of municipalities—through public briefings, bulletin boards, municipal annual reports etc. R-PIU and each PIU will conduct public auditing.

109. Community awareness and participation plan (CAPP) has been prepared for the project (Appendix 12) to ensure inclusive and effective participation of all stakeholders, especially

³⁶ Project completion report format is available at:
<http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>.

women, poor, female headed households (FHHs), socially excluded³⁷ and vulnerable groups.³⁸ Effective and meaningful participation of stakeholders is the key in building ownership and long-term sustainability of the project activities.

F. Sustainability of Outputs

110. Non-Province 7 municipalities have received support for institutional strengthening through previous projects (IUDP and STIUEIP). To help ensure sustainable O&M of existing assets and new assets developed under RUDP, under the framework of the project the non-Province 7 municipalities shall update, endorse and implement the following:

- (i) **City-wide Sanitation Action Plan.** covering the entire municipality, including new expansion areas; zoning for different sanitation technologies and phased approaches; cost-recovery mechanism; and O&M costs to be included in the updated Business Plan.
- (ii) **Five-year Business Plan.** Each non-Province 7 municipality will update their respective business plans, which shall now include revenue and expenditure of the additional investment for the next 5 years (FY2017-2018 to FY2022-2023). ADB will provide technical support to the PCO to review and/or revise the updated business plans prepared by each municipality. The business plan will be taken as a basis for sustainable implementation of municipal activities and O&M of new and existing infrastructure.
- (iii) **Comprehensive financial management improvement plan (CFMIP).** ADB PPTA has provided support to non-Province 7 municipalities to update their respective CFMIP. The plan includes targets and prioritized action plan for increasing own-source revenue through the integrated property tax system, among other activities.

111. Non-Province 7 municipalities will include these priority actions linked to the documents above in their municipal program and annual budget. In addition, the CSC/ DSC scope of work shall include preparation of city-wide municipality asset registry with detailed O&M plans for existing and new municipal infrastructure assets as the first step towards preparing municipal asset management plans (see outline process description in Appendix 2).

112. **Sustainability assurances–Province 7 municipalities.** The Province 7 project municipalities will receive capacity building support from the institutional development consultant. This will include: (i) improving of financial management system; (ii) strengthening municipal organizational system; (iii) strengthening urban planning; (iv) establishing an asset management system; (v) establishing a GESI institutional structure; (vi) establishing an environmental management system; and (vii) improving customer orientation and service delivery. The DSC shall prepare city-wide sanitation action plans, 5-year business plans, and CFMIP for each of the 4 municipalities. The Province 7 municipalities will also have access to incentive grant funds through a PBSDP. This is intended to (i) strengthen core municipal

³⁷ Socially excluded include those that are excluded socially or culturally such as women, *Dalits*, *Adibasi Janajatis*, *Madhesis*, *Tharus*, farmers, laborers, suppressed classes, *Muslims*, backward classes, minorities, marginalized, endangered communities, youth, children, the aged, gender-based and sexually oriented minorities and the disabled or those who are physically or mentally incapacitated and citizens of backward regions and financially deprived Khas Aryans (Source: Constitution of Nepal).

³⁸ Vulnerable groups include female headed households, households with physically disabled family member, households having senior citizen without a able bodied family member, households severely affected by natural calamities or disaster.

functions; (ii) ensure smooth project implementation; and (iii) mainstream activities and functions introduced during the project period into regular municipal operations.

G. Project Development Facility (“Project Bank”)

113. Output 3 of the project is specifically related to the project’s support for the operationalization of the DUDBC’s new Urban Planning and Development Centre, which will house the project bank consultants financed under the project. These consultants will prepare feasibility studies and detailed project reports to increase project readiness of flagship projects in the urban sector, with priority given to projects with a regional dimension. A dedicated project steering committee will be established for the project bank, to guide policy related issues and project selection, and review technical reports. Appendix 3 summarizes the project bank guidelines; and detailed guidelines are available upon request. All consultants under the project bank financed by ADB will be recruited following ADB Guidelines on the Use of Consultants (March 2013, as amended from time to time).

H. Performance-based Socioeconomic Development Program (PBSEDP)

114. Detailed guidelines for planning, implementation, financial management and reporting will guide the program. The PCO will evaluate the municipalities’ performance with technical support provided by the project management consultant (PMC). The Institutional Development Consultant (IDC) will provide capacity building support to the municipalities to help achieve the targets and prepare their annual programs. The DSC-Province 7 will provide technical support for the small infrastructure.

115. The grant will be provided in the following financial year based on the performance evaluation of the previous year. Appendix 1 provides the indicators and the scoring methodology. The total allocated grant amount shall be divided among the municipalities based on population and performance score. No grants are to be received for a score of less than 40 points (see Table 21). The disbursement of the budget will be proportional to the score for points between 40-90. One hundred percent of the budget will be disbursed for score above 90.

Table 21: Scoring and Allocation of Funds

Score	Budget received
<40	Zero
40-90	Proportional to score
>90	100%

116. The grant may be used for (i) institutional capacity development, (ii) socioeconomic development GESI related subprojects or activities, (iii) environmental protection, and (iv) operations and maintenance. The types of subprojects envisaged are listed in Table 22 below.

Table 22: Scope for Use of the Performance-based Socioeconomic Development Program

Institutional capacity development (at least 20% of the grant)
<p>Can include:</p> <ul style="list-style-type: none"> • Salaries to hire key staff (civil engineering, ICT, financial management, environmental, and community development) in PISU (e.g. if such expertise is not available in municipality) • Establishing a house numbering system; • Strengthening revenue administration system (i.e. database establishment, billing system establishment, awareness campaigns, etc.);

<ul style="list-style-type: none"> • Basic office facilities; • Capacity development activities and trainings in the area of (i) project management, (ii) procurement and e-bidding, (iii) construction management, (iv) planning and budgeting, (v) revenue administration, (vi) monitoring and evaluation, (vii) environmental and social safeguards, (viii) GESI, (ix) social mobilization, etc.; • Updating or preparing planning and building bylaws; and Implementing building code and planning bylaws.
Socioeconomic development and GESI (at least 30% of the grant)
Can include: <ul style="list-style-type: none"> • Small community level infrastructure such as community water supply, SWM, sanitation, roads, footpaths, street lights, culverts, community hall; • Economic infrastructure development works such as improvements for local market or bus park; • Skills development and income-generation trainings for low-income communities; and Awareness programs for promotion of GESI related activities.
Environmental protection (at least 20% of the grant)
Can include: <ul style="list-style-type: none"> • Awareness raising programs; • Promotion of 3Rs (reduce-reuse-recycle) activities; • Health and hygiene development activities; and Planting, bioengineering, landscaping, parks, ponds/lakes conservation, etc.
Operations and maintenance (at least 10% of the grant)
Can include: <ul style="list-style-type: none"> • Implementation of activities identified in the O&M plan; • Beautification; and • Small equipment.

GESI = gender equality and social inclusion, ICT = information and communication technology, O&M = operation and maintenance, PISU = project implementation support unit.

X. ANTICORRUPTION POLICY

117. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.³⁹ 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.⁴⁰

118. To support these efforts, relevant provisions are included in the loan agreement/regulations and the bidding documents for the project. The Commission for the Investigation of Abuse of Authority (CIAA) may investigate any irregularities in the Project. This includes financial irregularities, as well as corruption of government officials and officers and employees of autonomous bodies. Project-specific measures to enhance governance and prevent corruption, designed with the stages of project implementation and the disbursement chain in mind, include (i) orient PCO, implementing agencies, PIUs, contractors, and consultants ADB's anticorruption policy; (ii) strict enforcement of contractual provisions; (iii) bidding document to prohibit informal subcontracting and excessive subcontracting; (iv) the requirement for PCO and PIUs to follow government rules and procedures for all expense and

³⁹ Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>.

⁴⁰ ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>.

revenue items including cash and the proper and accurate maintenance of financial records; and (v) establishing a project website at PCO to provide transparency on project details including procurement.

XI. ACCOUNTABILITY MECHANISM

119. 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 a 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.⁴¹

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

120. All revisions and/or updates to the PAM during implementation should be retained in this section to provide a chronological history of the changes to implemented arrangements in the PAM, including revision to contract awards and disbursement s-curves.

Table 23: Record of Project Administration Manual Changes

Date of change	Nature of change	Remark

⁴¹ Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

**APPENDIX 1: REGIONAL URBAN DEVELOPMENT PROJECT–PROVINCE 7 MUNICIPALITIES
PERFORMANCE EVALUATION CRITERIA FOR PERFORMANCE-BASED SOCIOECONOMIC DEVELOPMENT PROGRAM**

The indicators below are meant to (i) help strengthen core municipal functions, (ii) ensure smooth project implementation, and (iii) mainstream activities and functions introduced during the project period into regular municipal operations.

Table A1.1: Performance Indicators for the Allocation of Performance-Based Fund

Area of Activity/Activity	Performance Indicator/Criteria				Core/ Non-core Weight of Non-Core Activities
	Readiness (R) for Installment 1	Intermediate (I) for Installment 2	Intermediate (II) for Installment 3	Advanced (A) for Installment 4	
A. Project Implementation Structures					
i. Formation and mobilization of municipal-level coordination committee (MCC)	<ul style="list-style-type: none"> MCC formed and led by Executive Officer (EO); includes representatives from: key line agencies related with the project, ex-mayors, local chamber of commerce, civil society/ professional associations (engineer, law, etc), TLOs At least 2 meetings held Meeting agenda and minutes prepared and disclosed 	<ul style="list-style-type: none"> Meetings held at regular intervals (at least 4 in a year) Meeting minutes prepared and disclosed and decisions followed-up MCC decisions on identify PBSDP activities for Y1, undertake awareness raising on project activities, and establishment of grievance mechanism. 	<ul style="list-style-type: none"> Meetings held at regular intervals (at least 4 in a year) Meeting minutes prepared and disclosed and decisions followed-up MCC decisions on identify PBSDP activities for Y2, undertake awareness raising on project activities, and establishment of grievance mechanism. 	<ul style="list-style-type: none"> Meetings held at regular intervals (at least 4 in a year) Meeting minutes prepared and disclosed and decisions followed-up MCC decisions on identify PBSDP activities for Y3, undertake awareness raising on project activities, and establishment of grievance mechanism. 	Core
ii. Assign one municipality engineer/technical staff in Regional Project Implementation Unit (R-PIU) and establish Project Implementation Support Unit	<ul style="list-style-type: none"> Identify one municipal engineer/technical staff to join the R-PIU Allocate office space for PISU and furnish with desks, chairs and computers 	<ul style="list-style-type: none"> Participate regularly in R-PIU meetings (participation of PISU Chief in more than 80% R-PIU meetings) Fill key staff positions of PISU as recommended by the IDC/R-PIU Fully operation of 	<ul style="list-style-type: none"> Participate regularly in the R-PIU meetings (participation of PISU Chief in more than 80% R-PIU meetings) No vacancies in key staff positions of PISU as recommended by the IDC/R-PIU Fully operation of 	<ul style="list-style-type: none"> Participate regularly in the R-PIU meetings (participation of PISU Chief in more than 80% R-PIU meetings) No vacancies in key staff positions of PISU as recommended by the IDC/R-PIU PISU functions are 	Core

Area of Activity/Activity	Performance Indicator/Criteria				Core/ Non-core Weight of Non-Core Activities
	Readiness (R) for Installment 1	Intermediate (I) for Installment 2	Intermediate (II) for Installment 3	Advanced (A) for Installment 4	
(PISU) in the municipality.		PISU (Adequate office space and amenities, desks, chairs, necessary ICT equipment and stationeries for all staff)	PISU (Adequate office space and amenities, desks, chairs, necessary ICT equipment and stationeries for all staff)	mainstreamed into the municipality's responsibilities	
iii. Mobilization of municipal level IDC consultant team	<ul style="list-style-type: none"> • Provide office space, desks and chairs to the municipal level IDC team • Finalize IDC work plan for the project period and detail work plan for Y1 	<ul style="list-style-type: none"> • Review and finalize IDC annual work plan. • Support and monitor IDC functions and submit quarterly progress reports to the R-PIU within 1 month of quarter end 	<ul style="list-style-type: none"> • Review and finalize IDC annual work plan. • Support and monitor IDC functions and submit quarterly progress reports to the R-PIU within 1 month of quarter end 	<ul style="list-style-type: none"> • Review and finalize IDC annual work plan. • Support and monitor IDC functions and submit quarterly progress reports to the R-PIU within 1 month of quarter end 	1
B. Project Programming and Budgeting					
iv. Approval of municipal annual program and budget incorporating the PBSDP	<ul style="list-style-type: none"> • Prepare annual plan and budget for PBSDP for next FY as per the guidelines provided by the PCO • Incorporate PBSDP into municipal annual program and budget 	<ul style="list-style-type: none"> • Prepare annual program for PBSDP for next FY as per the guidelines provided by the PCO • Receive no objection from the PCO on PBSDP • Incorporate PBSDP in municipal annual program and budget 	<ul style="list-style-type: none"> • Prepare annual program for PBSDP for next FY as per the guidelines provided by the PCO • Receive no objection from the PCO on PBSDP • Incorporate PBSDP in municipal annual program and budget 	<ul style="list-style-type: none"> • Prepare annual program for PBSDP for next FY as per the guidelines provided by the PCO • Receive no objection from the PCO on PBSDP • Incorporate PBSDP in municipal annual program and budget 	Core
v. Creation of project budget heads per agreements and budgeting	<ul style="list-style-type: none"> • Create separate budget head with necessary budget sub-headings for the project to cover incremental administration, PBSDP, and infrastructure 	<ul style="list-style-type: none"> • Allocate necessary budget for next FY for incremental administration, PBSDP, and infrastructure development sub- 	<ul style="list-style-type: none"> • Allocate necessary budget for next FY for incremental administration, PBSDP, and infrastructure development sub- 	<ul style="list-style-type: none"> • Allocate necessary budget for next FY for incremental administration, PBSDP, and infrastructure development sub- 	2

Area of Activity/Activity	Performance Indicator/Criteria				Core/ Non-core Weight of Non-Core Activities
	Readiness (R) for Installment 1	Intermediate (I) for Installment 2	Intermediate (II) for Installment 3	Advanced (A) for Installment 4	
	development sub-projects	projects	projects	projects	
vi. Satisfactory implementation progress of sub-projects implemented under previous installment	N.A.	<ul style="list-style-type: none"> All sub-projects under the PBSDP are completed as per the schedule All assets created under the PBSDP are in public use All sub-projects completed with desired quality (workmen ship for infrastructure sub projects and number of participants for trainings) 	<ul style="list-style-type: none"> All sub-projects under the PBSDP are completed as per the schedule All assets created under the PBSDP are in public use All sub-projects completed with desired quality (workmen ship for infrastructure sub projects and number of participants for trainings) 	<ul style="list-style-type: none"> All sub-projects under the PBSDP are completed as per the schedule All assets created under the PBSDP are in public use All sub-projects completed with desired quality (workmen ship for infrastructure sub projects and number of participants for trainings) 	1
vii. Allocation of municipal budget in time for matching project cost for infrastructure development sub-projects	N.A.	<ul style="list-style-type: none"> Formal agreement with the R-PIU and Contractor on matching cost contribution from the municipality for infrastructure development sub-projects and operation and maintenance Allocate municipal budget to match sub-project cost of the infrastructure development as per the work schedule 	<ul style="list-style-type: none"> Allocate municipal budget to match sub-project cost of the infrastructure development as per the work schedule Payment of municipal portion of civil works contracts within 30 days 	<ul style="list-style-type: none"> Allocate municipal budget to match sub-project cost of the infrastructure development as per the work schedule Payment of municipal portion of civil works contracts within 30 days 	1
C. Financial and Operational Strengthening					
viii. Own source	N.A.	<ul style="list-style-type: none"> RIAP prepared and 	<ul style="list-style-type: none"> RIAP reviewed and 	<ul style="list-style-type: none"> RIAP reviewed and 	Core

Area of Activity/Activity	Performance Indicator/Criteria				Core/ Non-core Weight of Non-Core Activities
	Readiness (R) for Installment 1	Intermediate (I) for Installment 2	Intermediate (II) for Installment 3	Advanced (A) for Installment 4	
revenue mobilization capacity enhancement		endorsed by Municipal Council	endorsed by Municipal Council <ul style="list-style-type: none"> • Activities based on RIAP started • Increased own source revenue, including arrears, by at least 15% from previous FY 	endorsed by Municipal Council <ul style="list-style-type: none"> • Activities based on RIAP started • Increased own source revenue, including arrears, by at least 20% from previous FY 	
ix. Prepare financial operating plan (FOP) of the municipality and financial projections	N.A.	<ul style="list-style-type: none"> • Financial operating plan (FOP) for next five years prepared including project disbursements • Annual budget prepared based on FOP and revenue projection done in RIAP 	<ul style="list-style-type: none"> • Update FOP • Annual budget prepared based on FOP and revenue projection of RIAP 	<ul style="list-style-type: none"> • Update FOP • Annual budget prepared based on FOP and revenue projection of RIAP 	2
x. Preparing annual O&M plan, including budget provision	N.A.	<ul style="list-style-type: none"> • O&M Plan for next five years prepared and approved by council • Increased budget allocation for O&M by at least 5% more than previous FY 	<ul style="list-style-type: none"> • O&M Plan updated • Increased budget allocation for O&M by at least 10% more than previous FY 	<ul style="list-style-type: none"> • O&M Plan updated • Increased budget allocation for O&M by at least 10% more than previous FY 	2
xi. Implementation of planning and building bylaws	N.A.	<ul style="list-style-type: none"> • Formulate planning and building bylaws based on the guidelines provided by the MOUD and MoFALD 	<ul style="list-style-type: none"> • Approve planning and building bylaws • Municipal staff and key stakeholders are trained on approved bylaws • Enforce planning and building bylaws 	<ul style="list-style-type: none"> • Implement capacity development activities to ensure proper implementation of planning and building bylaws 	1
xii. Prepare and	N.A.	N.A.	<ul style="list-style-type: none"> • Inventory of assets of 	<ul style="list-style-type: none"> • Asset management 	2

Area of Activity/Activity	Performance Indicator/Criteria				Core/ Non-core Weight of Non-Core Activities
	Readiness (R) for Installment 1	Intermediate (I) for Installment 2	Intermediate (II) for Installment 3	Advanced (A) for Installment 4	
implement asset management plan			infrastructure developed under the project prepared and published • Asset management plan for SWM, roads and waste water management prepared • Tariff rate and collection plan SWM service and waste water management finalized and approved by the council	plan approved • Institutional modalities for operations of new assets are finalized and approved	

FOP = financial operating plan, MCC=municipal coordination committee, MOFALD = Ministry of Federal Affairs and Local Development, MOUD = Ministry of Urban Development, O&M = operations and maintenance, PCO = project coordination office, PBSDP = performance-based socioeconomic development program, RIAP = revenue improvement action plan, SWM = solid waste management

**Table A1.2: Performance Evaluation Criteria–Regional Urban Development Plan
Evaluation of Year 1 (FY 2016/17) for PBSDP of Year 2 (FY 2017/18)**

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
A. Project Implementation Structures				
i. Formation and mobilization of municipal level coordination committee (MCC)	Form MCC Hold MCC meetings Meeting minutes and disclosure	MCC formed in accordance with the project requirements	Max 10 (yes–10 or no–0)	25
		At least 2 meetings held in Year 1	Max 10 (5 X 2)	
		Meeting minutes of MCC prepared and disclosed	Max 5 (prepared–3, disclosed–2)	
ii. Assign one municipality engineer/technical staff in Regional Project Implementation Unit (R-PIU) and establish Project Implementation Support Unit (PISU) in the municipality.	Identify one municipal engineer/technical staff to join the R-PIU Allocate office space for PISU and furnish with desks, chairs and computers	Assign one municipal engineer/technical staff in R-PIU	Max 15 (yes–15 or no–0)	25
		Establish PISU with necessary office equipment	Max 10 (excellent–10, good–5, poor or no–0)	
iii. Mobilization of municipal level IDC consultant team	Provide office space, desks, chairs to IDC team Finalize work plan of IDC for the project period and detail work plan for Y1	Provide office space, desks and chairs	Max 10 (excellent–10, good–5, poor or no–0)	15
		Finalize IDC work plan	Max 5 (yes–5, no–0)	
B. Project's programming and budgeting				
iv. Approval of municipal annual program and budget incorporating the PBSDP	Prepare annual plan and budget of PBSDP for next FY as per the PCO guidelines Incorporate PBSDP in municipal annual program and budget	Annual program of PBSDP as per guidelines	Max 10 (yes–10, no–0)	25
		Incorporate PBSDP in municipal program and budget	Max 15 (yes–15, no–0)	
v. Creation of project budget heads according to agreements	Create separate budget head for the project to cover cost of incremental administration, PBSDP and infrastructure development sub-projects	Create separate budget head for the project	Max 10 (yes–10, no–0)	10
Total Score Point				100

IDC = institutional development consultant, PBSDP = performance-based socioeconomic development program, MCC = municipal level coordination committee, PCO = project coordination office, PISU = project implementation support unit, R-PIU = regional project implementation unit.

Table A1.3: Evaluation of Year 2 (FY 2017/18) for PBSDP of Year 3 (FY 2018/19)

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
A. Project Implementation Structures				
i. Formation and mobilization of municipal level coordination committee (MCC)	Hold MCC meetings Meeting minutes and disclosure Take key decisions related PBSDP activities, awareness raising, grievances handling	At least 4 meetings held at regular intervals	Max 4 (1 X 4)	15
		Meeting minutes of MCC prepared and disclosed	Max 5 (prepared–3, disclosed–2)	
		Meetings take decisions on key project related activities (based on meeting minutes or recorded proof)	Max 6 (MCC decision on PBSDP–2, awareness–2, grievances–2)	
ii. Assign one municipality engineer/technical staff in Regional Project Implementation Unit (R-PIU) and establish Project Implementation Support Unit (PISU) in the municipality.	Participation of PISU Chief in R-PIU meetings Fill key staff positions of PISU as recommended by the IDC/R-PIU Fully operational PISU	Participation of PISU Chief in R-PIU meetings	Max 5 (more than 80% - 5, 50% to 80%–3, less than 50%–0)	15
		Fill all key staff positions in PISU	Max 5 (all–5, major–3, limited or no–0)	
		Fully operation of PISU with adequate office space and amenities, desks, chairs, necessary ICT equipment and stationeries for all staff	Max 5 (fully–5, partly or no–0)	
iii. Mobilization of municipal level IDC consultant team	Review and finalize IDC annual work plan Support and monitor IDC functions and submit quarterly progress reports to the R-PIU within 1 month of quarter end	Review and finalize IDC annual work plan	Max 3 (yes–3, no–0)	7
		Support and monitor IDC functions and report to the R-PIU	Max 4 (report four times in a year–4, twice in a year–2, less than two or no–0)	
B. Project Programming and Budgeting				
iv. Approval of municipal annual program and budget incorporating the PBSDP program (PBSDP)	Prepare annual program of PBSDP for next FY as per the PCO guidelines Receive no objection from PCO Incorporate PBSDP in municipal annual program and budget	Annual program of PBSDP as per guidelines	Max 5 (yes–5, no–0)	15
		Receive no objection from PCO	Max 5 (yes–5, no–0)	
		Incorporate PBSDP in municipal program and budget	Max 5 (yes–5, no–0)	
v. Creation of project budget heads according to agreements and budgeting	Allocate necessary budget for all three components	Allocate necessary budget for project activities	Max 4 (fully–4, limited or no–0)	4

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
vi. Satisfactory implementation progress of sub-projects implemented under previous instalment	All sub-projects under the PBSDP are completed as per the schedule All assets created under the PBSDP are in public use All sub-projects completed with desired quality (workmanship for infrastructure sub projects and number of participates for trainings)	Sub-projects completed as per the work schedule	Max 3 (all-3, more than 80%-2, less than 80%-0)	7
		All sub-projects are in public use	Max 2 (more than 80% subprojects-2, less than 80%-0)	
		All infrastructure sub-projects are completed with desired quality	Max 1 (more than 80% sub-projects-1, less than 80%-0)	
		Target participants are trained in all training programs	Max 1 (more than 80% training program-1, less than 80%-0)	
vii. Allocation of municipal budget in time for matching project cost for infrastructure development sub-projects	Formal agreement with the R-PIU and Contractor on municipal matching cost contribution from the municipality for infrastructure development sub-projects and operation and maintenance Allocate municipal budget to match sub-project cost of the infrastructure development as per the work schedule	Formal agreement with R-PIU and Contractor on cost contribution	Max 4 (yes-4, no-0)	7
		Allocation of required budget from the municipality	Max 3 (yes-4, no-0)	
C. Financial and Operational Strengthening				
viii. Own source revenue mobilization capacity enhancement	RIAP preparation RIAP endorse by municipal council	RIAP prepared	Max 7 (yes-7, no-0)	15
		RIAP endorsed	Max 7 (yes-7, no-0)	
ix. Prepare financial operating plan (FOP) of the municipality and financial projections	FOP of municipality prepared including project's disbursement Annual budget formulated based on FOP and RIAP	FOP prepared	Max 2 (yes-2, no-0)	4
		Annual budget formulated based on RIAP and FOP	Max 2 (yes-2, no-0)	
x. Preparing annual O&M plan including budget provision	O&M plan for next five years prepared O&M plan approved Increased budget allocation for O&M	O&M plan prepared	Max 2 (yes-2, no-0)	4
		O&M plan approved	Max 1 (yes-1, no-0)	
		Increased 5% budget allocation than previous FY for O&M	Max 1 (yes-1, no-0)	
xi. Implementation of	Formulation of planning and	Formulation of planning and building bylaws	Max 7 (yes-7, no-0)	7

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
planning and building bylaws	building bylaws based on the guidelines provided by the MOUD and MoFALD			
Total Score Point				100

FOP = financial operating plan, IDC = institutional development consultant, MCC = municipal level coordination committee, MOFALD = Ministry of Federal Affairs and Local Development, MOUD = Ministry of Urban Development, O&M = operations and maintenance, PBSDP = performance-based socioeconomic development program, MCC = municipal level coordination committee, PCO = project coordination office, PISU = project implementation support unit, RIAP = revenue improvement action plan, R-PIU = regional project implementation unit.

Table A1.4: Evaluation of Year 3 (FY 2018/19) for PBSDP of Year 4 (FY 2019/20)

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
A. Project Implementation Structures				
i. Formation and mobilization of municipal level coordination committee (MCC)	Hold MCC meetings Meeting minutes and disclosure Take key decisions related PBSDP activities, awareness raising, grievances handling etc.	At least 4 meetings held at regular intervals	Max 4 (1 X 4)	15
		Meeting minutes of MCC prepared and disclosed	Max 5 (prepared-3, disclosed -2)	
		Meetings take decisions on key project related activities (based on meeting minutes or recorded proof)	Max 6 (MCC decision on Y3PBSDP-2, awareness-2, grievances-2)	
ii. Assign one municipality engineer/technical staff in Regional Project Implementation Unit (R-PIU) and establish Project Implementation Support Unit (PISU) in the municipality.	Participation of PISU Chief in R-PIU meetings No vacancies in key staff positions of PISU as recommended by the IDC/R-PIU Fully operational PISU	Participation of PISU Chief in R-PIU meetings	Max 5 (more than 80%-5, 50% to 80%-3, less than 50%-0)	15
		working all key staff in PISU	Max 5 (all-5, major-3, limited or no-0)	
		Fully operation of PISU with adequate office space and amenities, desks, chairs, necessary ICT equipment and stationeries for all staff	Max 5 (fully-5, partly or no-0)	
iii. Mobilization of municipal level IDC consultant team	Review and finalize IDC annual work plan Support and monitor IDC functions and submit quarterly progress reports to the R-PIU within 1 month of quarter end	Review and finalize IDC annual work plan	Max 3 (yes-3, no-0)	6
		Support and monitor IDC functions and report to the R-PIU	Max 3 (report four times in a year-3, twice in a year-2, less than two or no-0)	
B. Project Programming and Budgeting				
iv. Approval of municipal annual program and budget incorporating the PBSDP	Prepare annual program of PBSDP for next FY as per the PCO guidelines Receive no objection from PCO Incorporate PBSDP in municipal annual program and budget	Annual program of PBSDP as per guidelines	Max 5 (yes-5, no-0)	15
		Receive no objection from PCO	Max 5 (yes-5, no-0)	
		Incorporate PBSDP in municipal program and budget	Max 5 (yes-5, no-0)	
v. Creation of project budget heads per agreements and budgeting	Allocate necessary budget for all three components	Allocate necessary budget for project activities	Max 4 (fully-4, limited or no-0)	4

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
vi. Satisfactory work progress of sub-projects implemented under previous instalment	All sub-projects under the PBSDP are completed as per the schedule All assets created under the PBSDP are in public use All sob-projects completed with desired quality (workmen ship for infrastructure sub projects and number of participates for trainings)	Sub-projects completed as per the work schedule	Max 2 (all–2, more than 80%–2, less than 80%–0)	6
		All sub-projects are in public use	Max 2 (more than 80% subprojects–2, less than 80%–0)	
		All infrastructure sub-projects are completed with desired quality	Max 1 (more than 80% sub-projects–1, less than 80%–0)	
		Target participants are trained in all training programs	Max 1 (more than 80% training program–1, less than 80%–0)	
vii. Allocation of municipal budget in time for matching project cost for infrastructure development sub-projects	Allocate municipal budget to match sub-project cost of the infrastructure development as per the work schedule Payment of municipal portion of civil works contracts within 30 days	Allocation of required budget from the municipality	Max 3 (yes–3, no–0)	6
		Payment of municipal portion of all contractors' bill within 30 days of receiving payment request	Max 3 (yes–3, no–0)	
C. Financial and Operational Strengthening				
viii. Own source revenue mobilization capacity enhancement	RIAP reviewed Activities based on RIAP for Y3 started Increase OSR	RIAP reviewed	Max 2 (yes–2, no–0)	15
		RIAP activities for Y3 started	Max 3 (more than 80%–3, more than 50%–1, less than 50%–0)	
		Increased OSR by 15%	Max 10 (yes–10, no–0)	
ix. Prepare financial operating plan (FOP) of the municipality and financial projections	Updated FOP Annual budget formulated based on FOP and RIAP	FOP updated	Max 2 (yes–2, no–0)	4
		Annual budget formulated based on RIAP and FOP	Max 2 (yes–2, no–0)	
x. Preparing annual O&M plan including budget provision	O&M plan updated Increased budget allocation for O&M	O&M plan updated	Max 2 (yes–2, no–0)	4
		Increased 10% budget allocation than previous FY for O&M	Max 2 (yes–2, no–0)	
xi. Implementation of planning and building b-laws	Approved planning and building bylaws Enforce bylaws	Approved bylaws	Max 3 (yes–3, no–0)	6
		Enforce bylaws	Max 3 (yes–3, no–0)	
xii. Prepare and implement	Inventory of assets of infrastructure	Inventory of build assets	Max 1 (yes–1, no–0)	4

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
asset management plan	developed under the project prepared and published	prepared and published		
	Prepare asset management plan for SWM, roads and waste water management	Asset management plan prepared	Max 2 (yes-2, no-0)	
	Tariff rate and collection plan for SWM service and waste water management finalized	Tariff rate and collection plan	Max 1 (yes-1, no-0)	
Total Score Point				100

FOP = financial operating plan, IDC = institutional development consultant, MCC = municipal level coordination committee, MOFALD = Ministry of Federal Affairs and Local Development, MOUD = Ministry of Urban Development, O&M = operations and maintenance, PBSDP = performance-based socioeconomic development program, MCC = municipal level coordination committee, PCO = project coordination office, PISU = project implementation support unit, RIAP = revenue improvement action plan, R-PIU = regional project implementation unit, SWM = solid waste management.

Table A1.5: Evaluation of Year 4 (FY 2019/20) for PBSDP of Year 5 (FY 2020/21)

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
A. Project Implementation Structures				
i. Formation and mobilization of municipal level coordination committee (MCC)	Hold MCC meetings Meeting minutes and disclosure Take key decisions related PBSDP activities, awareness raising, grievances handling etc.	At least 4 meetings held at regular intervals	Max 4 (1 X 4)	15
		Meeting minutes of MCC prepared and disclosed	Max 5 (prepared-3, disclosed-2)	
		Meetings take decisions on key project related activities (based on meeting minutes or recorded proof)	Max 6 (MCC decision on Y4PBSDP-2, awareness-2, grievances-2)	
ii. Assign one municipality engineer/technical staff in Regional Project Implementation Unit (R-PIU) and establish Project Implementation Support Unit (PISU) in the municipality.	participation of PISU Chief in R-PIU meetings No vacancies in key staff positions of PISU as recommended by the IDC/R-PIU PISU functions are mainstreamed into the municipality's responsibilities	Participation PISU Chief in R-PIU meetings	Max 5 (more than 80%-5, 50% to 80%-3, less than 50%-0)	15
		Working all key staff in PISU	Max 5 (all-5, major-3, limited or no-0)	
		All PISU functions are mainstreamed into the municipality responsibilities	Max 5 (all-5, partly or no-0)	
iii. Mobilization of municipal level IDC consultant team	Review and finalize IDC annual work plan Support and monitor IDC functions and submit quarterly progress reports to the R-PIU within 1 month of quarter end	Review and finalize IDC annual work plan	Max 3 (yes-3, no-0)	6
		Support and monitor IDC functions and report to the R-PIU	Max 3 (report four times in a year-3, twice in a year-2, less than two or no-0)	
B. Project Programming and Budgeting				
iv. Approval of municipal annual program and budget incorporating the PBSDP	Prepare annual program of PBSDP for next FY as per the PCO guidelines Receive no objection from PCO Incorporate PBSDP in municipal annual program and budget	Annual program of PBSDP as per guidelines	Max 5 (yes-5, no-0)	15
		Receive no objection from PCO	Max 5 (yes-5, no-0)	
		Incorporate PBSDP in municipal program and budget	Max 5 (yes-5, no-0)	
v. Creation of project budget heads per agreements and budgeting	Allocate necessary budget for all three components	Allocate necessary budget for project activities	Max 4 (fully-4, limited or no-0)	4
vi. Satisfactory work progress of sub-projects implemented	All sub-projects under the PBSDP are completed as per the	Sub-projects completed as per the work schedule	Max 2 (all-2, more than 80%-2, less than	6

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
under previous instalment	schedule All assets created under the PBSDP are in public use All sob-projects completed with desired quality (workmen ship for infrastructure sub projects and number of participates for trainings)		80%–0)	
		All sub-projects are in public use	Max 2 (more than 80% subprojects–2, less than 80%–0)	
		All infrastructure sub-projects are completed with desired quality	Max 1 (more than 80% sub-projects–1, less than 80%–0)	
		Target participants are trained in all training programs	Max 1 (more than 80% training program–1, less than 80%–0)	
vii. Allocation of municipal budget in time for matching project cost for infrastructure development sub-projects	Allocate municipal budget to match sub-project cost of the infrastructure development as per the work schedule Payment of municipal portion of civil works contracts within 30 days	Allocation of required budget from the municipality	Max 3 (yes–3, no–0)	6
		Payment of municipal portion of all contractors bill within 30 days of receiving payment request	Max 3 (yes–3, no–0)	
C. Financial and Operational Strengthening				
viii. Own source revenue mobilization capacity enhancement	RIAP reviewed Activities based on RIAP for Y3 started Increase OSR	RIAP reviewed	Max 2 (yes–2, no–0)	15
		RIAP activities for Y4 started	Max 3 (more than 80%–3, more than 50%–, less than 50%–0	
		Increased OSR by 20%	Max 10 (yes–10, no–0)	
ix. Prepare financial operating plan (FOP) of the municipality and financial projections	Updated FOP Annual budget formulated based on FOP and RIAP	FOP updated	Max 2 (yes–2, no–0)	4
		Annual budget formulated based on RIAP and FOP	Max 2 (yes–2, no–0)	
x. Preparing annual O&M plan including budget provision	O&M plan updated Increased budget allocation for O&M	O&M plan updated	Max 2 (yes–2, no–0)	4
		Increased 10% budget allocation than previous FY for O&M	Max 2 (yes–2, no–0)	
xi. Implementation of planning and building bylaws	Implement capacity development activities to ensure proper implementation of planning and building bylaws	Implement capacity development activities to implement the bylaws effectively	Max 6 (yes–6, no–0)	6

Area of Activity/Activity	Task	Performance Indicator/Criteria	Assessment Method	Score (max)
xii. Prepare and implement asset management plan	Asset management plan approved Operation modalities finalized and process initiated	Asset management plan approved	Max 2 (yes=2, no=0)	4
		Operation modalities finalized and process initiated	Max 2 (yes=2, no=0)	
Total Score Point				100

FOP = financial operating plan, IDC = institutional development consultant, MCC = municipal level coordination committee, MOFALD = Ministry of Federal Affairs and Local Development, MOUD = Ministry of Urban Development, O&M = operations and maintenance, PBSDP = performance-based socioeconomic development program, MCC = municipal level coordination committee, PCO = project coordination office, PISU = project implementation support unit, RIAP = revenue improvement action plan, R-PIU = regional project implementation unit, SWM = solid waste management

APPENDIX 2: FRAMEWORK FOR DEVELOPING A MUNICIPAL ASSET INVENTORY

I. Asset Management Plan

1. As a first step towards preparing an asset management plan, the design and supervision consultant (DSC) for Biratnagar, and the construction supervision consultants (CSC) for Birgunj, Nepalgunj and Siddharthanagar will prepare a municipal-wide asset register for existing and new assets. This should be prepared on a GIS platform (or other acceptable software), although initial asset information can be first assembled using basic excel worksheets. This appendix is provided to guide the municipalities in preparation of their asset registers.

2. When documenting information on the assets, it is essential to provide information about the condition and performance of assets, which inter alia, includes the following information:

- (i) Location of assets (with geo-reference);
- (ii) Construction and technical specifications (e.g. dimensions, materials, etc.);
- (iii) Current condition of assets;
- (iv) Age of assets;
- (v) Actual value of assets;
- (vi) Maintenance, repairs, and replacement records for assets;
- (vii) Replacement and/or maintenance costs;
- (viii) Estimated remaining service life;
- (ix) Estimated usefulness of assets;
- (x) Estimated failure risk; and
- (xi) Relationships with other assets.

3. The minimum initial information to be determined by the consultants should include at least up to point (iii) or (iv) in the above list; with the asset indicated on municipal plans and/or maps. Table A2.1 below provides an example of the infrastructure asset hierarchy or categorization.

Table A2.1: Example Infrastructure Asset Hierarchy

Network	Facility or Asset Group	Asset
Roads	Paved Arterial and Distributor Roads	Formation
		Pavement structure
		Pavement surface
		Kerbs and channels
	Paved Collector and Residential Roads	Formation
		Pavement structure
		Pavement surface
		Kerbs and channels
	Gravel Roads	Formation
		Gravel surface
	Structures	Bridges
		Large Culverts
		Retaining walls
		Structures
	Footpaths	Paving
		Trees/ planting
Street Lights Street lights	Street lights Post	
	Street light fixtures	
Street furniture	Bus shelters	

Network	Facility or Asset Group	Asset
		Guard rails
	Streetscape horticulture	Trees/ shrubs/ hedges Grass verges
	Walls/ fences	Walls/ fences
Storm water drainage	Interception and conveyance	Pipelines
		Culverts
		Open channels
	Attenuation	Earth wall
		Site
		Perimeter
Hydrological Monitoring Stations	Building	
	Specialist equipment	
Solid Waste Management	Collection	Vehicles
		Containers/ bins
	Transfer stations, and processing facilities	Buildings
		Electrical plant
		Mechanical plant
		Site
		Perimeter protection
	Landfill Site	Earthmoving and compaction equipment
		Landfill preparation
		Perimeter protection
		Building
Weighbridge		
Sanitation	Collection	Sewerage reticulation
		Vehicles (e.g. sludge sucker, tractor/trailer)
	Bulk pipelines	Rising mains
		Gravity mains (outfall)
	Pump station	Civil works
		Building
		Electrical plant
		Mechanical plant
		Meter/ Telemetry
		Site
	Wastewater Treatment Works (may be broken down per process element)	Perimeter protection
		Civil Works
		Mechanical plant
		Electrical plant
		Buildings
		Meters
Site		
Perimeter protection		

II. Operation and Maintenance Plan

4. The DSCs and CSCs shall also prepare an operation and maintenance (O&M) plan for their respective municipality. While the plan is intended to be used by municipal staff as a guide for operating, maintaining and monitoring the functioning of infrastructure system, DSC/ CSC will support the respective municipality to implement the plan. The O&M Plan should be organized into the following sections (at least):

- (i) **Updating inventory.** Systematic updating of asset registry or inventory with regard to acquisition costs, original and remaining useful life, physical condition, and cost history for repair and maintenance;
 - (ii) **Operations instructions.** Clear, comprehensive and step-by-step instructions for operating each systems or component;
 - (iii) **Maintenance needs.** Describe the required maintenance (particularly preventive and routine) activities, frequency, procedures, and responsibilities for each of the assets and systems;
 - (iv) **Maintenance methods.** Define clear and detailed instructions for carrying out maintenance so that new personnel can easily understand the tasks required; and
 - (v) **Management information systems.** Recommend what type of management information systems are required, and how to implement and manage them to support high-quality asset management.
5. These processes are interrelated and some cases interdependent.

APPENDIX 3: SUMMARY OF PROJECT DEVELOPMENT FACILITY GUIDELINES

1. **Overview.** Project development facility (PDF) guidelines have been drafted and will be approved by the Steering Committee of the Urban Planning and Development Center (UPDC)¹ and the Department of Urban Development and Building Construction (DUDBC). The draft (and later approved) guidelines are available upon request. All consultants under the PDF financed by ADB will be recruited following ADB Guidelines on the Use of Consultants (March 2013, as amended from time to time). Priority for the ADB financed PDF facility will be for projects with regional impact -e.g., city region development, city clusters, improving border crossing facilities, regional infrastructure such as a regional landfill, etc.
2. The guidelines are intended to provide systematic guidance to the UPDC and DUDBC on sound processes and practices for project planning, design and appraisal to generate a shelf of high-quality detailed project reports and accelerate the much needed investments for the urban sector. This is critical given that projects take 2 years or more to reach the procurement stage.
3. **Guiding principles.** These include (i) green, resilience, inclusive planning, (ii) enhanced complementarity and synergies between cities, (iii) integration in infrastructure provisioning, (iv) early involvement in safeguards, land acquisition and land management, (v) costing of project lifecycle, and (vi) adequate investment on 'soft' components including urban planning and strengthening of municipal finances and capacity to undertake operations and maintenance.
4. **Project selection.** The document gives guidance on project prioritization per criteria such as (i) urban hierarchy (e.g. population, density, and concentration of economic activities), (ii) nature of infrastructure (e.g. improved access to basic services for emerging towns and improved quality of services and higher order needs for more developed centers), (iii) alignment with national and sectoral policies, (iv) scale (i.e. to avoid fragmentation), and (v) expected economic and social impacts. The guidelines propose quantitative and qualitative methodology for geographical prioritization. Projects of less than \$10 million will not be considered for UPDC's PDF. There will be two categories: (i) medium-sized projects (\$10-100 million), and (ii) large projects (\$100 million+).
5. **Initial steps.** The document gives step-by-step guidance on how to embark on robust project preparation, to ensure a host of strategic economic, social and environmental aspects are taken into consideration, and to inform project objectives and design. The guidance is meant also to identify soft support requirements for institutional strengthening and planning, as well as investments in infrastructure.
6. **Implementation arrangements.** The document provides options and recommendation for effective implementation arrangements for differing levels of capacity—and for different types of projects— e.g. for stand-alone municipality interventions, or for city clusters, or for regional interventions.
7. **Appraisal process.** The document provides guidance on assessing project feasibility. This includes factors such as technical viability, demand, local support and commitment,

¹ Steering Committee is chaired by Secretary, MOUD. Members include representatives from National Planning Committee, Ministry of Finance, Ministry of Urban Development, Ministry of Federal Affairs and Local Development, Ministry of Physical Infrastructure and Transport, Department of Urban Development and Building Construction, Federation of Nepal Chambers of Commerce, Confederation of Nepalese Industries, Land and Housing Development Association, Municipal Association of Nepal, Regional and Urban Planners Society of Nepal, and Center for Urban Planning Studies/Institute of Engineering (Tribhuvan University).

continued relevance, risks, land availability, economic and financial viability (including willingness to pay), availability/modality of finance, partnerships, capacity for O&M, social impacts, environmental impacts, and others. Based on this analysis, some adjustment to the approach and/or scope and design is likely required.

8. **Administrative approvals.** The document outlines the bureaucratic steps for the UPDC to approve its PDF pipeline, review the pipeline, and update it periodically.

Table 3.1 Scoping and Prioritization Phase

Criteria	Due diligence or description
Alignment with policies and plans (4.4.1)	<i>National and sectoral</i>
Proposed project/program title (4.1.2)	<i>Does the name reflect the objective?</i>
Proposed rationale and objectives (4.1.2)	<i>What does the project/program intend to achieve? Why?</i>
Geographical coverage (4.1.2)	<i>Where is the project/program located?</i>
Expected beneficiaries (4.1.2)	<i>Who are the expected beneficiaries? How many people are expected to benefit?</i>
Proposed scope and activities (4.1.2)	<i>What are the core activities proposed to achieve the expected change?</i>
Program vs project (4.1.2)	<i>Is this part of a wider initiative, or proposed as a stand-alone project?</i>
Urban hierarchy (4.2.1.1)	<i>What is the importance of the proposed cities in a national or regional context? What is the size of population and density? Describe the concentration of and type of prevalent economic activities</i>
Nature of infrastructure (4.2.1.2)	<i>Does the proposed scope aim to increase access to services? Or quality of existing services?</i>
Scale of investment (4.2.1.4)	<i>Is the proposed investment sufficiently large for PDF consideration? If not, can it be packaged with other smaller investments?</i>
Location selection criteria (4.3.3)	<i>Explain what criteria were used to select the project location (if relevant)</i>

Table 3.2 Preliminary Design Phase

Criteria/ Factor	Due diligence or description
Profile (4.3.5.1)	<i>What is the regional and local profile of the targeted area? Describe physical, demographic, social, economic, environmental, administrative and other considerations. Describe boundaries of the proposed intervention area.</i>
Growth trend (4.3.5.2)	<i>Provide data on urbanization and economic growth trends; What are the dominant economic activities?</i>
Regional and local development vision, strategies, programs (4.3.5.3)	<i>Describe existing initiatives and aspirations; describe local capacity for planning</i>
Regional and local development potential (4.3.5.4)	<i>Describe competitive or comparative advantages of the proposed area – e.g. related to industry, culture, heritage, nature, services, trade, existing infrastructure, location, connectivity, trade facilities, social capital and others.</i>
Impediments to development (4.3.5.5)	<i>What are the main constraints to unleashing the zone's potential? They may include physical, institutional, financial, legislative, social, and/or political constraints, among others.</i>
Existing infrastructure (4.3.5.6)	<i>Describe existing infrastructure, including technical specifications and condition</i>
Infrastructure demand (4.3.5.6)	<i>Describe demand for new infrastructure and improved services; what are the priorities? Can economies of scale be</i>

Criteria/ Factor	Due diligence or description
Preliminary project design (4.3.5.7)	<i>What are the proposed objectives, components, and beneficiaries? Describe both hard and soft components; and describe how the project will address they key impediments to development.</i>
Estimated cost (4.3.5.7)	<i>What is the estimated cost?</i>
Availability and feasibility of land (4.3.5.8)	<i>Describe the adequacy of land; and justification for selecting particular sites (e.g. densities, proximity to xxx, suitability for land pooling, etc..)</i>
Project benefits (4.3.5.9)	<i>Describe environmental, social and economic benefits, including unquantifiable benefits</i>
Implementation arrangements (4.3.5.10)	<i>Describe the institutional arrangements for implementation with details on roles and responsibilities; and explain why the proposal is suitable for the project</i>

Table 3.3 Feasibility Assessment Phase

Criteria/ Factor	Due diligence or description
Technical viability (4.3.1.1)	<i>Include aspects such as appropriateness of technology, accessibility and suitability of sites, mitigation against risks and hazards (climate change, floods, earthquakes, other), availability of land, availability of water (or proposal to provide), adequacy of power (or proposal to provide)</i>
Local ownership (4.3.1.1)	<i>Include minutes of consultations; explain issues raised by key stakeholders; is demand sufficiently high for the proposed project? What are the expectations? What is the level of commitment for any proposed reforms?</i>
Institutional viability (4.3.1.2)	<i>Provide findings from the institutional capacity assessment for implementation and post-construction phase; what support is required through the project to ensure sustainability of new and existing assets? What assurances are required?</i>
Financial viability (4.3.1.3)	<i>What is the source(s) and modality of cost-sharing and finance? What are the proposed terms and conditions for finance? What is the state of municipal finances (or relevant entity)? What is the financial model to ensure sustainable O&M? Is their willingness-to-pay? Is there a need for viability gap funding to ensure sustainability of new assets?</i>
Economic viability (4.3.1.3)	<i>What are the economic benefits? What are the expected returns?</i>
Social impact (4.3.1.4)	<i>Describe positive and negative impacts related to poverty alleviation, youth, indigenous people, women and other marginalized groups. Describe how communities are involved in the design process, and how they will be involved during implementation; include minutes of consultations. Describe targeted social interventions. Describe mitigation measures for negative impacts, if any, including on resettlement</i>
Environmental impacts (4.3.1.5)	<i>Describe positive and negative impacts to the environment, and related mitigation measures, if any; Determine if EIA is required.</i>
Key risks (4.3.1.6)	<i>Describe key risks and mitigation measures and propose risk category (e.g. high, moderate, low); risks could be related to capacity, governance, stakeholder participation, political interference, etc..</i>
Procurement capacity assessment	<i>Assess experience and capacity of implementing agency(ies)</i>

Criteria/ Factor	Due diligence or description
(4.3.1.7)	<i>to undertake procurement; and identify support required</i>
Coordination mechanism (4.3.1.8)	<i>Identify needs for coordination at local and central level; and propose mechanism(s)</i>
Innovation (4.3.1.9)	<i>Describe any innovation that the project introduces (e.g. use of technology, financing mechanism, land management, water reuse, climate change adaptation, urban design, etc..)</i>

APPENDIX 4: PROJECT CLIMATE RISK FINANCING CALCULATIONS

Project Subcomponent	Link to Climate Risks Identified in the Project Climate Risk Assessment and Management Reporting	ADB financing ¹ (\$m)	Non-Qualifying Costs	Qualifying Costs
Output 1: Urban infrastructure in 8 municipalities constructed or rehabilitated with climate-resilient and sustainable designs (civil works, equipment, goods, consultancy services)	<p>Project cities are flood-prone, and it is widely assumed that climate change may further exacerbate the problem. The climate assessment for the project suggests that by 2050 there will be an increase in rainfall from about 3-16% during the monsoon season and an increase in rainfall intensity. This would exacerbate waterlogging problems in the urbanized areas of the Terai region, where all 8 project municipalities are located. Climate change may also exacerbate flooding from rivers. Project municipalities are already facing an infrastructure deficit even under the current climate. Increased drainage capacity and improved drainage design; improved road conditions that ensure surface runoff can flow to drains; operations and maintenance of existing and new drains; and a functioning and integrated solid waste management system are all required to ensure that the project municipalities are more resilient to the projected effects of climate change.</p> <p>The primary cause of flooding in the project areas is however difficult to attribute to climate change. Likewise, landfills will require strong flood protection even under the current climate. Nevertheless, \$12.2 million of the drainage component (works) has been taken as qualifying cost due to climate proofing (i.e. larger capacity drains); and \$6.1 million of the solid waste management component (works) is proposed as a qualifying cost for mitigation in line with design measures and related costs to make these features and the cities more resilient and their contribution to climate change mitigation. Solid waste management component is also expected to reduce annual greenhouse gas emissions by about 12,000 tCO₂e and is critical to the functionality of the drainage network.</p>	114.0	95.7	18.3
Output 2: Municipal capacity strengthened (consultancy services)	<p>This component includes the preparation of urban master plans and bylaws that address risk levels for different land uses, infrastructure, and settlements, and will make the cities more resilient to disasters, including floods that may be exacerbated by the effects of climate change. It will also strengthen the financial and technical capacity of municipalities to maintain their drainage systems and operate their solid waste systems to</p>	12.2	11.0	1.2

¹ Only base costs have been considered in the calculation.

	avoid clogging of drains. Therefore, proportionate cost under this output is a qualifying cost .			
Output 3: Project preparation capacity improved	The guidelines for the project development facility shall include provision for ensuring climate resilience of future projects, where appropriate; and consultants will ensure that the DPR of future investment project also includes climate resiliency features, including climate change analysis and hydraulic modeling. However, the extent of the requirement is not yet known, and therefore only a small amount is assumed to be a qualifying cost .	5.4	5.1	0.3
Subtotal	ADB Financing of Base Cost	131.6	111.8	19.8
	ADB financing of Contingencies	18.4	17.4	1.0
TOTAL ADB Financing		150.0	129.2	20.8

DPR = detailed project report.

**APPENDIX 5: TERMS OF REFERENCE:
DESIGN AND SUPERVISION CONSULTANTS SERVICES FOR PROVINCE 7 PROJECT
MUNICIPALITIES**

I. OVERVIEW OF PROJECT CONSULTANT SERVICES ORGANIZATION

1. The project coordination office (PCO) based in the Department of Urban Development and Building Construction (DUDBC) will have a regional project implementation Unit (R-PIU) in the Province 7 in association with project municipalities of Bheemdatt, Dhangadhi Godawari, and Shuklaphanta. Project implementation support units (PISU) will be established in all 4 municipalities. All these organizations will be provided with necessary consulting services under the project to strengthen their management and implementation capability including engineering design and construction supervision.
2. The various consultant firms and individual consultants will be selected in accordance with the latest procedure and guidelines set by the ADB.
3. The main objectives of the design and supervision consultants (DSC) is to assist in verifying specific project components and component sites, update maps and plans, undertake surveys, investigations and urban planning and prepare detailed technical designs of various project components for each of the project municipalities. Prepare technical specifications and contract document, assist in construction supervision, quality control and measurement of works under the Project.
4. The DSC will ensure that issues impacting women, poor and excluded are assessed and addressed in the project components, that any design or survey works identify opportunities for engagement of women and the excluded as key actors and decision makers, not just as passive beneficiaries, and that contract and tender documents mainstream GESI issues.
5. The composition of the DSC shall be in a manner whereby there would be a core team of experts to oversee the whole of a municipality sub-project activities and subject specialists who would be inducted for specific activity requirement. The core team and the subject specialists would consist of experts in urban planning, project management; drainage; municipal solid waste management; municipal roads; municipal buildings; contracting and procurement, participatory planning, environmental and social safeguards, GESI and community awareness.
6. The DSC will report to the R-PIU project manager and will work under the overall guidance, technical control, and direction of the project deputy director at the PCO and the project management consultants (PMC). The DSC will coordinate with the IDC and municipalities regarding operation and maintenance of the urban infrastructure constructed and services provided.

II. SCOPE OF WORK

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

A. General Task

1. **Project planning, surveys, investigations and analysis**

- (i) Confirm project subprojects identified during the Project conceptual design phase, identify necessary surveys and investigations for specific urban planning tasks and detail design of the agreed identified project components;
- (ii) Prepare urban development plans, infrastructure master plans, and sanitation plan for entire municipality and preliminary engineering designs; ensuring that plans and designs are gender and differently able friendly;
- (iii) Assess identified resettlement issues including land acquisition, prepare, review and update resettlement plans to satisfy ADB's SPS including implications of any land acquisition on women, poor and excluded and address any negative impacts;
- (iv) Advise and assist IDC and PISU in the identification, selection, planning, and implementation of small infrastructure under performance based socioeconomic development program;
- (v) Prepare, review and update the initial environmental assessment (IEE) and/or environmental impact assessment (EIA) and subproject-wise environmental management plans (EMPs);
- (vi) Prepare a risk assessment and management plan (RAMP);
- (vii) Support R-PIU to update the procurement plan and formulation of contract package;
- (viii) Work with the R-PIU to prepare a detailed implementation schedule and management plan covering all stages of the implementation for each component from field survey to hand-over, to ensure minimization of disruption to the public. Ensure wider consultation while preparing the implementation schedule;
- (ix) Prepare quality assurance and quality control plan (QA and/or QC) for ensuring execution of quality works; and
- (x) Orient DSC's experts including supervisors and contractor about the QA and QC plan.

2. **Detailed Engineering Design**

- (i) Once the preliminary plans and designs are approved by each project municipality, R-PIU, and PCO; prepare detailed designs of prioritized infrastructures by PPTA in accordance with National Design Standards and sound engineering practices;
- (ii) Prepare and submit construction drawings, cost estimates and associated contract documentation to include Letter of Invitation, conditions of contract, specifications, detail drawings, design reports, bills of quantities, environment management plan (EMP), health and safety (EH&S) plans for construction sites, and resettlement plan or due diligence report etc. for all subprojects;
- (iii) The design shall meet the particular requirements of the project municipalities, PCO, R-PIU and shall be sufficiently detailed to ensure clarity and understanding by the contractors and will be incorporated into a detailed design report to be submitted for approval of the R-PIU and PCO. The design criteria will have GESI sensitive standards;
- (iv) The components of wastewater (fecal sludge) management, drainage, solid waste management, municipal roads, and municipal building components as delineated in the approved project scope will require detailed engineering design;
- (v) For all detailed engineering designs DSC will carry out necessary topographical surveys, total station surveys, construction material survey, water, wastewater and solid waste sampling and analysis, geotechnical, hydro-geological and soil investigations. All surveys and investigations shall be accurate and plotted for review by PCO, R-PIU and PISU;

- (vi) The CAD files (three sets of hard and digital copies) of physical surveys and detailed engineering designs shall be submitted to R-PIU in AutoCAD format at the time of submission of the reports. Where possible, all such surveys and investigations will be informed by local people's knowledge and experience. The engineers' estimate shall be prepared on the basis of schedule of rates and/or market rates;
- (vii) Detailed engineering design should include scope to link and benefit marginalized settlements to the core project component design. If not, better technical options should be considered. The design criteria should include GESI and disabled friendly standards; and
- (viii) Assist R-PIU with procurement of goods and equipment, civil works under ICB, NCB, IS, or Shopping procurement method as necessary, including preparation of documents, tendering, tender evaluation and contract award and recruitment of consultants (individuals or a firm), as required.

3. **Construction Supervision**

- (i) Supervise construction of project components, monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings;
- (ii) Review contractor's performance by assessing the adequacy of the contractors' construction schedule; mobilization of material, labor; and construction method;
- (iii) Furnish all revisions and detailed drawings as necessary during the execution of the contract, and cooperate with third party inspections including technical auditor appointed by National Vigilance Center or other agencies as necessary;
- (iv) Examine contractors' claims, and recommend for approval;
- (v) Prepare operation and maintenance plan and procedure, check installation and commissioning;
- (vi) Maintain daily record of measurement for works completed and in progress and review interim payment statement submitted by the contractors and bills of suppliers and prepare certificate for payment by R-PIU;
- (vii) Ensure that works are constructed to the prescribed quality in accordance with specifications tender documents and quality assurance system and that the work is carried out in compliance with EH&S measures. Include monitoring of labor wages for women and men in addition to EH&S standards;
- (viii) Assist the municipalities establish mechanisms for engagement of local communities in supervision e.g. through Ward Citizen's Forum and Users' Committees. Ensure that these mechanisms are GESI friendly with transparent processes;
- (ix) Assist the R-PIU in the resolution of contractual issues including review, evaluation and confirmation of contract Variation Orders;
- (x) Assist the R-PIU with overall contract management and ensure the quality of the "as built" drawings submitted by the contractor;
- (xi) DSC will be responsible for measurement and certification of the works completed and for certifying and recommending payments to the contractors;
- (xii) In all aspects of design and supervision ensure efficient transfer of knowledge and skills to the R-PIU and municipal staff, specifically women, for future planning, development and O&M. Prepare inception report, monthly/quarterly progress reports and project completion report, including reporting on GESI related measures undertaken; and
- (xiii) Assist R-PIU to undertake other tasks as assigned by the PCO.

B. Specific Tasks

1. Urban Planning. In addition to the general support tasks:

- (i) Base Maps
 - (a) Assess quality and accuracy of existing geo-referenced digital mapping in the municipalities. Develop or update digital base maps at 1:2,500 scale for urban areas and at 1:5,000 scale for the remaining areas. Base maps should include major topographical features such as roads, water courses and building footprint;
 - (b) Prepare geo-referenced digital inventory maps suitable for input to GIS of all existing urban infrastructure, including roads/ drains, water supply, electric power lines and sub-stations, street lighting, public land, open space/ parks, community facilities, etc. (Note: other specific mapping will be undertaken by the municipalities assisted by the IDC on the same GIS platform);
 - (c) Prepare road hierarchy by defining right of way, road and off-road standards, including cycle track; by reviewing and elaborating Urban Infrastructure Development Norms of DUDBC and taking into consideration Disaster Risk Management (DRM); and
 - (d) With assistance from the municipalities delineate poverty-ridden areas within the municipality on the basis of the nationally accepted classification system. Delineate gender-inequality or gender discrimination problem areas within the municipality on the basis of the analysis of socioeconomic information and also delineate the pocket areas of marginalized population.
- (ii) Preparation of Risk Sensitive Land Use Plan
 - (a) Carry out urban growth trend and multi hazard assessment based on available socioeconomic, geo-morphological map, flood zones, river bank erosion, land use information and local consultations to identify different areas that need to be protected, controlled or promoted. These will be based on national and/or international guidelines on Risk Sensitive Land Use Planning. Propose incentive mechanism for citizens to adhere to the Land Use Plan;
 - (b) Prepare zoning maps based on the existing growth pattern, building typology, density and potential future growth to define urban form of the municipality;
 - (c) Prepare land use map, as classified by National Land Use Policy 2012 and its subsequent update if available, by applying participatory planning approach; and
 - (d) Provide advisory support to IDC to review and amend building bye laws, by taking into consideration of Model Bylaws prepared by DUDBC, with specific provision for: a) minimum land parcel size, ground coverage and building height and also make specific provision for mixed land use and changes in building use; and b) preparation of an implementation and monitoring mechanism for risk sensitive land use plan, building bylaws and land sub-division regulation.
- (iii) Preparation of Urban Development Plan
 - (a) Use the concept development plans prepared for each municipality under the PPTA to develop a long-term urban development plan for each

- municipality to complement the regional development vision; with extensive discussions with wider stakeholders; and
- (b) Based on the agreed urban development plan prepare goals, objectives, strategies, plans and programs, funding requirement and institutional roles and responsibilities.
- (iv) Feasibility and Detail Project Report of Land Pooling Project
- (a) Identify potential land pooling sites for residential development as well as for the acquisition for applicable public facilities i.e. special economic zone or industrial development or wholesale market or sports stadium; in accordance with the land pooling development concept in the TA study report.
 - (b) Conduct consultation and/or orientation meetings with the landowners to obtain consensus on the project and carry out feasibility study of the selected site with the block planning, tentative project cost and contribution ratio.
 - (c) Discuss with the concerned government offices to assure investment on the land and infrastructure for above public facilities; facilitate for entering into tripartite agreement.
 - (d) Prepare the detailed project report one for each municipality containing, but not limited to the following:
 - i. Detailed information of land parcels including names of owners and address.
 - ii. Topographical survey of the area and preparation of map; digitization and superimposition of cadastral map with minimum possible error.
 - iii. Detail design of neighbourhood roads, drainage, water supply, electricity and/or communication and waste water treatment plant; on the basis of envisaged population density of the area.
 - iv. Detail quantity and cost estimates for the infrastructure development and associated costs.
 - v. Valuation methodology based on location, existing facilities, shape and size of the parcels to develop land contribution policy.
 - vi. Land parcel re-plotting map and associated contribution details.
 - (e) Facilitate municipality in getting project approval from MOUD and constituting land users' committee and land management sub-division committee; in implementing the project in accordance with the Town Development Act 1998 and land pooling manual published by DUDBC.

2. **Wastewater Management.** In addition to the general support tasks, this will entail the preparation of sanitation action plan and wastewater management master plan for each municipality. The following activities are envisaged:

- (i) Identify areas where wastewater disposal or septic tanks are problematic, i.e. where septic tanks are overflowing onto land or into surface water drainage; e.g. due to: a) high water table; b) impervious ground; c) no space for soak-pit; d) septic tank needs frequent dislodging; e) no space for septic tank; and f) prolonged seasonal flooding. Also disaggregate data by sex/ caste/ ethnicity, income and location regarding access to sanitation facilities;
- (ii) For improved fecal sludge management (FSM) determine fecal sludge quality, quantity, and its characteristics. Assess options for: a) equipment and types of suction vehicles and pumps required for septic tank emptying and transport; and

- b) sludge treatment as a part of integrated solid waste management subproject. Assess advantages and disadvantages with cost of options including responsibilities for emptying, transporting, treatment and disposal;
- (iii) Develop design options for upgrading and retrofitting pit latrines, access pits to standard septic tanks at households, institutions and public toilets. Share design with each municipality which could be implemented under small infrastructure improvement;
- (iv) Together with IDC identify and plan through public consultation and participation involving women, poor and the socially excluded suitable locations for community sanitation blocks and facilities including participation in design and agreement on physical and financial responsibility for operation and maintenance;
- (v) Identify areas in relation to phased urban development and water supply expansion appropriate for on-site and off-site sewage treatment and disposal including staged development options; i.e. a) on-site septic tanks with soak-pit; b) septic tanks with overflow to small bore sewerage; and c) conventional sewerage;
- (vi) With reference to the natural drainage plans (see roads and drainage section) identify suitable locations for wastewater treatment, fecal sludge management and effluent disposal. Options for treated effluent re-use (e.g. irrigation, fish ponds) should be incorporated where feasible;
- (vii) Prepare a phased wastewater management plan following the approach of using appropriate technology by utilizing and upgrading the existing system;
- (viii) Prepare in relation to the urban development plan a phased 20-year capital investment plan for municipal wastewater management;
- (ix) Plan, design and prepare contracts for wastewater management including septage, sullage treatment plants, as appropriate. Assist the municipal authorities with land acquisition for the identified and/or agreed wastewater treatment site;¹
- (x) Carry out environmental examination of proposed septage treatment sites and undertake necessary ground/ soil investigations; and
- (xi) Provide technical inputs and coordinate with IDC to assist the municipality and communities for small scale and/or local interventions related to water and sanitation in poverty pockets.

3. **Solid Waste Management.** In addition to the general support tasks:

- (i) Update available information on the composition and volume of waste generated from domestic, institutional and commercial sources, as far as required for preparation of a SWM Master Plan, SWM strategy and implementation plan; collect disaggregated data regarding solid waste management practices;
- (ii) Based on updated detail municipality maps prepare collection and transportation program including vehicle routing; confirm equipment requirements and prepare specifications for tenders;
- (iii) Based on the quality and quantity of different types of solid waste, including septage sludge, carry out a sample survey to assess options for waste reduction, re-cycling and the demand and market for composting and recyclable products;
- (iv) Ascertain the preferred options with gender/ caste/ ethnicity/ income disaggregation for collection and willingness-to-pay (or ability to pay) for

¹ Advance action in acquiring land for wastewater treatment is necessary even if WWTPs are not included under the project in order to protect/ reserve the land for future infrastructure investment.

- improved waste collection from households, markets, commercial centers, and hotels/ restaurants;
- (v) Carryout environmental examination of proposed transfer stations (if any) and integrated solid waste treatment/ processing and disposal sites and ensure that all environmental clearances are obtained. Undertake geo-technical site surveys and soil investigations, if necessary;
 - (vi) Determine the potential for private sector participation in waste collection, recycling, transportation and disposal; adopt affirmative action principles to promote women's groups/ cooperatives in recycling enterprises;
 - (vii) Propose improvements in the institutional arrangements for collection, transportation and disposal of solid wastes including increased private sector involvement;
 - (viii) Determine the technical and financial viability for shared landfill site for 2 or more municipalities; propose institutional/ financial mechanism for operation;
 - (ix) Prepare in relation to the urban development plan a phased 20-year capital investment plan for municipal solid waste management;
 - (x) Identify and plan post-closure of existing open waste disposal sites where applicable;
 - (xi) Design and prepare contract documents, where applicable, for construction of solid waste and septage treatment facilities such as aerobic and anaerobic digestion plant; and
 - (xii) Plan, design and prepare contract documents for construction of final waste disposal site (engineering landfill site and/or sanitary landfill site) as required.

4. **Roads and Drainage**

(i) **Roads**

In addition to the general support tasks:

- (a) Survey condition of existing road pavement and assess adequacy of drainage system. Prepare detailed inventory with reference map of road network including condition of cross drainage structures;
- (b) Conduct project component specific topographical surveys and hydrological/ geotechnical investigations on the proposed alignments for collecting information necessary for engineering design;
- (c) Conduct traffic surveys and carry out traffic analysis and provide 10-year forecast for road pavement design;
- (d) Prepare in relation to the urban development plan a phased 20-year municipal capital investment plan for road and access improvement including surface drainage;
- (e) Identify drainage/ irrigation culvert structures or nalla bridges that require widening or replacing;
- (f) Identify linkage roads, tracks or trails for upgrading as cycle ways and those which can facilitate connectivity and reduce work burden of women, poor and excluded of nearby settlements;
- (g) Ensure adequate right-of-way (ROW) for providing footpaths and service corridors for installation of proposed and future infrastructure (e.g. water supply, telecommunications, etc.). Service ducts to be provided at road junctions to avoid future disturbance of the finished road construction;
- (h) Prepare detailed designs and contract documents for new and existing roads-to-be-upgraded or widened. Designs to be 'pedestrian friendly'. Municipal thoroughfares to include environmentally efficient street lighting (e.g. solar powered LED) and street furniture with adequate segregated

space for pedestrians and cyclists. Environmental enhancing greenery planting (e.g. indigenous shade providing trees) to be included wherever practical;

- (i) Identify measures for compensation of land and structures to be acquired in order to provide the required alignment and ROW and measures for compensation;
 - (j) Conduct road safety audit to identify road safety issues, impacts and prioritization for treatment in subsequent stages of project implementation;
 - (k) Promote employment opportunities for women, poor and the excluded in construction activities. Ensure provision of gender specific facilities for employees/ laborers; and
 - (l) Coordinate any required traffic diversions due to the project (including other sectors) with the local traffic police and Department of Roads (DOR). Ensure that road safety issues identified at design stage are properly addressed during construction. Road safety audit to be undertaken on completion of the works.
- (ii) **Surface Water Drainage**
In addition to the general support tasks:
- (a) Collect all available data, contour maps, details of past schemes and reports; collect historic rainfall data; data on past incidents of rainwater or river flooding and loss;
 - (b) Undertake location and condition survey of existing drains. Prepare a base map of the municipal drainage system with contours related storm water drainage. Prepare an inventory on the status of the condition of existing drains, irrigation canals, ponds, and other water bodies within the municipality including their catchment areas. The inventory to be in a form that can be easily transferred to a GIS;
 - (c) Identify and map areas within the municipalities prone to annual river flooding (rather than flooding caused by localized storms). Discuss problem areas with the Ministry of Irrigation and coordinate (if appropriate) with any related river management and flood control study projects. Identify whether these problems are experienced more by particular social groups and link it with the GESI action plan;
 - (d) Prepare in relation to the urban development plan a comprehensive drainage master plan based on Sustainable Drainage System (SuDS) principles for each municipality. Identify missing drainage links and a prioritized program of drainage improvement works. Consideration to be given to developing the retention and storm balancing capacity of existing water bodies or ponds, where applicable, while incorporating or increasing community use and environmental enhancement in the designs. Attention to be given to protection of channels used for agricultural irrigation. Identification and separation of the functions of drainage and irrigation channels might be necessary;
 - (e) Identify major wastewater producers and industrial/pollution sources that may require additional treatment prior to discharge to the public drains or to be isolated until in compliance with environmental norms. In consultation with the Ministry of Environment recommend appropriate actions required; and

- (f) Prepare detailed designs and contract documents and incorporate with the road development plans, for surface water drainage improvements.
5. **Financial and Economic Analysis.** In addition to the general support tasks:
- (i) Prepare the item-wise and total cost estimates using the ADB-standard price and physical contingencies, and detailed financing and disbursement plans;
 - (ii) For each subproject prepare financing plans, economic and financial analysis, arrangements for O&M and arrangement for PPP, if applicable. Outputs of the socioeconomic surveys, including willingness-to-pay surveys for urban sector investments, land acquisition and any environmental mitigation costs will be incorporated in the design of subprojects;
 - (iii) Conduct economic analyses of subprojects, including estimation of economic internal rate of returns (EIRRs), and other economic indicators to assess the project economic viability in accordance with ADB's Guidelines;
 - (iv) Undertake financial analyses of subprojects in accordance with ADB's Guidelines. For non-revenue earning subprojects, a least-cost analysis will be undertaken to assess the financial viability of the project;
 - (v) Carry out sensitivity analysis for EIRR with respect to important parameters such as project risks, revenues, capital investments, O&M costs etc., based on the capital, O&M and other cost design tariff structure (where applicable); and
 - (vi) Prepare financial reports as required by various agencies (ADB, GoN).
6. **Financial Administration.** In addition to the general support tasks:
- (i) Work closely with the financial management section of the R-PIU and assist R-PIU to prepare annual program and budget of the project activities;
 - (ii) Assist R-PIU to prepare project account, maintain project account and prepare financial reports as per requirement of the government and ADB;
 - (iii) Prepare financial administration guidelines of the project for the use of municipalities;
 - (iv) In coordination with the IDC, support municipalities to develop and maintain project account and SOE procedures;
 - (v) Assist internal and external audit of project account; and
 - (vi) Working as a financial management advisor of the R-PIU, provide inputs in financial administration of the project and all necessary support to operate financial administrative functions smoothly.
7. **Social and Environmental Safeguards.** In addition to the general support tasks:
- (i) Resettlement
 - (a) Prepare and Updating of Resettlement Plans: Prepare and update resettlement plans, as required in accordance with project resettlement framework. Prepare due diligence report to confirm absence of land acquisition, involuntary resettlement and indigenous people plan in proposed component;
 - (b) Resettlement Monitoring: Assist the R-PIU in the implementing and monitoring of the resettlement plan. Assist the PIU to ensure that the ADB's Safeguards Policy Statement (2009) and the government policies are met. Ensure issues of women, poor and the excluded are implemented as addressed in the resettlement plan; and
 - (c) Grievances Redress Mechanism Management: Monitor that grievances are properly recorded by R-PIR or PISU and addressed on time. Any other works assigned by the R-PIU will be carried out.

- (ii) Environmental Protection
 - (a) Environmental Screening: Carry out component wise environment screening and prepare a report;
 - (b) Preparation/ Updating of IEE and EIA: Prepare IEE or EIA as required in line with the environmental assessment and review framework (EARF) prepared under project preparation TA 8817-NEP. Preparation/ Updating of environmental management plans (EMP): For each component requiring an IEE, prepare site specific EMP for each works package, covering the aspects for environmental management during construction and operation of the project;
 - (c) Environmental Monitoring: Assist the R-PIU in implementing and monitoring the EMPs. Conduct awareness and capacity development of concerned stakeholder. Review Contractor's EMP implantation progress report and suggest corrective measures;
 - (d) Public Disruption due to Construction Works. Public disruption problems due to construction related activities will involve providing advice to communities on what to do in the event of project related to construction site problems and the grievance redress mechanism; and
 - (e) The DSC sector specialists will also assist in the preparation/ updating of the resettlement plan, a management plan for temporary disruption and impacts during construction of new/improvement of existing drainage system and other construction works according to ADB Social Safeguard Policy 2009. The following activities will be carried out for the social safeguards of the affected people:
 - ii. Provide, in association with the municipality, a project awareness campaign to include environmental and social issues, such as, temporary disruption and impact to the households/ community ensuring the coverage of different social groups, and compensation entitlements.
 - iii. Assist PIU in identifying and enlisting affected persons. Organize regular individual and/or joint meetings of affected persons with PIU; provide complete information to affected persons about project activities, benefits accruing to the citizens as a result of the proposed subproject; and help them understand their important role in the subproject implementation. Participatory methods should be used to organize these meetings, especially for involving the vulnerable sections of affected persons.
 - iv. Assist PIU to coordinate and provide transparency in the setting and ensuring distribution of compensation payments to affected persons for temporary business disruption, affected structures, if land acquisition required or other agreed project related damages or grievances; and ensure those experiencing different kinds of exclusions are supported to access their compensation.
 - v. Ensure that the affected persons are given full entitlements due to them according to the resettlement plan entitlement matrix. Support the affected persons, especially women, poor and those from excluded groups in collaboration with the relevant authorities, in cases of relocation and rehabilitation, including counseling, if necessary.

C. Gender Equality and Social Inclusion (GESI)

In addition to the general support tasks, the DSC will:

- (i) Support R-PIU in the implementation and reporting of GESI action plan;
- (ii) Advise IDC in implementing GESI Action for each municipality;
- (iii) Ensure all design criteria for infrastructure will have GESI responsive standards including safety and security;
- (iv) Guide IDC to identify small works and services under performance based allocation program that supplements key infrastructures and facilitate to improve access to market and reduce work-burden of women, poor and excluded citizens of municipality;
- (v) Provide guidance to R-PIU, PISU, and municipalities to ensure that specific issues of women, poor and the excluded are recognized and responded to in project municipalities;
- (vi) Conduct socioeconomic baseline survey and collect disaggregated data;
- (vii) Develop in cooperation with the IDC and municipalities a GESI (sex, caste/ethnicity, location, FHH, below poverty line HH, other vulnerability) disaggregated data collection and reporting system of all activities; and
- (viii) Create awareness and sensitize stakeholder about core labor standards.

D. PROFESSIONAL STAFF REQUIREMENTS FOR DSC

(i) Inputs of Experts

- (a) The DSC shall work as 2 separate teams, but with some experts working in both. It is intended that gender and disabled friendly office accommodation would be provided for DSC staff in the larger municipalities of Bheemdatt and Dhangadhi for their respective districts. DSC would be expected to work alongside the institutional development consultant (IDC) and share knowledge with respective discipline municipal officers; and
- (b) Personnel would be engaged to suit design and implementation program requirements. Table A5.1 provides an indicative list of technical staff required.

Table A5.1: Design and Supervision Consultant Indicative Professional Staffing (Person-months)

Positions	District	Kailali	Kanchanpur
	Municipality	Dhangadhi/Godawari	Bheemdatt/Shuklaphanta
Team Leader/ Municipal Engineer			60
DTL/ Road and Drainage Engineer x 2		60	60
Urban Planner x 2		18	12
Urban Designer / Architect			12
Drainage Engineer x 2		18	18
Wastewater Management Engineer x 2		18	18
Solid Waste Management Engineer			24
Geotechnical engineer			3
Structural Engineer	24		
Procurement /Contract Management Expert			36

Positions	District	Kailali	Kanchanpur
	Municipality	Dhangadhi/Godawari	Bheemdatt/Shuklaphanta
Road Construction & Utility Cord Engineer x 2		36	36
Construction Supervision Engineers (2 x 2)		72	72
Financial Analyst / Economist		6	
Quantity Survey Expert		24	
Environmental Safeguard Expert		36	
Social Safeguards / Resettlement Expert		36	
Total DSC Person Months		699	

DSC = design and supervision consultant.

E. Expert Qualifications

8. **Team Leader/ Municipal Engineer.** Team Leader/ Municipal Engineer must have a master's degree in urban planning, wastewater management, surface water drainage, roads and solid waste management) or in a related discipline and preferably 15 years of project management experience with experience in managing urban infrastructure projects for multilateral agencies. The basic requirements include:

- (i) Demonstrated capabilities to lead multidisciplinary teams and to work with a range of different stakeholders;
- (ii) Experience with large multilateral funded projects such as ADB projects is desirable;
- (iii) Ability to work in an interdisciplinary team;
- (iv) Skills in communicating with authorities and other stakeholders; and
- (v) Demonstrated capabilities in report writing.

9. **Deputy Team Leader/ Civil Engineer.** The expert must have demonstrated experience of working in urban areas. The basic requirements include:

- (i) Should be with master's degree in transportation/ highway engineering or related subject preferably with 15 years of experience in detailed engineering designs of urban roads and surface water drainage works;
- (ii) Experience to include road alignments selection, soil and material investigations, pavement design and specifications, plus preparation of estimates of various components of municipal roads/ highways and surface water drainage;
- (iii) Experience with large multilateral funded projects such as ADB projects is desirable;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

10. **Urban Planner.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in urban/ regional planning or related subjects preferably with of 10 years of relevant working experience;
- (ii) Knowledge of land pooling schemes;
- (iii) Must have previous experience of preparing urban development or strategic plans;
- (iv) Should have skills/ knowledge of computer aided design and GIS;

- (v) Experience with multilateral funded projects such as ADB projects is desirable;
- (vi) Ability to work in an interdisciplinary team;
- (vii) Skills in communicating with authorities and other stakeholders; and
- (viii) Demonstrated capabilities in report writing.

11. **Architect.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in architecture and preferably 10 years of experience in design and development related projects;
- (ii) Previous experience of designing institutional buildings and urban streetscapes including street furniture and lighting, environmental greenery and parks;
- (iii) Experience with large multilateral funded projects such as ADB projects is desirable;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

12. **Drainage Engineer.** The expert must have demonstrated experience of working in urban areas and with government institutions. The basic requirements include:

- (i) Master's degree in civil or environmental engineering or related subject and preferably with 12 years of experience in planning and detailed engineering designs of urban drainage systems;
- (ii) Experience in preparation of estimates of various components of municipal surface water drainage;
- (iii) Experience with large multilateral funded projects such as ADB projects is desirable;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

13. **Wastewater Management Engineer.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in civil or environmental engineering or public health engineering or related subject and preferably with 12 years of experience in design of sanitation systems/ waste water treatment plants;
- (ii) Experience with large multilateral funded projects such as ADB projects is desirable;
- (iii) Ability to work in an interdisciplinary team;
- (iv) Skills in communicating with authorities and other stakeholders; and
- (v) Demonstrated capabilities in report writing.

14. **Solid Waste Management Engineer.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in civil or environmental engineering or public health engineering or related subject and preferably with 12 years of experience in design of solid waste management systems;
- (ii) Experience in preparation of ISWM strategy and implementation plan and SWM baseline data;

- (iii) Experience in designing waste treatment facilities (aerobic and anaerobic digestion plant) and final disposal sites (engineering landfill site/ sanitary landfill site) including leachate treatment;
- (iv) Experience in the preparation of solid waste management technical guidelines and operational manuals;
- (v) Ability to work in an interdisciplinary team;
- (vi) Experience with large multilateral funded projects such as ADB projects is desirable;
- (vii) Skills in communicating with authorities and other stakeholders; and
- (viii) Demonstrated capabilities in GIS and report writing.

15. **Geotechnical Engineer.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in geotechnical engineering and preferably with 10 years of experience;
- (ii) Should be broadly experienced in geotechnical investigations, design, construction supervision and quality control of municipal infrastructure with particular reference to waste-water and solid-waste management;
- (iii) Ability to work in an interdisciplinary team;
- (iv) Experience with large multilateral funded projects such as ADB projects is desirable;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

16. **Structural Engineer.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in structural engineering and preferably with 10 years of experience in design of structural systems;
- (ii) Must have skills in computer aided design of buildings and structural analysis;
- (iii) Experience with large multilateral funded projects such as ADB projects is desirable;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

17. **Procurement/ Contract Management Expert.** The consultant will be responsible for procurement under ADB/ Nepal Government's Procurement Act and Regulations and Procurement Guidelines. The basic requirements include:

- (i) Master's degree in civil engineering or related management discipline after a bachelor's degree in engineering or architecture preferably with 12 years of experience in infrastructure development projects;
- (ii) Must have in depth knowledge and understanding of technical, commercial and legal aspects of procurement in development projects, financed by the government and its development partners;
- (iii) Specialized knowledge of and significant experience in substantive areas/aspects of procurement;
- (iv) In depth knowledge of procurement practices (use of internationally accepted contract documents for works, goods and services, sound understanding of principles underlying good procurement practices and international agencies' procurement guidelines; understanding of ADB/ Government's procurement Act

and regulations; analytical capability in identifying and resolving procurement issues);

- (v) Ability to work in an interdisciplinary team;
- (vi) Experience with large multilateral funded projects such as ADB projects is desirable;
- (vii) Skills in communicating with authorities and other stakeholders; and
- (viii) Demonstrated capabilities in report writing.

18. Road Construction and Utility Coordination Engineer. The expert must have demonstrated experience of working in urban areas and government institutions. The basic requirements include:

- (i) Master's degree in highway engineering/ transportation engineering related engineering subject preferably with 12 years of experience in infrastructure development projects;
- (ii) Experience to include detection and mapping of buried services (e.g. water supply mains, electric/ communication cables, etc.), material testing and pavement design specifications;
- (iii) Skills in communicating with the highway authorities and police and other stakeholders about road closures and traffic diversions prior to and during project infrastructure construction activities;
- (iv) Ability to work in an interdisciplinary team in particular the social development and resettlement experts;
- (v) Experience with large multilateral funded projects such as ADB projects is desirable; and
- (vi) Demonstrated capabilities in report writing.

19. Construction Supervision Engineers. The consultant must have demonstrated experience of working with municipalities or other government officials. The basic requirements include:

- (i) Preferably with master's degree in construction management or related discipline and bachelor degree in civil engineering and preferably with 15 years of experience in infrastructure development projects;
- (ii) Must have at least 5 years in construction supervision of municipal road/bridge, water supply, drainage, municipal facilities or other related projects as a Construction Supervisor Engineer;
- (iii) Ability to work in an interdisciplinary team;
- (iv) Experience with large multilateral funded projects such as ADB projects is desirable;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in maintaining the daily diary and prepare daily reports in standard reporting formats.

20. Financial Analyst/ Economist. The consultant must have demonstrated experience of working in multi-discipline teams with municipalities or other government officials. The basic requirements include:

- (i) Master's degree in economics, finance or related subject and preferably with 10years of working experience financial and economic analysis, rates of return and weighted average cost of capital calculations;
- (ii) Experience with work undertaken in compliance with Financial Management and Analysis of Projects (2005), and be guided by the advice given in the Financial Due Diligence Methodology Note (2009); and

(iii) Skills in communicating with authorities and other stakeholders.

21. **Quantity Survey Expert.** The consultant must have demonstrated experience of working with municipalities or other government officials. The basic requirements include:

- (i) Bachelor's degree in civil engineering preferably with 15 years of work experience;
- (ii) Must have experience in determining unit rates, preparing estimates of cost;
- (iii) Ability to work in an interdisciplinary team;
- (iv) Experience with large multilateral funded projects such as ADB projects is desirable;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

22. **Environmental Safeguard Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:

- (i) Master's degree in environmental science/ engineering or related subjects and preferably with 12 years of working experience;
- (ii) Experience in the preparation of environmental management plans;
- (iii) Good knowledge of Nepalese environmental legislation, IEE and EIA procedures;
- (iv) Familiarity with ADB's environmental safeguards is desirable;
- (v) Ability to work in an interdisciplinary team;
- (vi) Skills in communicating with authorities and other stakeholders; and
- (vii) Demonstrated capabilities in report writing.

23. **Social Safeguards/ Resettlement Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:

- (i) Master's degree in sociology/ anthropology or social works or related social sciences and preferably with 12 years of working experience on social impact assessments and resettlement action plans, with preference for urban development related projects;
- (ii) Familiarity with applicable Nepalese legislation, especially for questions related to land acquisition or expropriation;
- (iii) Familiarity with ADB's social safeguards is desirable;
- (iv) Ability to work in an interdisciplinary team;
- (v) Proven communication skills with PAPs (Project Affected Persons), authorities and other stakeholders;
- (vi) Experience of implementing RAPs, including compensation, grievance redress, etc.; and
- (vii) Demonstrated capabilities in report writing.

III. IMPLEMENTATION ARRANGEMENTS

24. The Ministry of Urban Development (MOUD), through the Department of Urban Development and Building Construction (DUDBC), will be the executing agency.

25. At the central level, a steering committee will be established to monitor project implementation. The steering committee will be chaired by the secretary of the MoUD and consist of high-level representatives from the National Planning Commission (NPC), the Ministry of Finance (MOF), the Ministry of Federal Affairs and Local Development (MOFALD), the Ministry of Water Supply and Sanitation (MOWSS) the Secretariat of the Local Body Fiscal

Commission, the Municipal Association of Nepal, participating municipalities, and the DUDBC. Technical departments and institutions (such as the Department of Water Supply and Sewerage, the Department of Roads, and the Solid Waste Management Technical Support Center) will be invited whenever issues to be discussed are considered relevant. The steering committee will meet as needed to discuss the overall progress and provide policy guidance to the project. The government will provide all relevant documents, data, statistics, information, and maps that are available at the disposal of the government.

26. District project coordination committees (Kanchanpur and Kailali Districts) will be established to coordinate the project with infrastructure line agencies. The district committees could also include DDC and political parties' representatives.

27. At each participating municipality, a focal person for the project will be appointed to head a PISU which will have representatives from sections on revenue, accounting, audit, urban planning, GIS, water and sanitation, transport, solid waste management, GESI etc. to work closely with the project consultants. In addition, a municipal project coordination committee will be established to obtain consensus and coordination from municipal level stakeholders. Attachment 1 indicates the arrangements.

28. The contract will be implemented over 60 months from January 2017 to December 2021. The consultants will be engaged by DUDBC in accordance with the ADB Guidelines on the Use of Consultants (March 2013, as amended from time to time).

29. The DSC will be recruited using the quality-and-cost-based method of selection with a standard quality–cost ratio of 80:20. A simplified technical proposal will be used for the selection of the consultant firm. Disbursements under the contract will be made in accordance with ADB's Technical Assistance Disbursement Handbook.

30. The consultant will assist the government in organizing workshops at the beginning and toward completion of the contract. The overall framework and approach, objectives, and targets of the project will be shared at the first workshop by inviting relevant government agencies and municipalities. The final workshop will be held to disseminate good practices and lessons from the project.

A. Offices and Equipment

31. The government will provide (i) office accommodation in DUDBC Divisional Office Kailali and the municipality offices which will include utility costs (covering electricity, water and local communication) plus office equipment, including desks and chairs; and (ii) logistical assistance for the workshops and seminars and identifying and inviting the participants

32. After completion of the contract, the items purchased under project shall be handed over to the executing agencies or participating municipalities.

B. Deliverables and Milestones

33. Other than project reporting (see below), the consultant should also deliver the following in hard and soft copies, as appropriate, to the PIU and participating municipalities within the set times. (Note: Contract signing = Zero weeks)

- (i) Updating of municipality digital base maps for GIS–8 weeks;

- (ii) Digital maps of existing urban infrastructure for the municipal urban areas. Separate layer for each sector for integration into GIS–12 weeks;
- (iii) Long term urban development plan for each municipality–16 weeks;
- (iv) Urban municipal infrastructure master plans (roads and drainage, wastewater management, SWM) with 20 year capital investment and sanitation plan–20 weeks;
- (v) Verification of proposed project components with cost estimate–24 weeks;
- (vi) Updated procurement plan, financial and economic analysis–26 weeks;
- (vii) Resettlement Plan or Due Diligence Report for drainage and road improvement works–26 weeks;
- (viii) Initial Environmental Examination (IEE)/ Works package wise EMP–26 week;
- (ix) Gender Equality and Social Inclusion Action Plan–26 weeks;
- (x) Detail design of drainage and road improvement work package for each municipality–40 weeks;
- (xi) Procurement documents including specifications–42 weeks;
- (xii) Detail design of integrated solid waste management system with sanitary landfill site or controlled dump for each Province 7 project municipalities –52 weeks;
- (xiii) Technical and User manuals–minimum 6 months before end of project; and
- (xiv) Asset Management Plan including inventory of asset and operation and maintenance.

C. Project Reporting

34. The consultants will submit (i) an inception report within 4 weeks from the start of the contract, finalizing the approach and presenting a detailed work plan and implementation schedule for the contract; (ii) a progress report every quarter, summarizing the progress, problems, and challenges identified and actions taken or proposed to be taken to address them as well as major achievements to be noted and shared with other municipalities and the government, and programs planned for the next quarter; (iii) a draft final report 48 months from the start of the contract, presenting all activities undertaken and results achieved, an assessment of achievements in comparison to original targets, a review of problems encountered during implementation and actions taken or proposed to be taken to remedy these problems, and proposed recommendations for future short-to medium-term programs, with clear presentation of actors, actions, time frame, performance indicators, and targets; and (iv) a project completion report within 4 weeks of project completion. The consultant shall submit at least 5 hard and soft copies of each report.

D. Cost and Financing

35. The government has asked ADB to provide funds from the proposed project loan. The government will provide counterpart support in the form of office space, remuneration for counterpart staff (including their field per-diem and transportation), and other in-kind contributions.

Table A5.2: Data Sheet–Identified Priority Urban Infrastructure Components

Godawari	
Sector	Description
Wastewater Management	Improvements to existing on-site wastewater management New small bore sewerage and decentralized WWTP site(s) Serving wards 3, 4 & 13 of then Godawari Municipality as identified by

Sector	Description
	PPTA. Households approx. 2,000
Solid Waste Management	Strategic waste prevention plus reduce, reuse and recycle. Integrated solid waste management (ISWM) system with landfill site Serving wards 2, 3, 4, 5, 6, 7, 11, 12 & 13 of then Godawari Municipality as identified by PPTA.. Households approx. 6,600
Roads and Drainage	In wards 2, 5, 6, 7, 10 & 12 of then Godawari Municipality as identified by PPTA.. Approx. length 20.0 km.
Buildings	Municipality building

Bheemdatt

Sector	Description
Wastewater Management	Improvements to existing on-site wastewater management New small bore sewerage and decentralized WWTP site(s) Serving wards 4, 6, & 18 of then Bheemdatt Municipality as identified by PPTA.. Households approx. 2,000
Solid Waste Management	Strategic waste prevention plus reduce, reuse and recycle. Integrated solid waste management (ISWM) system with landfill site Serving wards 1 to 11 and 15 to 18 of then Bheemdatt Municipality as identified by PPTA... HHs approx. 10,700
Roads and Drainage	In wards 1, 3, 4, 8, 9, 10, 11, 12, 15, 16, 17 & 18 of then Bheemdatt Municipality as identified by PPTA.. Approx. length 36.5km.

Dhangadhi

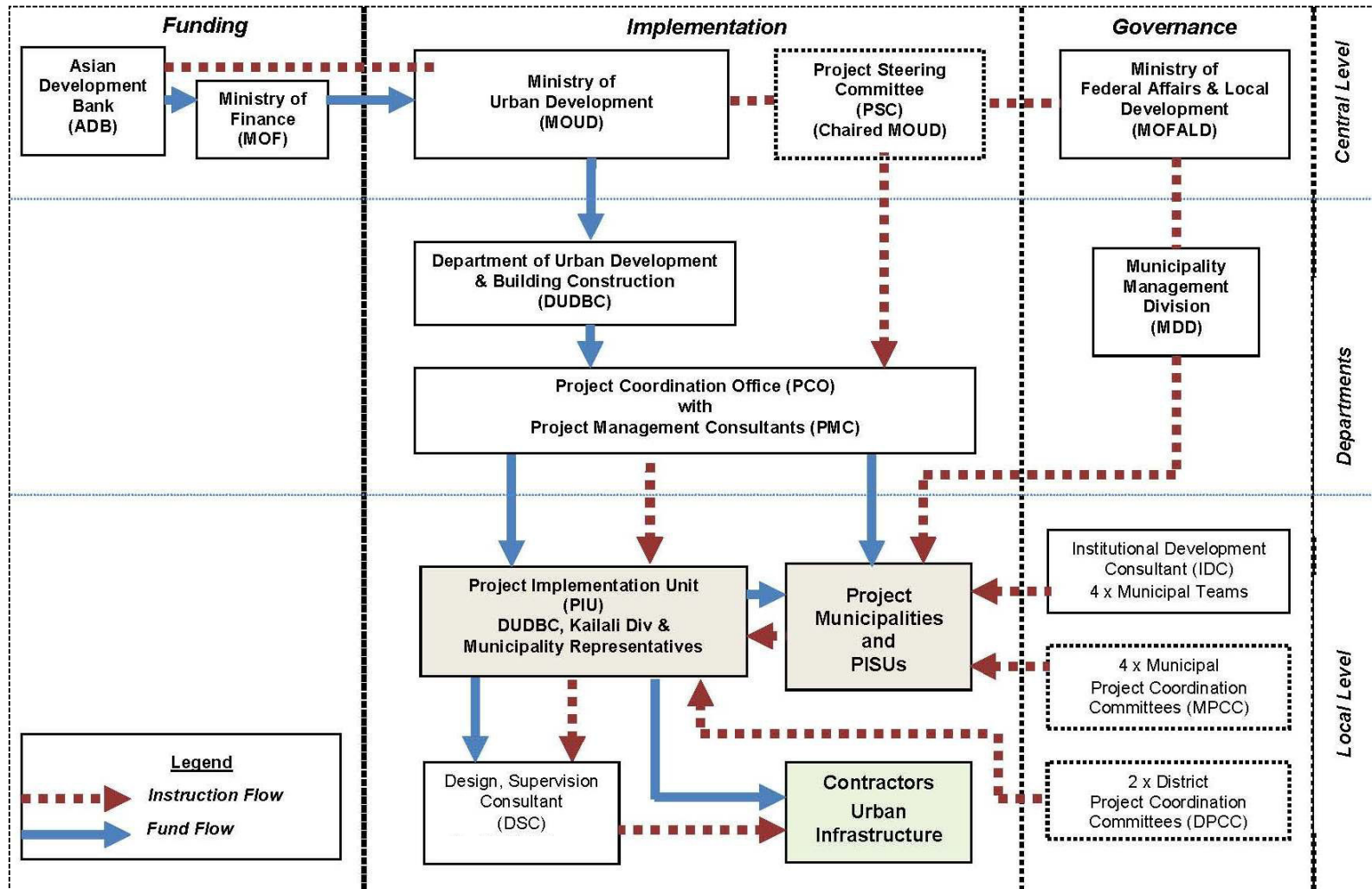
Sector	Description
Wastewater Management	Improvements to existing on-site wastewater management New small bore sewerage and decentralized WWTP site(s) Serving wards 1, 2, 3, 4, 5 & 8 of then Dhangadhi Municipality as identified in PPTA... Households approx. 3,000
Solid Waste Management	Strategic waste prevention plus reduce, reuse and recycle. Integrated solid waste management (ISWM) system with landfill site Serving wards 1, 2, 3, 4, 5, 8 & 13 of then Dhangadhi Municipality as identified by PPTA.. HHs approx. 10,000
Roads and Drainage	In wards 1, 2, 3, 4, 5, 6, 8, 10, 12 & 13 of then Dhangadhi Municipality as identified by PPTA.. Approx. length 34.0 km.

Shuklaphanta

Sector	Description
Wastewater Management	Improvements to existing on-site wastewater management New small bore sewerage and decentralized WWTP site(s) Serving wards 10 & 11 of then Shuklaphanta Municipality as identified by PPTA. Households approx. 400

Sector	Description
Solid Waste Management	Strategic waste prevention plus reduce, reuse and recycle. Integrated solid waste management (ISWM) system with landfill site Serving wards 3, 4, 5, 6, 7, 9, 10 & 11 of then Shuklaphanta Municipality as identified by PPTA. HHs approx. 3,400
Roads and Drainage	In wards 4, 9, 10 & 11 of then Shuklaphanta Municipality as identified by PPTA. Approx. length 8.0 km.
Buildings	Municipality building

Attachment A5.1: Regional Urban Development Project-FW Implementation Arrangements



APPENDIX 6: TERMS OF REFERENCE: PROJECT MANAGEMENT CONSULTANTS SERVICES

I. INTRODUCTION

1. Government of Nepal is negotiating a project loan with the Asian Development Bank (ADB) for financing the proposed Regional Urban Development Project (RUDP) comprising additional investment for complementing ongoing infrastructure development in 4 municipalities (Biratnagar, Birgunj, Siddharthanagar & Nepalgunj–Non-Province 7 municipalities) and integrated urban infrastructure of four municipalities in the Province 7 of Nepal (Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta–Province 7 municipalities).

2. The executing agency of the project is the Ministry of Urban Development (MOUD). Under the executing agency, the Department of Urban Development and Building Construction (DUDBC) will be implementing this RUDP through its project coordination office (PCO). The RUDP has been designed to set foundations for regional economic development by stimulating the economic potentials of these municipal areas, and thus, to help those act as an economic corridor and urban cluster conglomeration. The project has subproject components grouped into 3 interactive categories: Physical Infrastructure Improvement; Urban Management and Institutional Development; and Implementation Assistance. Categorically, the project comprises of subprojects including surface water drainage, solid waste management (SWM), road improvements, wastewater management, and allied services along with the institutional capacity building in these areas.

3. The selection and engagement of the consultant firms will be done followings Quality and Cost Based Section (QCBS) procedure set out in ADB's Guidelines on the Use of Consultants (2013, as amended from time to time), the latest procedure and guidelines set by ADB. Five types of consultant services are planned to be recruited under the project, which are as follows:

- (i) The project management consultant (PMC) will be engaged to support the PCO to undertake monitoring and evaluation, reporting, overall planning, risk management, institutional development support, and coordination, to ensure that project implementation is in compliance with financing agreement to be signed between Government of Nepal and ADB. The PMC will also assist the PCO in meeting the relevant requirements of the government and ADB for project implementation. The PMC will also provide institutional development assistance and guidance to the non-Province 7 municipalities;
- (ii) The design and supervision consultant (DSC) for Province 7 municipalities will be engaged to design all subprojects to be implemented in the municipalities;
- (iii) Design of SWM subproject and overall construction supervision consultant will be engaged by Biratnagar PIU to undertake detailed engineering design of SWM subproject, environmental and social due diligence, document for procurement activities, and preparation of a 20-year SWM management plan and to supervise works contract for the improvement of road and drainage system;
- (iv) The construction supervision consultant will be engaged for each non-Province 7 municipality (Nepalgunj, Birgunj, and Siddharthanagar) to supervise works contract for the improvement of road and drainage system; and
- (v) Institutional development support consultant (IDC) for Province 7 project municipalities will be engaged to strengthen the capacity of the Province 7 project municipalities (Godawari, Bheemdatt, Dhangadhi, and Shuklaphanta) for improved municipal asset management, strengthen municipal revenue mobilization and financial management capacity and improve urban planning. The IDC in association with the municipalities will be responsible for the

gender equality and social inclusion mainstreaming, and implementing performance based socioeconomic development program (PBSDP) including public awareness campaigns associated with the Project.

4. A PCO will be based in the DUDBC in Kathmandu. Each of the municipalities has a project implementation unit (PIU) established and will remain as PIU for the project. In addition, there will be a PIU for the Province 7 project municipalities based in the DUDBC Divisional Office Kailali in association with the project Province 7 project municipalities. The Province 7 project municipalities will each establish project implementation support units (PISU).

5. At the central level, a steering committee will be established to monitor project implementation. The steering committee will be chaired by the secretary of the Ministry of Urban Development (MOUD) and consist of high-level representatives from the National Planning Commission (NPC), the Ministry of Finance (MOF), the Ministry of Federal Affairs and Local Development (MOFALD), the Ministry of Water Supply and Sanitation (MOWSS), participating municipalities, and the DUDBC. Technical departments and institutions (such as the Department of Water Supply and Sewerage, the Department of Roads, and the Solid Waste Management Technical Support Center) will be invited whenever issues to be discussed are considered relevant. The steering committee will meet as needed to discuss the overall progress and provide policy guidance to the project.

6. The government will provide (i) office accommodation and local communication in DUDBC, Babarmahal, Kathmandu office complex; and (ii) logistical assistance for the workshops and seminars and identifying and inviting the participants.

7. The contract will be implemented over 60 months from January 2017 to December 2021. The consultants will be engaged by DUDBC in accordance with the ADB's Guidelines on the Use of Consultants (March 2013, as amended from time to time).

8. The PMC will be recruited using the quality-and-cost-based method of selection with a standard quality–cost ratio of 90:10. Full technical proposal will be used for the selection of the consultant firm. Disbursements under the contract will be made in accordance with ADB's Technical Assistance Disbursement Handbook.

II. SCOPE OF WORKS

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

A. Detailed Design and Procurement Assistance Phase

1. Project Orientation and Planning

- (i) Plan and deliver briefing, training and orientation of RPIU, Province 7 municipalities, design and supervision consultants (DSC), and PISUs, institutional development consultant, municipal staff about project approach, scope, activities and implementation schedule;
- (ii) Create awareness among stakeholders regarding their roles and responsibilities for achieving the intended outcome and output of the project;
- (iii) Advise and assist the PCO with overall strategic direction, planning, implementation, management, risk management, cost control, and scheduling;
- (iv) In consultation with PCO, prepare detailed annual work plans with progress milestones covering the entire project period, staffing schedules and equipment budgets, and ensuring gender and inclusion issues integrated;

- (v) Facilitate the process for the project to establish the required mechanisms and structures to implement identified activities on GESI mainstreaming in project municipalities;
- (vi) Ensure the effective and timely delivery of the various activities on GESI in project municipalities under the project;
- (vii) Assist PCO to create a project website to disclose key project-related information, including costs, safeguards, procurement such as the list of participating bidders, name of the winning bidder, basic details on bidding procedures adopted, amount of contract awarded, and the list of goods/ services procured; and
- (viii) Assist PCO to prepare a grievance redress mechanism and to establish a 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, including but not limited to grievances due to safeguard issues. The special committee will: (i) be independent of has no conflict of interest with the project municipalities; (ii) make public of the existence of the grievance redress mechanism; (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 aspect of the project; and (iv) proactively and constructively responding to them.

2. Preparation of System, Manuals, Guidelines and Technical Studies

- (i) Develop a project management information system and keep track of the project and subprojects schedule. Advise PCO of any deviations in the agreed subproject implementation processes, schedules, and agreed activities, and suggest actions that should be taken to remedy these deviations and thereby avoid delays;
- (ii) Provide guidelines to, and review the design criteria and standard specifications for civil, mechanical, and electrical works prepared by the DSCs so as to ensure the highest standards of quality in design and construction and uniformity in all project municipalities;
- (iii) Review the quality assurance of the safety manuals submitted by the DSCs to be followed on each construction site so as to enforce safety of construction workers, engineers, and citizens;
- (iv) Prepare, or as necessary amend, existing procedures and guidelines for PIUs site supervision and quality control to include guidelines and detailed job descriptions for resident engineers, supervisors (site inspectors);
- (v) Prepare, in consultation with the DSCs, guidelines for preparation of bid documents: procedure for invitation, receipt, evaluation, approval of bids and award of contracts, standard bidding documents, standard contract forms, and standard templates for bid evaluation reports etc. as per ADB procedures;
- (vi) Develop procedures and prepare guidelines for the PIUs for identifying options for public-private partnership;
- (vii) Prepare, in consultation with the DSCs, guidelines for contract administration for day to day contract administration requirements such as measurement of works; certification and payment of contractors' bills, release of retention money, approval of variation, time extension and contractors' claim, issue of completion certificate, financial closure of contract; management during the defects liability period (DLP) and to use it in administration of contracts by the PIUs; and
- (viii) Support PCO to (a) prepare a project specific guideline on complaint handling and conflict resolution; (b) maintain and regularly update a complaint/ resolution data base; and (c) monitor complaint, handling, to ensure follow up resolution efforts at levels.

- 3. Technical Advice and Review of Detailed Engineering Design Review**
 - (i) Assist the PCO in reviewing and verifying all changes in preliminary design and costs submitted by the DSCs arising from the detailed surveys conducted if any;
 - (ii) Assist the PCO in reviewing detailed financial and economic assessments and tariff structures for different subprojects conducted by the DSCs;
 - (iii) Establish a system in PCO and support PCO to proof check all structural designs prepared by the DSCs;
 - (iv) Assist the PCO in reviewing/ proof checking/ verifying all detailed design reports, specifications, and construction drawings;
 - (v) While reviewing the detailed designs, ensure that the DSCs have carried out a concept plan in order to ascertain/ identify the overall flow capacities, needs and catchment conditions, so that any physical intervention in drainage in the municipalities is in line with the receiving catchment capacity and long-term planning requirement of the towns, and will not lead to overflows/flooding in other parts of the municipalities or redundancy of the constructed drains in future;
 - (vi) Assist the PCO in setting out procedures for third party inspection of the material to be procured for execution of the subprojects, including preparing the list of materials for such inspection in advance, witness of material procured, and review of material receive; and
 - (vii) Provide specialist advice and guidance to RPIU and PIU of Biratnagar municipality in the design, construction and operation of sanitary land fill sites and other solid waste management facilities including the 3R's, re-cycling and composting.

- 4. Technical support to implement institutional development activities of Non-Province 7 municipalities**
 - (i) Prepare assets management plan for each municipality of Province 7 and create awareness about its importance to maintain an up-to-date assets status and information;
 - (ii) Update the assets management plan annually and provide on the job training to main the database of assets;
 - (iii) Provide technical support non-Province 7 municipalities to plan and implement street name and house numbering system;
 - (iv) Provide technical support to implement revenue enhancement program and expanding the tax net; and
 - (v) Prepare operation and maintenance plan for each municipality and assist to implement.

- 5. Technical Advice and Review of Performance-based Socioeconomic Development Program of Province 7 project municipalities**
 - (i) Assist PCO in reviewing the assessment of milestone compliance, score computation for accessing PBSDP grant, and annual program submitted by RPIU and validate the milestone compliance through field visits to Province 7 project municipalities;
 - (ii) Monitor performance status of performance milestones and submit PCO for approval and determine performance-based socioeconomic development grants based on the achievements status of set milestones;
 - (iii) Provide orientation about PBSDP to Province 7 project municipalities;
 - (iv) Provide inputs and guidance to IDC in implementing PBSDP; and
 - (v) Support IDC/ municipality and monitor IDC's support to prepare/ revise building bylaws and monitor implementation progress on the bylaws.

6. Procurement

- (i) Support PCO in reviewing the overall procurement plan and preparing and updating the annual procurement plans;
- (ii) Support PCO to monitor annual contract awards and disbursements and update s-curve for contract awards and disbursements;
- (iii) Support PCO to engage international and national individual consultants, particularly on preparing terms of reference, inviting, evaluating, and negotiating the various individual consultancy;
- (iv) Provide support to PIUs on bid process management including seeking ADB approval, issuing bids, evaluation of bids and contract awards;
- (v) Provide guidance to PIUs through PCO on bid document preparation for all ICB and NCB contracts based on ADB standard bidding documents;
- (vi) Advise the PIUs of Province 7 project municipalities in preparing specific contractual arrangements for the drainage and roads improvement works and building construction; and
- (vii) Advise the PIUs of Province 7 project municipalities in preparing specific contractual arrangements for the integrated solid waste collection, treatment and disposal contracts with due consideration to private sector participation in the solid waste management services including landfill operation. The civil work contract may integrate management of the system for 3-5 years, and may also include drainage system maintenance.

7. GESI Action Plan

- (i) Assist the PCO in preparing GESI implementation plan for the project based on GESI action plan;
- (ii) Prepare and integrate in the PPMS, indicators related to gender equality, social inclusion and poverty based on GESI action plan;
- (iii) Assist and guide, through PCO, the PIUs, including DSCs and IDC, to integrate GESI and poverty related indicators and variables in all surveys, designs, and activities to be carried out under the project;
- (iv) Support the PCO and PIUs to prepare and maintain a gender and caste/ethnic disaggregated database regarding participation, access and control in municipal services provided under the project;
- (v) Provide guidance to ensure that specific issues of women, poor and the excluded are recognized and responded by project municipalities;
- (vi) Identify measures to integrate GESI in planning, budgeting and monitoring systems and processes of municipality and guide PIU and DSC accordingly for GESI integration in annual plans of each municipality;
- (vii) Identify training needs and opportunities to enhance the efficiency and effectiveness of municipal staff and GESI technical working team in municipalities; develop modules/ curriculum for training of trainers and general training/ skill transfer to PCO/ PIUs and DSC staff where appropriate; and
- (viii) Advise RPIU on GESI sensitive standards in design criteria of infrastructures and identify technological choices to enhance participation of women.

8. Environmental and Social Safeguards Compliance

- (i) Assist the PCO in reviewing all environmental and social safeguards documents such as IEEs, EIAs, and resettlement plans prepared by RPIU with DSCs supports;
- (ii) Assist the PCO to ensure compliance with all government rules and regulations regarding forest and environmental permits and clearances;
- (iii) Assist PCO in monitoring implementation of land acquisition in the project municipalities (Province 7 project and Non-Province 7 municipalities) in accordance with the Resettlement plan for the subprojects;

- (iv) Ensure all environmental requirements as per the IEEs and EIAs are incorporated in bidding and contract documents; and
- (v) Supervise and monitor the social safeguard screening activities conducted by PIUs including PISUs with support of CSCs and DSCs.

B. Construction and Post Construction Management Phase

1. Contract Administration

- (i) Prepare the standard construction management system, in consultation with the PCO, RPIU, PIUs, PISUs, and DSCs, to be followed by contractors at construction sites comprising important components such as planning of activities (work schedule), procurement of construction material and equipment; construction methodology, deployment of construction machinery, deployment of workers, deployment of funds;
- (ii) Explain to RPIU, PIUs and PISUs about the process and practices to be followed with regards to contract variation;
- (iii) Provide support to PCO in reviewing contract variation documents submitted by RPIU, PIUs and PISUs;
- (iv) Provide guidance to RPIU, PIUs and PISUs through PCO in effective contract management, including handling contracts' claims during construction phase;
- (v) Monitor the DSCs' and CSCs' reports on contractor progress, and assist PCO in maintaining bar charts summarizing overall project progress. Notify relevant DSCs and CSCs through PCO, RPIU and PIUs if there is slippage in the progress of critical activities; and
- (vi) Prepare a contract administration manual and train PCO, RPIU, PIUs and PISUs, in FIDIC procedures for administration of large civil works contracts.

2. Financial Management

- (i) Assist the PCO, RPIU, PIUs and PISUs in establishing, testing and reviewing financial accounting and ensuring accurate and timely report submissions and funds flow from the ADB and onwards to the implementing agencies;
- (ii) Support PCO to establish budget control systems, according to which expenditures are compared with originally planned allocations to spot and correct significant variances; and
- (iii) In the first year of the project, support PCO in the preparation of withdrawal applications based on the statement of expenditures submitted by RPIU and PIUs.

3. Project Performance Management System (PPMS)

- (i) Assist the PCO in setting up the PPMS for the project as per agreement with ADB;
- (ii) Assist the PCO with the implementations of PPMS and coordinate accurate and timely data collection for PPMS with DSCs and NGOs in accordance with guidelines, and verifying accuracy of all field-level reported data;
- (iii) Support PCO in monitoring project implementation progress against work plan;
- (iv) Analyze baseline data and real-time management information and include qualitative and quantitative assessments on the achievement of envisaged outputs and outcomes under the project;
- (v) Continuously monitor progress of the project as per the PPMS, prepare regular progress reports based on the PPMS and provide feedbacks to PCO for the appropriate corrective actions;
- (vi) Proactively identify potential risks and opportunities and assist PCO with taking timely actions to enhance project performance and mitigate any adverse constraints;

- (vii) Develop monitoring and reporting mechanisms with disaggregated data and analysis regarding shifts in the lives of women, poor and excluded; and
- (viii) Conduct independent assessment and monitoring of subproject preparation and implementation in consultations with community leaders, municipality, and women and vulnerable groups.

4. Monitoring to Implement GESI Action Plan

- (i) Continuously monitor progress of the GESI related interventions under the project as per the PPMS, prepare regular progress reports based on the PPMS and provide feedbacks to PCO for the appropriate corrective actions.

5. Environmental and Social Safeguards Compliance Monitoring

- (i) Assist the PCO to establish a system to monitor environmental and social safeguards of the Project; prepare indicators for monitoring important parameters of safeguards;
- (ii) Provide trainings to the PCO, RPIU, PIUs, PISUs, DSCs and construction contractors involved in the project implementation for strengthening their capacity in managing and monitoring environmental and social safeguards;
- (iii) Support PCO to conduct assessment and analysis on the PIU's compliance with ADB's Safeguard Policy Statement (2009) in all outputs and other specific requirements as stipulated in the PAM. Identify lessons learned and suggest recommendations for remedial actions for improvements; and
- (iv) Review and verify internal quarterly monitoring reports and findings on environmental and social safeguards prepared by the DSCs and consolidate into semi-annual safeguard monitoring reports and submit to ADB.

6. Interfaces and Coordination

- (i) Assist PCO in taking over responsibility for coordinating the interfaces among the MOUD, DUDBC, project municipalities, RPIU, PIUs, and PISUs; and
- (ii) Facilitate close communication and coordination between DSCs, CSCs, RPIU, PIUs and PISUs.

7. Communications and Reporting

- (i) Assist the PCO in preparing, based on the submission from the DSCs and CSCs through PIUs, monthly and quarterly progress reports for submission on progress against the agreed timelines, compliance monitoring and other issues under the project;
- (ii) Assist PCO to conduct regular meetings with RPIU, PIUs, DSCs, CSCs, IDC and other consultants working under the Project to discuss progress and issues related to implementation, and prepare minutes for recording and circulation;
- (iii) Prepare, based on the submission from DSCs, IDC and CSCs through Dhangadi PIU and PIUs of non-Province 7 municipalities, all necessary documents for progress reviews, and a comprehensive midterm review, to be conducted by the government and ADB at various intervals according to the project documents and agreements with the government; and
- (iv) The following constitute a minimum reporting requirement for the PMC service:

Table A6.1: Minimum Reporting Timing and Output Details

Reports	Timeline	Descriptions
1. Inception Report	1 month from mobilization	<ul style="list-style-type: none"> • Detailed work plan and schedule • Preliminary assessment of the outputs required and action plan on them, including review of existing situation and information

Reports	Timeline	Descriptions
2. Prepare a contract administration manual and provide training to Province 7 DSC, RPIU and Municipalities	3 months from the mobilization	<ul style="list-style-type: none"> • Design and Supervision consultants' performance monitoring • Construction management including critical path and event identification • Resource planning by the contractor • Quality assurance • Facility planning and logistics management
3. Monthly progress reports and quarterly progress reports	15 th day of every month	<ul style="list-style-type: none"> • Progress on delivery of each of the outputs • Key issues and constraints • Updated project schedule • Any changes in project design and details
4. Semi- annual environmental monitoring Report	15 th day of the July 15 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
5. Semi-annual safeguard monitoring report	15 th day of the July 15 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
6. Assets management plan (4 plans to be prepared)	One year after the commencement of the services	<ul style="list-style-type: none"> • List of assets • Operation and maintenance strategy and plan
7. Interim report	Halfway through the contract period	<ul style="list-style-type: none"> • Progress report on each of the subprojects and all other outputs, verified cost estimates after detailed design, verified detailed design reports and tender documents for all major subprojects, update on compliance with ADB loan covenants including safeguard requirements • Issues and constraints
8. Annual progress report including annual environmental safeguard and social safeguard monitoring report	31 January of each year	<ul style="list-style-type: none"> • Summary of reporting requirements outlined above for all aspects of works and activities under the Project.
9. Draft Final Report	On the specified delivery date.	<ul style="list-style-type: none"> • Detailed draft final report for outputs, including status reports of all design and construction works, issues, all deliverable under the contracts.
10. Final Report	One month prior to contract completion date	<ul style="list-style-type: none"> • Draft project completion report, and summary of all other reports, progress and issues under the Project, summary of annual progress reports and PPMS; • Completed PPMS

DSC = design and supervision consultant, PPMS = project progress management system, R-PIU = regional project implementation unit.

III. INDICATIVE CONSULTANT REQUIREMENTS

10. The personnel requirement for the PMC for the scope of works as outlined above is estimated to be as follows:

Table A6.2: Indicative Experts Inputs

Key Professional Staff	Person-Months
National Staff	
1. Team Leader: Team Leader/ Project	60

Key Professional Staff	Person-Months
Management and Monitoring Expert	
2. Municipal Governance Expert	36
3. Road Engineer	20
4. Strategic Urban Planner	12
5. Drainage Engineer	20
6. GIS Expert	6
7. Information Technology Expert	18
8. Electro-mechanical Engineer	3
9. Structural Engineer	6
10. Procurement and Contract Management expert	24
11. Monitoring and Evaluation Expert	20
12. Financial Management Expert	24
13. GESI and Social Development Expert	30
14. Environmental Safeguard Expert	30
15. Social Safeguard Expert	30
16. Solid waste Management Expert	12
Total	351

GESI = gender equality and social inclusion, GIS = geographic information system.

IV. SPECIALIST AND EXPERT QUALIFICATIONS

11. **Team Leader/ Project Management and Monitoring Expert.** Team Leader must have bachelor degree in civil engineering/ architecture with a master's degree in urban planning/ urban management/ urban ecological planning/urban environmental management, or related discipline. The basic requirements include:

- (i) Preferably 15 years of project management experience in urban infrastructure projects;
- (ii) Experience in working in team of project management consultant;
- (iii) Demonstrated capabilities to lead multidisciplinary teams and to work with a range of different stakeholders;
- (iv) Directly involved in multilateral funded projects such as ADB, World Bank (WB), etc.;
- (v) Ability to work in an interdisciplinary team;
- (vi) Skills in communicating with authorities and other stakeholders; and
- (vii) Demonstrated capabilities in report writing.

12. **Municipal Governance Expert.** The municipal governance expert must have a master's degree in any relevant discipline with experience in managing municipal governance system including programming, budgeting, revenue mobilization, human resource management and have experience in working with bilateral and multilateral agencies. The basic requirements include:

- (i) Preferably 15 years of experience in municipal management and local governance system;
- (ii) Experience in working with bilateral and multilateral agencies in the area of project implementation;
- (iii) Experience in programming and budgeting, performance evaluation, reporting and monitoring of project activities;
- (iv) Skills in communicating with authorities and other stakeholders; and
- (v) Demonstrated capabilities in report writing.

13. **Road Engineer.** The expert must have demonstrated experience of working in urban areas and other government institutions. The basic requirements include:

- (i) A master's degree in transportation/ highway engineering or related subjects;

- (ii) Preferably 15 years of experience in design/ supervision of roads with experience of detailed engineering designs of municipal roads/ surface water drainage works/ cycle ways and pedestrian access, street furniture and street lighting;
- (iii) Experience to include road alignments selection, soil and material investigations, pavement design and specifications;
- (iv) Experience in preparation of estimates of various components of municipal roads/ highways and surface water drainage;
- (v) With experience with large multilateral funded projects such as ADB, WB etc.;
- (vi) Ability to work in an interdisciplinary team;
- (vii) Skills in communicating with authorities and other stakeholders; and
- (viii) Demonstrated capabilities in report writing.

14. **Strategic Urban Planner.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in urban or regional planning preferably with 15 years of relevant working experience;
- (ii) Must have previous experience of preparing urban development /strategic plans, land pooling etc.;
- (iii) Should have skills/ knowledge of computer aided design and GIS;
- (iv) With experience with large multilateral funded projects such as ADB, WB etc.;
- (v) Ability to work in an interdisciplinary team;
- (vi) Skills in communicating with authorities and other stakeholders; and
- (vii) Demonstrated capabilities in report writing.

15. **GIS Expert.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in geo-informatics/ GIS/ relevant degree preferably with 10 years of relevant working experience;
- (ii) Experience of preparing GIS based urban maps/ base maps;
- (iii) With experience with large multilateral funded projects such as ADB, WB etc.;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

16. **Drainage Engineer.** The consultant must have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:

- (i) Master's degree in Water Resource Engineering/ Hydraulic Engineering/ Sanitary Engineering/ Environmental Engineering and preferably with 15 years of experience in infrastructure development projects;
- (ii) Experience in design of storm water drainage and sanitation systems including wastewater treatment plants including preparation of development plans;
- (iii) Experience in designing waste treatment facilities (aerobic and anaerobic digestion plant) and final disposal sites (engineering landfill site/ sanitary landfill site) including leachate treatment would be an advantage;
- (iv) With experience with large multilateral funded projects such as ADB, WB etc.;
- (v) Ability to work in an interdisciplinary team;
- (vi) Skills in communicating with authorities and other stakeholders; and
- (vii) Demonstrated capabilities in report writing.

17. **Electro-Mechanical Engineer.** The expert must have demonstrated experience of working in municipal areas or with government institutions. The basic requirements include:

- (i) Bachelor's degree in electro-mechanical engineering or related subject;

- (ii) Preferably with 10 years of experience in planning and detailed engineering design of electro-mechanical elements for waste management systems;
- (iii) With experience with large multilateral funded projects such as ADB, WB etc.;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

18. **Structural Engineer.** The expert must have demonstrated experience of working in municipal areas or with government institutions. The basic requirements include:

- (i) Should have a master's degree in structural engineering or related subject;
- (ii) Preferably with 15 years of experience in detailed engineering design of institutional buildings/other structures;
- (iii) With experience with large multilateral funded projects such as ADB, WB etc.;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

19. **Procurement and Contract Management Specialist.** The consultant will be responsible for procurement under ADB/ Government's procurement Act and regulations and procurement guidelines. The basic requirements include:

- (i) Master's degree in civil engineering or related management discipline after a bachelor's degree in engineering or architecture;
- (ii) Preferably with 15 years of experience in infrastructure development projects;
- (iii) Must have in depth knowledge and understanding of technical, commercial and legal aspects of procurement in development projects, financed by the government and its development partners;
- (iv) Specialized knowledge of and significant experience in substantive areas/ aspects of procurement;
- (v) In depth knowledge of procurement practices (use of internationally accepted contract documents for works, goods and services, sound understanding of principles underlying good procurement practices and international agencies' procurement guidelines; understanding of ADB/ Government's procurement Act and regulations; analytical capability in identifying and resolving procurement issues);
- (vi) Ability to work in an interdisciplinary team;
- (vii) With experience with large multilateral funded projects such as ADB, WB etc.;
- (viii) Skills in communicating with authorities and other stakeholders; and
- (ix) Demonstrated capabilities in report writing.

20. **Monitoring and Evaluation Expert (M&E).** M&E expert must have a Bachelor degree (post-graduate degree preferred) in economics/ statistics or equivalent discipline with experience in monitoring, evaluation and reporting for multilateral agencies. The basic requirements include:

- (i) Preferably with 15 years of experience in M&E of infrastructure projects;
- (ii) Experience in participatory M&E system in multilateral projects is highly preferred;
- (iii) Strong quantitative skills and proven ability to carry out surveys/analysis of large datasets;
- (iv) Ability to work in an interdisciplinary team;
- (v) Skills in communicating with authorities and other stakeholders; and
- (vi) Demonstrated capabilities in report writing.

21. **Information Technology (IT Expert).** IT Expert must have a master's degree in information technology or equivalent discipline with experience IT system establishment in public agencies. The basic requirements include:

- (i) Preferably with 10 years of experience in development and implementation of office automation systems in public agencies;
- (ii) Experience in working with bilateral and multilateral agencies;
- (iii) Ability to work in an interdisciplinary team;
- (iv) Skills in communicating with authorities and other stakeholders; and
- (v) Demonstrated capabilities in report writing.

22. **Financial Management Expert.** The consultant must have demonstrated experience of working in multi-discipline teams with municipalities or other government agencies. The basic requirements include:

- (i) Master's degree business studies/ business administration with specialization in finance/ accounts, or a relevant professional qualification such as a CA, CPA, CIMA etc.;
- (ii) Preferably with 15 years financial assurance experience, with work undertaken in compliance with Financial Management and Analysis of Projects (2005), and be guided by the advice given in the Financial Due Diligence Methodology Note (2009);
- (iii) With experience with large multilateral funded projects such as ADB, WB etc.;
- (iv) Have a good understanding of public financial management and international best practices in accounting and auditing; and
- (v) Skills in communicating with authorities and other stakeholders.

23. **Gender Equality and Social Inclusion (GESI) and Social Development Expert.** The consultant must have demonstrated experience of working with senior government officials. The basic requirements include:

- (i) Master degree in social development/ gender & development studies or related equivalent subjects preferably with 10 years of experience in mainstreaming, training and analysis of gender and social inclusion in projects and programs;
- (ii) Demonstrated experience of GESI analytical and responsive skills in order to provide technical support to project team;
- (iii) Basic understanding of urban development and skills for incorporating GESI in urban development approaches and interventions;
- (iv) Interpersonal skills of clear communication and facilitation;
- (v) Previous experience of working with municipalities will be an advantage; and
- (vi) Experience of working in the project districts.

24. **Environmental Safeguard Expert.** The consultant must have demonstrated experience of working with senior government officials. The basic requirements include:

- (i) Master's degree in environmental sciences, natural resources management or other comparative university degree;
- (ii) Preferably with 15 years' experience working in environmental management with experience in the preparation of IEE/ EIA reports and implementing EMP;
- (iii) Knowledge of environmental management tools, familiarity with applicable Nepalese legislation, especially related to environmental protection, IEE and EIA procedures and land acquisition or expropriation;
- (iv) He/ she should have extensive experience working on environmental management plus health and safety issues but especially of urban nature with proven experience in working with a multi-stakeholder community;
- (v) Relevant experience to urban sustainable development areas is preferred;
- (vi) High communication and presentation skills and excellent command of English and Nepali languages is important and with proven training and mentoring skill;
- (vii) Skills in communicating with authorities and other stakeholders; and

- (viii) Experience of working for the ADB or other development partners' projects in the urban sector is highly desirable.

25. **Social Safeguard Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:

- (i) Master's degree in social sciences or related subject;
- (ii) Preferably with 15 years of experience in preparation of social impact assessments and resettlement action plans, with preference for urban infrastructure and development related projects;
- (iii) Familiarity with applicable Nepalese legislation, especially related to land acquisition or expropriation;
- (iv) Familiarity with ADB's SPS (2009) is desirable;
- (v) Skills in communicating with project affected persons, authorities and other stakeholders;
- (vi) Experience with implementation of RAPs, including compensation, grievance redress, etc.;
- (vii) Experience in the preparation of social impact assessment plans and resettlement plans;
- (viii) Ability to work in an interdisciplinary team;
- (ix) Skills in communicating with authorities and other stakeholders; and
- (x) Demonstrated capabilities in report writing.

26. **Solid Waste Management Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:

- (i) Master's degree in environmental engineering, or equivalent;
- (ii) Preferably with 15 years of experience for urban infrastructure and development related projects;
- (iii) Experience in design of integrated solid waste management (ISWM) components including preparation of development plans;
- (iv) Experience in preparation of ISWM strategy and implementation plan and SWM baseline data;
- (v) Experience in designing waste treatment facilities (aerobic and anaerobic digestion plant) and final disposal sites (engineering landfill site/ sanitary landfill site) including leachate treatment;
- (vi) Experience in the preparation of solid waste management technical guidelines and operational manuals;
- (vii) With experience with large multilateral funded projects such as ADB, WB etc.;
- (viii) Ability to work in an interdisciplinary team;
- (ix) Skills in communicating with authorities and other stakeholders; and
- (x) Demonstrated capabilities in report writing.

APPENDIX 7: TERMS OF REFERENCE: INSTITUTIONAL DEVELOPMENT CONSULTANTS SERVICES

I. INTRODUCTION

1. The project coordination office (PCO) based in the Department of Urban Development and Building Construction (DUDBC) will have a regional project implementation unit (R-PIU) in the Province 7 in association with project municipalities of Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta. Project implementation support units (PISU) will be established in all 4 municipalities which will under RPIU on the implementation of the project. All these organizations will be provided with necessary consulting services under the project to strengthen their management and implementation capability including engineering design and construction supervision.

2. Institutional development consultants (IDC) services with national consultants will be engaged to strengthen the capacity of Bheemdatt, Dhangadhi, Godawari, and Shuklaphanta municipalities for improved municipal asset management, strengthen municipal revenue mobilization and financial management capacity and improve urban planning. The expected impact of the contract will be stronger institutional capacity of the municipalities to manage growth in a sustainable and pro-active manner. The outcome of the IDCs contract will be improved financial management system and revenue mobilization capacity, strengthened asset management system, strengthened urban planning, smooth operation of project activities, mainstreamed gender equality and social inclusion (GESI) in the project municipalities, and effective implementation of performance-based grant.

3. The institutional development consultants (IDC) will be responsible for technical support to Province 7 municipalities for the performance-based socioeconomic development program management, gender equality and social inclusion mainstreaming, poverty reduction programs, and public awareness campaigns associated with the project. The consultant firms will be selected in accordance with the latest procedure and guidelines set by the Asian Development Bank (ADB).

II. SCOPE OF WORK

4. The scope of the work will include the following:

A. Component 1: Improvement of Financial Management System

The tasks are:

- (i) Review municipal financial management policy, budgeting policy, revenue management policy, tax and rate fixation procedures, tax compliance situation etc.
- (ii) Support municipality to prepare revenue improvement action plan (RIAP) and update annually, support municipality to prepare municipal revenue projections as per the RIAP, provide technical support to implement major revenue enhancement activities of RIAP such as design tax awareness campaign, property tax management system strengthening, other tax and service fee system strengthening etc., support to set tariff for established municipal services including under RUDP subprojects, support to implement revenue administration system software programs developed by central agencies, assist municipal staff in inputting property taxpayer information in taxpayer database, including linkage with GIS-based maps.
- (iii) Support to prepare financial operating plan (FOP) of the municipality and update annually, support to prepare municipal budgets as per the RIAP and FOP, support in financial reporting system etc.

- (iv) Support municipality to maintain project account of RUDP, support to prepare financial reports of the project, support municipality to prepare annual plan and program of project fund, support to prepare SOE in coordination with PCO and PIU etc.
- (v) Design and conduct training on the various aspects of municipal finance and management i.e. IPT, own source revenue, revenue projections, accounting system and other relevant topics of municipal finance, etc.

B. Component 2: Strengthening Municipal Organizational System

The tasks are:

- (i) Review municipal organizational system, role of municipality, expenditure on human resources, work flow system, etc.
- (ii) Support municipality to carry out organization and management survey, suggest appropriate organization system including human resource needs for sustainable operation of subprojects and prepare job description of all core municipal staff.
- (iii) Support municipality to identify staffing needs to implement project and prepare job description of project staff.
- (iv) Assist municipality to hire necessary project staff in time.
- (v) Identify key capacity gaps of organizational system and design capacity development programs with budget.
- (vi) Design and support to conduct organization management training to municipal staff.

C. Component 3: Strengthening Urban Planning

The tasks are:

- (i) Review existing model building bylaws and codes, prepare or amend applicable municipal bylaws and propose amendments in relation to urban development planning tailored for each municipality for (a) specific provision for minimum land parcel size, ground coverage and building height and also make specific provision for mixed land use and changes in building use; and b) ensuring risk resilience to natural causes e.g. climate change, earthquakes, etc.
- (ii) Prepare: a) an action plan for implementation and enforcement (including a monitoring and evaluation methodology for implementation) of building bylaws and national building codes, and (b) provide training and support for and monitoring of implementation of the action plan.
- (iii) GIS-based maps: Based on geo-referenced digital maps updated or prepared by the DSC (a) assess staff capacity and the existing urban mapping system, identify an improvement methodology and needs for hardware and software; (b) assess training needs, and prepare and implement a detailed staff training plan; (c) prepare detailed operation manuals for GIS-based map utilization and training for GIS-based map utilization; (d) establish and implement an effective house and street addressing system; (e) customize software to establish links with the taxation system and real estate asset inventory; (f) provide regular on-the-job assistance through email and regular visits; (g) provide one refresher session before the end of the assignment; and (h) organize workshops to disseminate best practices.
- (iv) Support in House Numbering System: (a) support municipality to prepare detail action plan budget to implement house numbering system; b) provide technical support to implement house numbering system; and (c) support to update house numbering system in GIS maps.

D. Component 4: Improve Asset Management System

The tasks are:

- (i) Review existing asset inventory system and O&M policy.
- (ii) Support municipality to identify and prepare inventory of municipal assets, support to assess condition of municipal assets and prepare operation and maintenance plan including tentative cost requirement, support to implement O&M plan and update annually.
- (iii) Formulate asset management plan of major municipal assets including social infrastructure will be established under the project, support to approve and implement the asset management plan.
- (iv) Prepare operation guidelines of major assets established under the project.

E. Component 5: Establish a GESI Institutional Structure

The tasks are:

- (i) Support to conduct baseline and other socioeconomic survey together with Social and Community Development Section of participating municipality.
- (ii) Conduct GESI capacity need assessment and develop capacity building plan to institutionalize GESI in the project municipalities and strengthen skills of all relevant municipality staff through training, workshops and exposure visits.
- (iii) Develop and implement GESI sensitive monitoring and reporting guidelines, including disaggregated database systems of poor and excluded groups receiving data services of municipalities; data and evidence collection formats with income, sex, caste/ ethnicity and location disaggregation.
- (iv) Identify measures and mechanisms for improving communications and public outreach plus community engagement in supervision and monitoring, especially that of women, poor and the excluded.
- (v) Ensure interventions are integrated in project activities to increase access of women, poor and excluded to municipality services.
- (vi) Advocate for affirmative action to give small contracts to women contractors for simple construction works. Include instructions in conditions of contract (COC) that promote and enable women and people from different locations to submit bids.
- (vii) Support to ensure activities listed in community participation and awareness plan are implemented.
- (viii) Adopt affirmative action principles to promote women's groups/cooperatives and community-based organizations of disadvantaged groups in all project interventions where possible.
- (ix) Support social and community development section of municipality to conduct capacity building and skills trainings.
- (x) Provide training and capacity building support to staff of social and community development section on GESI institutionalization.
- (xi) Integrate GESI reporting in the regular reporting requirements of the municipalities. Prepare quarterly implementation status report of GESI action plan and annual reports on performance and impact of project activities with disaggregated data and analysis regarding shifts in the lives of women, poor and the excluded.

F. Component 6: Establish Environmental Management System

The tasks are:

- (i) Strengthen capacity of municipality on environmental management, in relevant aspects of their main duties, such as environmental procedures in project development, water quality monitoring, wastewater, and solid waste treatment and fecal sludge management (FSM), etc.
- (ii) Work with the DSC to design municipality specific management models for FSM which clearly identifies i) institutional/ stakeholder roles and responsibilities, ii) FS collection and transportation options, and iii) FS treatment and reuse options.

- (iii) Provide ongoing technical support and advice to the PCO and PIU on FSM.
- (iv) Develop a training module on FSM to build capacity of water supply and sanitation users committees.
- (v) Provide support for preparing municipal environmental management and monitoring guidelines, and for their application.
- (vi) Provide support for integrating EM reporting in the regular reporting requirements of the municipalities.

G. Component 7: Project Implementation Support

The tasks are:

- (i) Support municipality to prepare annual program of performance based socio economic development grant by adopting participatory planning process based on the government guidelines and guidelines provided by the PCO.
- (ii) Support municipality to prepare designs and cost estimates of infrastructure subprojects under the performance based socioeconomic development grant.
- (iii) Collect information for monitoring and evaluation of project activities and support municipality to prepare periodic reports as per the government and project requirements.
- (iv) Support municipality to prepare programs under IDC.
- (v) Support municipality in procurement of goods and works.

H. Component 8: Community Awareness

- (i) The IDC will advise and assist the municipalities undertake community awareness programs including implementation of Community Awareness and Participation Plan. Duties will be in 3 interrelated sections of:

(a) Community Awareness and Peoples' Participation in Project Activities. The information, education and communication (IEC) materials will be developed using mass-media techniques in appropriate languages and using relevant mediums to each all citizens, including women, poor and the excluded. The activities will include:

- i. Inventory and review of recent and current community-based development initiatives in each project municipality, target groups, organizations involved, methodologies used, and lessons learned and successes and failures.
- ii. Design education and awareness materials (such as posters, billboards, leaflets, stickers and streamers for community display as well as newspaper advertisements and television features, videos and radio spots/ messages of about 30 second duration) based on consultations with local communities, including different social groups.
- iii. Plan and deliver initial briefing, training and orientation of PIU and other project staff in community awareness and participation programs.
- iv. Development of health and hygiene education materials including 3Rs (reuse, reduce and recycle household solid waste).
- v. Plan and organize regular training events, including workshops and seminars for the duration of the project.
- vi. Create awareness among stakeholders regarding long-term benefits and short-term inconveniences of the project to gain full support of the beneficiaries for the project.
- vii. Create awareness among beneficiaries regarding their responsibilities, including 3Rs, health care facilities and

sanitation and their optimal use for achieving the goal of the project.

- viii. Conduct regular public consultations/ focus group discussions, with particular attention to women and vulnerable households (such as poor, marginal, backward class, female headed, disabled/ handicapped person), to monitor community sensitization to the awareness campaign. Provide feedback to the PIU with a view to adjusting the awareness campaign and/or work program based on the impact of the campaign and concerns raised by the beneficiaries.

(b) Health and Hygiene Education

- i) Review IEC material prepared by others in the health sector and assess its utilization in the Project. Ensure co-ordination with agencies like World Health Organization (WHO), United Nations Children's Fund (UNICEF), District Health Office and health and education units of the municipalities and others.
- i) Prepare a plan for Health and Hygiene Education, especially focusing on women and children in order that the benefits of improved services are properly realized by the citizens and implementing supportive activities to ensure women of excluded groups like Dalits, Madhesis, Muslims, etc. also access the information.
- ii) Effectively carry out the Health and Hygiene Education Plan in collaboration with the municipalities and other important stakeholders of the subproject.
- iii) Create awareness regarding preventive care to avoid any health related hazards and the dangers of construction sites with a special focus towards women and schools relating to children and deep excavations.
- iv) Assist PIU implement the EMP to ensure that health and safety measures on construction sites, including awareness-raising and training of labors, is effective.

- (c) 3 R's Awareness Campaign.** Public attitudes and behavior must change to ensure active cooperation in the integrated SWM system especially waste separation, collection, avoiding littering, illegal dumping and waste burning and also to increase cooperation in recycling and composting schemes. Also the acceptance and willingness to pay collection fees has to be improved. There are ongoing efforts in municipalities which need to be built upon/strengthened. Waste bins or specified locations for separated waste need to be arranged. Community involvement and education can act to improve the public's perception of the services provided and improve the quality of material presented for recycling. Special campaigns will also be required by the concerned authorities regarding separation of hospital and other hazardous wastes. The campaign will allow for the two way communication of issues to ensure that residents' concerns and suggestions can be taken into account during the planning of service improvements. These factors are key issues to obtaining the highest level of commitment with the available schemes. The design of the awareness program should consider the following:

Components	Responsible authority or organization	Stakeholder, area covered
Leaflets, posters, stickers	Municipality	Entire municipality: households, commercial places, institutions, etc.
House-to-house motivation	Municipality non-government organization (NGO), community-based organization (CBO) or civil societies	Entire municipality: ward wise especially households of socially excluded groups with little time or resource to access information
Group meeting (ward level)	Ward Citizen's Forum, NGO, CBO or civic societies	In every ward
Group meeting (central body)	Municipality	Entire municipality
Rally/ Campaign/ Exhibition of re-usable/recyclable products	Municipality NGO, CBO or civic societies, environmental group	Every school, women's self-help groups
Art competition, Street drama, etc.	Ward Citizen's Forum	In every ward
Billboard/ Festoon	Municipality, private enterprise	Municipality (at important locations)
Annual fair	Municipality	Municipality (central event)
Mass media	Municipality	All electronic and news media

III. KEY OUTPUTS

5. The contract has 14 key outputs. The major activities of each output are as follows:
- (i) **Output 1. Annually Updated and Implemented Revenue Improvement Action Plans (RIAP).** The IDC will provide support to municipalities to review existing revenue mobilization policy, assess municipal revenue coverage, rates and historic revenue collection. Based on the review of existing situation, the IDC will provide support to prepare revenue improvement action plans including (i) existing situation analysis, (ii) identify revenue improvement activities and formulate revenue improvement action plan, (iii) carry out municipal revenue projection for 5 years considering impact of revenue improvement activities on municipal revenue, (iv) support municipality to fix tariff rates of subprojects implemented under the project, (v) support municipality to update the RIAP annually, and (vi) support municipality to get formal approval of the RIAP.
 - (ii) **Output 2. Key Activities of the Revenue Implementation Action Plan Implemented.** Key activities of the RIAP will be implemented by the municipalities with technical support of the IDC as per the RIAP. Key revenue enhancement activities may include (i) strengthening revenue administration system, (ii) strengthening revenue data base system including operationalization of software, (iii) increase tax awareness, (iv) property tax system strengthening, and (v) design and conduct trainings in revenue enhancement etc.
 - (iii) **Output 3. Annually Updated and Budgeted Financial Operating Plans (FOP).** Financial operating plan of the municipality aimed to improve fund flow system of municipality by estimating revenue receipts and expenditure incurred in mid-term period. The IDC will provide support to municipalities to project recurrent expenditure and capital expenditure for five years to provide input to prepare municipal annual budget. To prepare FOP, the IDC will provide support to municipality to (i) analyze historic expenditure trend, (ii) project recurrent expenditure for coming 5 years, (iii) identify recurrent surplus for capital investment, (iv) estimate capital expenditure, (v) support

municipality to review FOP annually, and (vi) support municipality to prepare annual budget based on the RIAP and FOP.

- (iv) **Output 4. Timely Submission of Statement of Expenditures.** With the support of IDC, municipalities will be able to prepare statements of expenditure (SOE) in satisfactory manner for reimbursement. The IDC will provide support to municipality to (i) prepare annual plan, program and budget of project activities; (ii) maintain project accounts; (iii) prepare statement of expenditures of funds spent under the project; (iv) support to carry out annual audit of the accounts and timely submission of audit report to the PCO; and (v) design and conduct training on financial management system improvement.
- (v) **Output 5. Organization and Management Survey Report of Municipality.** The IDC will provide support to strengthen municipal capacity to deliver municipal services to its citizens in key areas identified after reviewing existing municipal institutional capacity. The support will: (i) carry out organization and management survey and recommend organization structure and staffing needs; (ii) identify staffing needs to implement project activities and prepare job description; (iii) assist municipality to hire necessary project staff; (iv) identify key capacity gaps, design capacity development programs with budget; and (v) design and deliver training programs to meet trainings needs.
- (vi) **Output 6. Amended building by-laws approved.** This output is intended to strengthen urban planning by assisting the municipalities in (i) reviewing and revising building bylaws for the delineation of urban functions in municipalities, and (ii) implementing building bylaws and national building codes. The approval decision is carried out at the municipal council level.
- (vii) **Output 7. GIS-based House Numbering System.** IDC support will use updated geo-referenced digital maps of the municipalities prepared by the DSC. The IDC will support municipality to establish a system for regular map updating for use in municipal activities by providing class room and-the-job training. The GIS maps will be used by the municipality to (i) delineate poverty-ridden areas; (ii) establish and implement an effective house and street addressing system; (iii) prepare roads hierarchy by defining right of way, roads and off-road standards; and (iv) use reference for property tax administration, etc. The IDC will also provide technical support to prepare program and budget for house numbering system implementation and technical support to implement the house numbering system.
- (viii) **Output 8. Annually updated O&M plan.** The IDC will provide technical support to prepare and implement O&M plan of municipality and updating the plan annually. The O&M plan includes (i) inventory of municipal assets including public assets; (ii) identify operation and maintenance needs by categorizing O&M needs and costs; (iii) assist municipality to approve O&M plan and allocate budget for operation and maintenance; and (iv) annually updating the O&M plan.
- (ix) **Output 9. Asset Management Plan and Operation Guidelines.** The IDC will provide support to the municipality to establish a system for the management of the assets established under the project after handing over to the municipality. Operation guidelines of the assets will also be prepared by the IDC.

- (x) **Output 10. GESI.** This output is aimed to strengthen GESI mainstreaming in municipality functioning, from institutional structure, planning, programming, budgeting, and implementation to monitoring and reporting. Capacity strengthening programs will be undertaken to establish/ strengthen structures, roles and systems, tools and mechanisms for integrating GESI in municipality processes and enhance skills of municipality staff on GESI. Efforts to increase sex and caste/ ethnicity diversity amongst municipality staff will be made. There will be processes for review and revision, where needed of human resource and personnel policies of municipalities to ensure recruitment processes are GESI sensitive, the support for gender specific responsibilities like child care and breast feeding time. Introduction of flexible timing provided to employees with policies against sexual harassment and caste-based discrimination developed and implemented. The working culture within the municipalities will be promoted to be supportive and discrimination free for all, including women, sexual and gender minorities, and people from disadvantaged social groups.
- (xi) **Output 11. Environmental Management.** Capacity development in the municipalities for environmental management, especially environmental assessment (preparation of IEEs) during project preparation, formulation of EMPs for specific projects, setting up and carrying out environmental monitoring, including EH&S, during and after the construction period. It also aims at raising environmental awareness in the municipalities (administration as well as general public) and sustaining environmental improvements introduced by the project.
- (xii) **Output 12. Formulation of Annual Program for Performance Based Socioeconomic Development Program and Institutional Development Program.** This output is intended to provide technical support to formulate annual program of performance-based socio economic development grants and capacity development support grants by adopting participatory planning process and government guidelines. The IDC in coordination with DSC will provide further support to prepare design and cost estimates of small community infrastructure development sub-projects, prepare proposals for other programs such as awareness programs, skill development programs, income generating trainings and institutional capacity development programs. Technical support will be provided to strengthen municipal capacity in procurement.
- (xiii) **Output 13. Periodic Progress Reports of Project as per the Guidelines.** Monitoring and evaluation system of municipality will be strengthened by providing support in information collection, data analysis and periodic reporting to the government and PCO as per guidelines. With the support of the IDC, municipalities will prepare progress reports of project activities by adopting the government guidelines and projects reporting formats in time.
- (xiv) **Output 14. Community Awareness.** The IDC will design IEC materials particularly for health and hygiene education, 3R awareness campaigns and community awareness in appropriate languages considering most appropriative media for awareness-raising. Social mobilization activities will be carried out by organizing house to house motivation and group meetings. With the technical support of the IDC, municipality will be able to mobilize NGOs, CBOs, ward citizen forums, civil societies to organize awareness events as planned.

IV. PROFESSIONAL STAFF REQUIREMENTS

6. **Specialist Inputs.** The expertise requirements of the consulting services are summarized in Table A10.1.

Table A7.1: Expertise Requirements

Expertise	Person-Months
A. National	
1. Urban management expert (team leader)	55
2. Financial management expert	24
3. Institutional development expert	15
4. Information system experts	18
5. GIS Expert	24
6. Environmental management expert	25
7. IEC expert	8
8. Municipal engineers–municipal team coordinator (4 nos)	180
9. Municipal finance specialist (4 nos)	120
10. GESI specialist (4 nos)	144
Total	613

7. In addition, 150 person months of computer operators for data inputting is to be provided. It is envisaged that the consultant will provide adequate budget for domestic travel by national experts to enable close monitoring and supervision of all the municipalities supported under the assignment and support staff such as secretarial staff, translators and drivers, as considered necessary.

8. **Team Leader and Urban Management Expert (National, 55 person-months).** The team leader should have a master's degree in urban planning, urban management, urban ecological planning, regional planning, municipal engineering or relevant fields and preferably with 15 years of experience in urban planning or urban management. A good understanding in a broad range of urban management and experience working for the ADB or other development partners' projects in the urban sector is highly desirable. As team leader, he or she will (i) manage the overall implementation of the contract; (ii) prepare a task matrix for consultants and counterparts; (iii) ensure timely inputs from the consultants; (iv) supervise the quality of inputs from the national consultants; (v) coordinate closely with the executing agency, participating municipalities, and ADB; (vi) coordinate and supervise capacity development programs implemented for each output for best outcomes; (vii) be responsible for delivering various components under the contract; and (viii) support municipalities to formulate, revise, approve and implementation of building bylaws and codes based on urban development plans. The team leader will ensure smooth coordination and linkage among components. He/ she will act as a focal point to coordinate with the Department of Urban Development and Building Construction, PCO and PIU.

9. **Financial Management Expert (National, 30 person-months, intermittent).** The expert should have a master's degree in business studies, business administration with specialisation finance, accounting, or relevant fields and preferably with 15 years of experience working in municipal finance, accounting, or auditing. He or she will take the lead in assisting the municipalities in (i) review municipal financial management situation and policy; (ii) assist to prepare and update RIAP and FOP; (iii) provide technical support to municipal finance specialist to support implementation of revenue enhancement activities; (iv) support municipality to set tariff under subprojects implemented under the project; (v) support municipality to prepare project accounts, auditing and submission of SOE; and (vi) design and conduct trainings programs in municipal revenue improvement and financial management system strengthen.

10. Institutional Development Expert (National, 15 person-months, intermittent).

The expert should have a master's degree in discipline of development studies/management or any relevant fields and preferably with 15 years of experience working in organization development activities including O&M survey, human resource management in public institutions and training needs assessment. He or she will take the lead in assisting the municipalities in (i) review municipal organization system; (ii) assist to prepare and update O&M survey and job description of core municipal staff; (iii) identify staffing needs to implement project activities and prepare job descriptions; (iv) support project staff recruitment; (v) support to prepare capacity development programs at regional and municipal level with budget; (vi) design and conduct regional level trainings; and (vii) contract and coordinate with MOFALD in institutional development activities. He or she will act as a focal point to coordinate with the MOFALD.

11. Information System Experts (national, 18 person-months).

The expert should have a master's degree in computer science, system engineering, or relevant fields and preferably with 12 years of experience in development of software/ MIS. A good understanding of various GIS software programs is required, and experience in urban GIS-based mapping is essential. The specialist will in institutionalizing the GIS-based municipal information system. He or she will (i) assess the staff capacity level and the existing urban mapping system; (ii) identify an efficient improvement methodology and needs for hardware and software; (iii) identify missing features to be captured in the maps prepared/ updated by DSC, including administrative boundaries, topographic features, cadastral data, infrastructure, and buildings; (iv) conduct field verification surveys; (v) develop the cadastral information system; (vi) establish an effective house and street addressing (numbering) system with roads hierarchy; (vii) assist municipalities to delineate poverty ridden areas, (viii) link GIS-based maps as a reference for the tax system; (ix) support municipality to establish office automation system; and (x) undertake staff training to equip relevant staff with the skills necessary to utilize, produce, interpret, and analyze outputs from the mapping system for decision making and to update the maps, including demonstration and dissemination of actual usage of various thematic maps. He or she will customize the software to link the GIS system with the municipalities' taxation system.

12. GIS Expert (National, 24 person months).

The expert should have master's degree in Geo-information Science or GIS preferably with 10 years of professional experiences on using GIS technology especially in developing urban base map, municipal GIS database system. He should have experiences in designing and developing GIS database system for urban sector, experiences in digital base mapping/urban mapping and Municipal GIS/ hazard and vulnerability mapping/land use mapping/cadastral mapping/ poverty assessment and mapping at least three numbers. Specific experience on designing, developing and implementing metric addressing system in municipalities with practical field experiences will be a benefit. Relevant experiences on designing training curricula and materials, coordinating and undertaking trainings on Urban Base Map and Municipal GIS is desirable.

13. Environmental Management Expert (National, 25 person-months).

The expert should preferably have 15 years' experience working in Environmental management and have a master's degree in environmental science, natural resources management or other comparative university degree. Knowledge of environmental management tools, as well as structures and policies of Nepal environmental legislation. Have proven training and mentoring skills. He/ she should have extensive experience working on environmental management plus health and safety issues but especially of urban nature with proven experience in working with a multi-stakeholder community. Relevant experience to urban sustainable development areas is preferred. High communication and presentation skills and excellent command of English and Nepali languages is important. Experience of working for the ADB or other development partners' projects in the urban sector is highly desirable. As environmental management expert he/ she will (i) manage the overall

implementation of the environmental management component of institutional strengthening of municipalities from an environmental management technical working group in municipality; (ii) build capacity of technical working group by organizing training programs and technical support; (iii) work with the DSC to design municipality specific management models for FSM which clearly identifying institutional/ stakeholder roles and responsibilities, FS collection and transportation options, FS treatment and reuse options etc.; (iv) provide support for preparing municipal environmental management and monitoring guidelines, and for their application; (v) provide support for integrating EM reporting in the regular reporting requirements of the municipalities; and (vi) be responsible for the documentation needed to report on environmental management institutional development components.

14. **IEC Expert (National, 8 person-months).** The IEC expert should have at least a master's degree in mass communication, social development or equivalent and preferably with 15 years of direct involvement designing awareness materials, planning, designing and implementing awareness campaigns preferably in health and hygiene, 3Rs for SWM. The IEC expert will responsible to design IEC materials for health and hygiene, 3Rs and mass awareness campaigns by selecting appropriate media of communication and languages.

15. **Municipal Engineers (National–4 nos, 180 person-months total).** The municipal engineers should have at least a bachelor's degree in civil engineering or other relevant field, and preferably with 12 years of experience in design and implementation of municipal/ community level small infrastructure development subprojects. A good understanding of urban planning, project management and GIS software programs is desirable. The engineer will (i) lead municipal level consultant team and ensure timely inputs from the municipal level consultants; (ii) manage the overall technical support activities for municipality in coordination with the team leader and subject experts; (iii) support municipality to prepare plan for implementation and enforcement of building bylaws and national building codes; (iv) support municipality to implement house numbering system; (v) support to prepare inventory of municipal assets and prepare O&M plan and update annually; (vi) prepare asset management plan and operation guidelines of sub-projects in coordination with the DSC; (vii) support to prepare annual program of performance based socioeconomic development program; (viii) support design and estimates of subprojects under performance-based socio economic development program; and (ix) support to collect information for monitoring and evaluation of municipal level activities and prepare periodic reporting. The municipal engineer will ensure smooth coordination and linkage among components. He or she will act under general supervision of PISU chief in technical matters.

16. **Municipal Finance Specialists (National–4 nos, 120 person-months total).** The municipal finance specialist should have a master's degree in finance or business administration or relevant fields and preferably with 12 years of experience in public financial management, local governance revenue and auditing. A good understanding of local governance revenue administration and financial management and financial reporting especially in development partners' projects is highly desirable. The municipal finance specialist will work under general supervision of financial management expert and municipal engineer. He or she will (i) provide technical support to municipality to implement key revenue enhancement activities; (ii) support municipality to implement financial administration and revenue administration related software developed by central agencies; (iii) support municipality to implement tax campaigns and establish tax data base; (iv) support to prepare municipal annual budget based on RIAP and FOP; (v) support municipality to prepare annual program and budget under capacity development component and performance-based socioeconomic development program; (vi) support to implement municipal level capacity development programs; and (vii) support municipality to prepare project accounts and audit.

17. **Gender Equality and Social Inclusion (GESI) Specialists (National–4 nos, 144 person-months total).** The GESI specialist should have a master's degree in social development/ gender development studies or related subjects and preferably with 15 years of experience in gender and GESI mainstreaming, community development and training. A good understanding of GoN and MOFALD's mandates for GESI is essential. Experience of working for the ADB or other development partners' projects in the urban sector is highly desirable. The specialist will work under general supervision of team leader and municipal engineer. He or she will (i) support to manage the overall institutional structure in municipality for implementation of the GESI component; (ii) provide technical support to review, revise and develop municipal policies, bylaws and directives from a GESI perspective; (iii) conduct GESI capacity need assessment and develop capacity building plan to institutionalize GESI in the project municipalities and strengthen skills of all relevant municipality staff; (iv) advocate for affirmative action to give small contracts to women contractors for simple construction works; (v) support municipality to prepare annual program related with GESI mainstreaming, skill development, awareness raising, income generating etc. by adopting participatory planning process under the performance based socio economic development program; (vi) support to prepare proposals for skill development trainings, awareness programs, income generating trainings etc.; (vii) prepare IEC materials in appropriate languages and using relevant mediums to reach all citizens, including women, poor and the excluded (viii) preparation of information materials and media campaigns in appropriate languages and using relevant mediums to reach all citizens, including women, poor and the excluded (ix) support to design and implement community awareness programs such as rally/ campaign/ exhibition of re-usable/ recyclable products, art competition, street drama, billboard/ festoon, annual fair, mass media etc.; and (x) be responsible for the documentation needed to report on GESI related activities. The GESI specialist will follow the policy directives of MOUD, DUDBC, MOFALD, project municipalities and ADB.

V. IMPLEMENTATION ARRANGEMENTS

18. The MOUD, through the DUDBC, will be the executing agency of the project. The MOFALD will assign chief of municipal management section (under secretary) to coordinate and supervise the work under components 1 to 2 and 5, while the DUDBC will assign chief of urban development division (deputy director general) to coordinate and supervise rest components.

19. At the central level, a steering committee will be established to monitor project implementation. The steering committee will be chaired by the secretary of the MOUD and consist of high-level representatives from the National Planning Commission, the Ministry of Finance, the MOFALD, the MOWSS, the Secretariat of the Local Body Fiscal Commission, the Municipal Association of Nepal, participating municipalities, and the DUDBC. Project coordinators will work as members and the conveners of the steering committee. Technical departments and institutions (such as the Department of Water Supply and Sewerage, the Department of Roads, and the Solid Waste Management Technical Support Center) will be invited whenever issues to be discussed are considered relevant. The steering committee will meet as needed to discuss the overall progress and provide policy guidance to the project.

20. A PIU will be established at regional level in participation of project municipalities. The IDC will work under day to day supervision of PIU for overall administrative issues, work performance and delivery of outputs in time with desirable quality.

21. At each participating municipality, a PISU will be established, with support staff, in the areas of engineering, financial management, IT, social development and environment. A working committee will be established to work closely with the project consultants. The

working committee will comprise representatives from sections or subsections on revenue, accounting, audit, urban planning, GIS, water and sanitation, transport, solid waste management, GESI and any other relevant fields. In addition, a municipal project coordination committee (MPCC) will be established to obtain consensus and coordination from municipal level stakeholders. The consultant team deputed in municipality has to work under the general supervision of the PIU and day to day supervision of PISU chief.

22. The government and municipality will provide (i) all relevant documents, data, statistics, information, and maps that are available at the disposal of the government; (ii) appropriate and qualified counterpart staff, including their field per diem and field transportation; (iii) project coordinators from the MOFALD and the DUDBC, to be assigned before the consultants' mobilization; (iv) project focal points and counterpart staff from each participating municipality, to be assigned before the consultants' mobilization; (v) office accommodation and office equipment, including desks and chairs, and local communication in PIU and municipal offices; (vi) logistical assistance for the workshops and seminars, including the venue, and identifying and inviting the invitees; and (vii) utility costs, covering electricity and water.

23. The contract will be implemented over 55 months from February 2017 to September 2021. The consultants will be engaged by DUDBC in accordance with the ADB Guidelines on the Use of Consultants (March 2013, as amended from time to time).

24. A team of consultants will be recruited under one package using the quality-and-cost-based method of selection with a standard quality–cost ratio of 80:20. A simplified technical proposal will be used for the selection of the consultant firm. Disbursements under the contract will be made in accordance with ADB's Technical Assistance Disbursement Handbook.

25. The consultants will assist the government in organizing workshops at the beginning and toward completion of the contract. The overall framework and approach, objectives, and targets of the project will be shared at the first workshop by inviting relevant government agencies and municipalities. The final workshop will be held to disseminate good practices and lessons from the project.

a. Offices and Equipment

26. The government will provide office accommodation and office equipment, including desks and chairs, and local communication in DUDBC Divisional Office Kailali. For district level consultant team, the municipality will provide office space, desks and chairs including utility costs, covering electricity and water.

27. After completion of the contract, the items purchased under the project shall be handed over to the executing agencies or participating municipalities.

B. Deliverables

28. Other than reporting outputs (see below), the consultant should also deliver the following in hard and soft copies to the executing agencies or participating municipalities, and that all reports should include disaggregation and analysis of GESI data:

- (i) List of proposed project staff position and their job description – within two months of beginning of the contract;
- (ii) Approved RIAPs, FOPs and O&M plans from year–1;
- (iii) Summary report on RIAP implementation progress from year–2;
- (iv) Organization and management survey report of all four municipalities in year-1;

- (v) Annual program and progress report of the budget provided under municipal capacity development and performance-based socioeconomic development program from year-1;
- (vi) Approved/ revised building bylaws of municipalities within year 2;
- (vii) Base maps for the municipalities in suitable scales (1:2500 to 1:5000) including all files prepared for each data layer, and any other file prepared for integration into GIS including codes if any developed for GIS implementation, customization, etc. within year 2 and updated in year 5;
- (viii) Progress report of house numbering from year 3;
- (ix) Asset management plan and operation guidelines in year 4;
- (x) Surveyed data in specified formats;
- (xi) GIS Database (including tax related data);
- (xii) Digital pictures of properties; and
- (xiii) Technical and User manuals.

C. Reporting

29. The consultants will submit (i) an inception report within 6 weeks from the start of the contract, finalizing the approach and presenting a detailed work plan and implementation schedule for the contract; (ii) a progress report every quarter, summarizing consultants' planned and actual inputs, work progress, problems and challenges identified and actions taken or proposed to be taken to address them as well as major outputs shared with municipalities and the government, and programs planned for the next quarter; (iii) a draft final report 45 months from the start of the contract, presenting all activities undertaken and results achieved, an assessment of achievements in comparison to original targets, a review of problems encountered during implementation and actions taken or proposed to be taken to remedy these problems, and proposed recommendations for future short-to medium-term programs, with clear presentation of actors, actions, time frame, performance indicators, and targets; and (iv) a final report 4 weeks after the final workshops and the receipt of comments on the draft final report from the government and ADB, satisfying all requirements of the contract.

D. Cost and Financing

30. The government has asked ADB to provide funds from the proposed project loan. The government will provide counterpart support in the form of office space, remuneration for counterpart staff (including their field per-diem and transportation), and other in-kind contributions.

E. EVALUATION CRITERIA

31. Only 6 firms will be short-listed as stipulated by the ADB guidelines which will be selected based on the following criteria:

- (i) Management Competency—20%;
- (ii) Technical Competency—80%; and
- (iii) Firms experience in improving financial management systems/ revenue enhancement systems, institutional development/ asset management/ preparation of bylaws/ strengthening environmental management capacities/Urban Maps preparation/ establishing GESI institutional structures.

Note:

- *Projects completed in last ten years (between June 2006 and November 2016) shall be considered for evaluation irrespective of the project start date.*
- *Experience of firm as Single or Lead or JV only shall be considered for evaluation.*

- *In case of JV, average score of all JV partners other than lead partners shall be taken for evaluation*
- *Only project of consulting service of value more than NRs 1million shall be considered for evaluation*
- *In case of JV, the weighting used shall be 60% for the lead firm and 40% for partners.*

**APPENDIX 8: TERMS OF REFERENCE:
DESIGN AND CONSTRUCTION SUPERVISION CONSULTANT SERVICES IN
BIRATNAGAR MUNICIPALITY**

I. OBJECTIVE

1. The objective of the design and construction supervision consultant (DCSC) services is to facilitate the effective project implementation at the municipality level roads and drainages and prepare detail design of integrated solid waste management. The consultant will work under the supervision of the project manager in the project implementation unit (PIU) of the municipality, and will assist the municipality in (i) supervising overall project implementation and management, (ii) construction management of subprojects¹, (iii) ensuring proper monitoring of project activities, (iv) preparing specific operation and maintenance plans for subprojects, (v) prepare and update assets inventory for the entire Biratnagar municipality, and (vi) preparing detail design of integrated solid waste management including sanitary landfill development.
2. The selection and engagement of the DCSC will be undertaken by PIU in accordance with the Quality and Cost Based Selection (QCBS) method (Quality-Cost) set out in ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). The cost for DCSC will be financed by the Project. The DCSC will, through the PIUs, also report to the project coordination office (PCO) which will guide, supervise and monitor the overall Project implementation and assist the PIU in reviewing all technical and other submissions from the DCSC.
3. Separate consultants will assist the PCO in overall management and implementation of the Project, namely project management consultant (PMC). The DCSC is expected to commence the assignment by June 2017. A total of 176 person months of national consulting services will be required for the DCSC.

II. PROJECT BACKGROUND

4. The Government of Nepal is negotiating loan with Asian Development Bank (ADB) for the Regional Urban Development Project (RUDP) in Nepal. The RUDP, in line with ADB's water and urban operation plans, will (a) construct and upgrade urban infrastructure in 8 towns in the Terai Region of Nepal and (b) improve operational effectiveness of these 8 municipalities. The project will also build institutional capacity of DUDBC for urban planning, project planning and project preparation in order to proactively shape urbanization in Nepal and implement the National Urban Development Strategy. Biratnagar is one of the 8 municipal towns included in the RUDP. This subcomponent of the RUDP covers the construction and improvement of sewerage, drainage and roads, and design of Integrated solid waste management system for Biratnagar municipality.

III. SCOPE OF WORKS

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

¹ Subprojects are: (i) improvement and development of drainage systems; and (ii) improvement of urban roads and lanes.

A. Construction Management and Post Construction Phase**1. Construction Supervision****(i) Quality Monitoring**

- (a) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract.
- (b) Monitor and enforce quality assurance and quality control plan.
- (c) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract.
- (d) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review of bills submitted and claimed for payment by the contractor and forward to project manager with recommendations.

(ii) Environmental and Social Compliance Monitoring

- (a) Ensure all environmental requirements as reported in the EIA/ IEE are incorporated into the bidding and contract documents.
- (b) Assist the PIU in monitoring compliance with the EIA/ IEE and Resettlement Plans and any environmental and social development issues identified during supervision phase in coordination with PIU, PCO, NGOs and other stakeholders. Review the monthly progress reports submitted by the contractor and field verify whether or not the contractor has complied with the approved conditions as stated in the EMP.
- (c) Assist PIU prepare quarterly monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU.
- (d) Assist the PIU in updating and implementing the environment management plan (EMP) and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the project.
- (e) Assist the PIU in monitoring and enforcing, as detailed out in safety manual, the measures taken to ensure safety of the workers, other project personnel, general public and works.
- (f) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement. This will help to develop feeling of ownership among the stakeholders.

(iii) Construction Site Management

- (a) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable.
- (b) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies.
- (c) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations.

- (d) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill.

2. Post Construction Support

- (i) Prepare operation and maintenance procedures and check installation and commissioning.
- (ii) Provide sufficient on the job training to the PIU about the subprojects and its operation and maintenance.
- (iii) Provide services during contract defect liability period.

B. Project Management at Municipal Level

- (i) Prepare a comprehensive implementation schedule and work plan for all subprojects supported under the project, covering all stages of the implementation process from field surveys and updated on a monthly basis.
- (ii) Build capacity of PIU on a regular basis in planning and managing all subprojects, and assist PIUs on the project management including monitoring risk, cost control, scheduling, monitoring progress, auditing, reporting and compliance monitoring.
- (iii) Assist PIU in reporting to the PCO and conducting regular stakeholder meetings to discuss progress and issues related implementation, and prepare minutes for recording and circulation.
- (iv) Assist PIU to develop and implement procedure for timely payments to the contractors and maintain subproject wise contract ledger.
- (v) Support PIU in conducting financial accounting, preparing project accounting reports, and administer the ADB loan and grant in accordance with ADB's disbursement guidelines and provide trainings to the PIU staff for the same.
- (vi) Assist PIU in ensuring compliance with all loan/grant covenants during implementation.
- (vii) Support PIU in obtaining, in a timely manner, the required clearances, permits, approvals, sanctions or any other information from relevant authorities so that the project activities are not unduly delayed.
- (viii) Identify municipal level mitigation measures to minimize governance risk elaborate in the governance risk assessment and management plan for the project.
- (ix) Assist PIU in carrying out inter-utility management coordination during the project implementation.
- (x) Assist the municipality in the initial operation of the system built under the project. Support includes establishment or strengthening of units responsible for O&M of drainage system, and roads, and training to staff to a level and degree commensurate with the roles and functions of these units.

C. Gender Equality and Social Inclusion (GESI) Mainstreaming at Municipal Level

- (i) Support municipality to establish GESI technical working team and orientation provided on their roles and responsibility. This will ensure to establish GESI institutional structure in municipality.
- (ii) Work closely with GESI technical working group to develop and implement the necessary interventions to revise systems, formats, mechanism and process of the municipality to integrate GESI mainstreaming in planning, budgeting and monitoring.
- (iii) Assist social development unit of the municipality to conduct regular coordination meeting.

- (iv) Assist social development unit to organize workshop to prepare a five-year work plan in participatory process for GESI mainstreaming in municipality and prepare annual work plan based on the five-year work plan.
- (v) Organize training including in-country exposure visit for GESI technical working team and social development unit staff in GESI mainstreaming tools and approaches and best practices of GESI in urban context.
- (vi) Conduct training of trainers for municipal staff on GESI mainstreaming in RUDP specific subsector in coordination with PCO/ PMSC.
- (vii) Organize GESI mainstreaming training for municipal staff, municipal political body representatives including relevant agencies for wider understanding on GESI; conduct consultation/ workshops for concerned officials in municipality as and when necessary.
- (viii) Assist PIU to prepare and implement a detail municipal-level GESI implementation plan in the framework provided by PCO/ PMSC and ensure integration of GESI in all project components; facilitate annual review of implementation plan.
- (ix) Provide technical inputs to PIU for ensuring GESI targets and approaches in community development program in poverty clusters; and assist in monitoring and disaggregated data collection and reporting.
- (x) Coordinate with PCO/ PMSC GESI consultant for necessary inputs.
- (xi) Assist PIU to maintain gender, caste/ ethnicity disaggregated data on all relevant project activities including poverty related information; and prepare progress reports on GESI implementation plan as required.

IV. INDICATIVE CONSULTING INPUT

D. Key Experts

S. NO.	Consultant/Specialist	Number of Person-Months
1	Team Leader/ Sewerage and Drainage Engineer	36
2	DTL/Road Engineer	15
3	Integrated Solid Waste Management Design Engineer	12
4	Geotechnical Engineer	2
5	Structural Engineer	2
6	Procurement Expert/ Contract Management Specialist	6
8	Construction Supervision and Utility Coordination Engineer (*2)	60
10	Finance/ Economist	3
11	Quantity Surveyor	6
12	Environment Safeguard Expert	15
13	Social Safeguards/ GESI/ Resettlement Expert	15
14	Electrical Engineer	2
15	Mechanical Engineer	2
15	Un-allocated Experts	0
	Total	176

GESI = gender equality and social inclusion.

E. Support Staff

Office Administration/Account Manager	Months	36
Supervisor (30 months) x 4/Junior engineer	Months	120
Quantity Surveyor (24 months) x 2/ Junior engineer	Months	48
CAD Operators x 1 (30 months)/Draft person	Months	30
Computer operator/ Receptionist	Months	36
Driver	Months	36
Office Attendant	Months	36

F. Expert Qualifications and Responsibilities

- (i) **Team Leader/ Sewerage and Drainage Engineer.** Team leader/ sewerage and drainage engineer preferably have a master's degree in municipal sectors such as wastewater management, drainage & sewerage or in a related discipline with experience in managing urban infrastructure projects for multilateral agencies and have experience of managing as either team leader or deputy team leader of large infrastructure projects. The basic requirements include:
- a) Preferably more than 10 years of project-related experience in urban infrastructure development project in the capacity of team leader/ deputy team leader;
 - b) Preferably more than 5 years' experience in urban infrastructure projects in the capacity of drainage/ sewerage design engineer/ specialist;
 - c) Demonstrated capabilities to lead multidisciplinary teams and to work with a range of different stakeholders;
 - d) Experience with large multilateral funded projects such as ADB projects is desirable and working with municipalities is added benefit;
 - e) Ability to work in an interdisciplinary team;
 - f) Skills in communicating with authorities and other stakeholders; and
 - g) Demonstrated capabilities in report writing.
- (ii) The team leader will undertake the following, but not limited to:
- (a) Review the designs and carry out necessary adjustments, revisions specific to the site conditions without increase in the overall cost as far as practicable in coordination with the PIU;
 - (b) Plan for mobilization of intermittent expert and full time experts such that their availability and the timing of requirements of work are properly matched and the time inputs in the consultancy contract is not exceeded;
 - (c) Ensure that the resident construction supervision engineers visit the site regularly, check the quality of works, carry out necessary tests, maintain daily site records, prepare monthly progress reports, and check the contractor's IPCs and recommend payments in a timely manner;
 - (d) Coordinate the works of other intermittent experts in a timely and effective manner;
 - (e) Review the contractor's claim, if any, in a timely manner and issue engineer's decision. Claims not settled and disputes arisen shall be referred to the dispute settlement mechanism provided in the contract without delay;

- (f) Control variations and ensure that the essential variations orders are issued on time with clear indication of impacts on time and cost overruns in the contract;
 - (g) Interact with the PIU and concerned authorities in a timely manner to ensure timely handling of grievance and project completion without undue time and cost over-run;
 - (h) Ensure that as built drawings and maintenance manuals are prepared, concerned representative of the PIU/ municipality are given training and the project is handed over in a complete package;
 - (i) Ensure that the design of integrated solid waste management system including the development of landfill site is carried out specific to the site conditions by the ISWM expert; and
 - (j) As drainage expert, plan the surface and subsurface drainage system, guide the drainage design engineer in detail design of drainages.
- (iii) **Deputy Team Leader/ Roads Engineer.** The expert is expected to have experience of working in urban areas with following credentials:
- (a) Preferably have master's degree in transportation/ highway engineering or related discipline;
 - (b) Preferably have more than 1 project experience in design and construction of surface water drainage works and municipal roads including cycle ways and pedestrian access, street furniture and street lighting;
 - (c) Preferably more than 15 years of experience in survey/design/ cost estimate/ construction to include road alignments selection, soil and material investigations, pavement design and specifications, plus preparation of estimates of various components of roads/ highways;
 - (d) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (e) Ability to work in an interdisciplinary team;
 - (f) Skills in communicating with authorities and other stakeholders; and
 - (g) Demonstrated capabilities in report writing.
- (iv) The road engineer will undertake the following, but not limited to:
- (a) Review the design of road components and make necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (b) Assist the team leader timely and effectively.
- (v) **Integrated Solid Waste Management Design Engineer.** The consultant is expected to have following requirements:
- (a) Preferably master's degree in civil, environmental engineering, Solid Waste Management or related subject;
 - (b) Preferably more than 1 project experience in planning/ and designing of integrated solid waste management (ISWM) components such as waste treatment facilities (aerobic and anaerobic digestion plant) and final disposal sites (engineering landfill site/ sanitary landfill site) including leachate treatment Preferably more than 5 years of experience in construction supervision or management of construction of ISWM;
 - (c) Experience in preparation of ISWM strategy and implementation plan and SWM baseline data. Experience in the preparation of solid waste management technical guidelines and operational manuals would be added benefit;
 - (d) Ability to work in an interdisciplinary team;

- (e) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (f) Skills in communicating with authorities and other stakeholders; and
 - (g) Demonstrated capabilities in GIS and report writing.
- (vi) The drainage engineer/ ISWM expert will undertake the following, but not limited to:
- (a) Review the design of the surface and subsurface drainages and make necessary adjustments to ensure fitness of purpose without increase in time and cost of construction;
 - (b) Collect SWM baseline data and prepare ISWM strategy and implementation;
 - (c) Designing Integrated Solid Waste Management (ISWM) components such as waste treatment facilities (aerobic and anaerobic digestion plant) and final disposal sites (engineering landfill site/ sanitary landfill site) including leachate treatment;
 - (d) Prepare solid waste management technical guidelines and operational manuals; and
 - (e) Assist the team leader in the matters related to ISWM strategy and designs.
- (vii) **Geotechnical Engineer.** The consultant is expected to have following requirements:
- (a) Preferably master's degree in geotechnical engineering or related field;
 - (b) Preferably experience of more than 5 years in foundation design and/ or geotechnical investigation of civil engineering structures;
 - (c) Preferably experience of more than 5 years in construction supervision of foundation work of civil engineering projects;
 - (d) Ability to work in an interdisciplinary team;
 - (e) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (f) Skills in communicating with authorities and other stakeholders; and
 - (g) Demonstrated capabilities in report writing.
- (viii) The geotechnical engineer is expected to:
- (a) Carry out geotechnical investigations and in-situ and laboratory testing of the properties of materials, CBR of pavement layers, foundation conditions for roads, drainages and landfill site structures at the design stage of ISWMS; and
 - (b) Inspect the site at the construction stage as per the requests of the TL and advise the Team Leader for actions to be taken in case of changed conditions.
- (ix) **Structural Engineer.** The consultant is expected to have following requirements:
- (a) Preferably master's degree in Structural Engineering or related subject;
 - (b) Preferably more than 7 years of experience in structural design/ analysis of urban infrastructures such as sewage/ sewerage lines, water/ road/ embankment retaining structures;
 - (c) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (d) Ability to work in an interdisciplinary team;

- (e) Skills in handling computer aided design software and communicating with authorities and other stakeholders; and
 - (f) Demonstrated capabilities in report writing.
- (x) The structural engineer is expected to do the following:
- (a) Carry out structural designs of retaining structures, drainages, and other related structures for the design of ISWM works; and
 - (b) Inspect the site at the construction stage as requested by the team leader and advise the team leader for actions to be taken in case of changed conditions.
- (xi) **Procurement Expert/ Construction Management Specialist.** The consultant will be responsible for procurement under ADB/ Nepal Government's procurement act and regulations and procurement guidelines. The basic requirements include:
- (a) Preferably master's degree in Construction Management or related discipline with Bachelor's degree in Civil Engineering/ Architecture;
 - (b) Must have in depth knowledge and understanding of technical, commercial and legal aspects of procurement in development projects, financed by the government and its development partners;
 - (c) Preferably more than 7 years of experience in procurement/contract management of infrastructure development projects in the capacity of procurement expert;
 - (d) In depth knowledge of procurement practices (use of internationally accepted contract documents for works, goods and services, sound understanding of principles underlying good procurement practices and international agencies' procurement guidelines; understanding of ADB/ government's procurement act and regulations; analytical capability in identifying and resolving procurement issues);
 - (e) Ability to work in an interdisciplinary team;
 - (f) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (g) Skills in communicating with authorities and other stakeholders; and
 - (h) Demonstrated capabilities in report writing.
- (xii) The procurement and contract management specialist shall undertake the following, but not limited to:
- (a) Assist the procurement unit of the PIU to collect and compile all procurement document and maintain a systematic and organized filing and documentation of the entire procurement activities;
 - (b) Assist the procurement unit of the PIU to keep systematic record and documentation of all IPCs, claims, disputes, dispute settlement activities related to the implementation of the contract;
 - (c) Assist the construction supervision engineers(CSEs) in maintaining a consistent work programme and subsequent revised programs without changing main activities so that the impacted schedule can be compared with the original schedule;
 - (d) Assist the CSEs to carry out delay analysis every 6 months;
 - (e) Assist the PIUs in reviewing the application for the extension of time and determine the excusable delay, inexcusable delay, compensable delay and non-compensable delays; and
 - (f) Assist the team leader timely and effectively in respect of fulfilling the employers' responsibilities and identifying the contractor's caused delays and variations.

- (xiii) **Construction Supervision and Utility Coordination Engineers.** The consultant is expected to have following requirements:
- (a) Preferably master's degree in civil engineering or related subject;
 - (b) Preferably more than 7 years' experience of supervising construction of urban development projects;
 - (c) Skills in communicating with the highway authorities and police and other stakeholders with regards to road closures and traffic diversions prior to and during project infrastructure construction activities;
 - (d) Ability to work in an interdisciplinary team;
 - (e) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (f) Skills in communicating with authorities and other stakeholders; and
 - (g) Demonstrated capabilities in maintaining the daily diary and prepare daily reports in standard reporting formats.
- (xiv) **Financial Analyst/ Economist.** The consultant is expected to have following requirements:
- (a) Preferably master's degree or equivalent in finance/ economics/ accounts, or a relevant professional qualification such as a CA, CPA, CIMA etc.;
 - (b) Preferably more than 7 years' experience in economic/ financial analysis of urban infrastructure projects;
 - (c) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (d) Have a good understanding of public financial management and international best practices in accounting and auditing; and
 - (e) Skills in communicating with authorities and other stakeholders.
- (xv) The financial analyst is expected to:
- (a) Carry out economic and financial analysis ISWMS;
 - (b) Prepare asset inventory and assist PIU in establishing asset management system for the entire Biratnagar municipality; and
 - (c) Carry out economic and financial analysis as requested by the team leader during construction.
- (xvi) **Quantity Surveyor.** The consultant is expected to have following requirements:
- (a) Preferably master's degree in civil engineering/ quantity surveying or equivalent;
 - (b) Preferably more than 7 years' experience in determining unit rates, quantity estimates, BOQ, preparing estimates of cost in designing as well as construction stage of urban infrastructure projects;
 - (c) Ability to work in an interdisciplinary team;
 - (d) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (e) Skills in communicating with authorities and other stakeholders; and
 - (f) Demonstrated capabilities in report writing.
- (xvii) The quantity surveyor is expected to:
- (a) Take off quantities and prepare cost estimates/ BOQs for Design stage of ISWMS; and
 - (b) Measure quantities of work and costs in the IPC and establish the system to be followed by the construction supervision engineers.

- (xviii) **Environmental Safeguard Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:
- (a) Preferably master's degree in environmental science/ environmental engineering or related subjects;
 - (b) Preferably more than 10 years of experience in preparation of Initial Environmental Examination, EIA, EMP with preference for urban infrastructure and development related projects;
 - (c) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (d) Good knowledge of Nepalese environmental legislation, IEE and EIA procedures;
 - (e) Familiarity with ADB's environmental safeguards is desirable;
 - (f) Ability to work in an interdisciplinary team;
 - (g) Skills in communicating with authorities and other stakeholders; and
 - (h) Demonstrated capabilities in report writing.
- (xix) The environmental safeguard expert will undertake the following, but not limited to:
- (a) Ensure all environmental requirements as reported in the EIA/ IEE are incorporated into the bidding and contract documents;
 - (b) Assist the PIU in monitoring compliance with the EIA/ IEE and Resettlement Plans and any environmental and social development issues identified during supervision phase in co-ordination with PIU, PCO, NGOs and other stakeholders;
 - (c) Review the monthly progress reports submitted by the contractor and field verify whether the contractor has complied with the approved conditions as stated in the EMP;
 - (d) Assist PIU prepare quarterly monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU;
 - (e) Assist the PIU in updating and implementing the EMP and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the project;
 - (f) Assist the PIU in monitoring and enforcing, as detailed out in Safety Manual, the measures taken to ensure safety of the workers, other project personnel, public and works;
 - (g) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement. This will help to develop feeling of ownership among the stakeholders; and
 - (h) Assist the team leader as required.
- (xx) **Social Safeguards/ GESI/ Resettlement Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:
- (a) Preferably master's degree in Sociology/ Anthropology/ Gender Studies or related social sciences;
 - (b) Preferably more than 7 years of experience as a GESI expert in mainstreaming, training and analysis of social inclusion in urban infrastructure projects;

- (c) Preferably more than 7 years of experience in preparation of Social Impact Assessments/ and Resettlement Action Plans, with preference for urban development related projects during planning as well as implementation stages;
 - (d) Familiarity with applicable Nepalese legislation, especially for questions related to land acquisition or expropriation;
 - (e) Experience with large multilateral funded projects such as ADB projects is desirable;
 - (f) Familiarity with ADB's social safeguards is desirable;
 - (g) Ability to work in an interdisciplinary team;
 - (h) Proven communication skills with project affected persons, authorities and other stakeholders;
 - (i) Experience of implementing RAPs, including compensation, grievance redress, etc.;
 - (j) Demonstrated capabilities in report writing; and
 - (k) Demonstrated capabilities in maintaining the daily diary and prepare daily reports in standard reporting formats.
- (xxi) The social safeguard expert will undertake the following, but not limited to:
- (a) Collect and compile the study reports relating to Social Impact Assessment Plans and Resettlement Action Plans;
 - (b) Interact and educate the project affected families relating to the scope of SIAP, RAP and social safeguard policies of the government and ADB;
 - (c) Assist the PIU in implementing the SIAP and RAP; and
 - (d) Assist the TL in matters relating to the implementation of SIAP and RAP and IPP, if any.
- (xxii) **Electrical Engineer.** The consultant must have demonstrated experience of working with municipalities or other government officials. The basic requirements include:
- (a) Preferably master's degree in electrical engineering;
 - (b) Preferably 7 years of experience in electrical/ instrumentation engineering in planning, designing, installation of electrical connections, plants, and machineries in urban infrastructure projects such as sewage/ sewerage/ water supply treatment plants, solid waste management etc.;
 - (c) Ability to work in an interdisciplinary team;
 - (d) Experience with large multilateral funded projects such as ADB projects is desirable; and
 - (e) Skills in communicating with authorities and other stakeholders.
- (xxiii) The electrical engineer will undertake the following, but not limited to:
- (a) Review the design of the electro-mechanical plants/ components and provide necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (b) Assist the team leader as requested.
- (xxiv) **Mechanical Engineer.** The consultant must have demonstrated experience of working with municipalities or other government officials. The basic requirements include:
- (a) Preferably master's degree in mechanical engineering or related subject;
 - (b) Preferably 7 years of experience in mechanical engineering in installation of plants, equipment, machineries in urban infrastructure

- projects such as sewage/ sewerage/ water supply treatment plants, solid waste management etc.;
- (c) Ability to work in an interdisciplinary team;
 - (d) Experience with large multilateral funded projects such as ADB projects is desirable; and
 - (e) Skills in communicating with authorities and other stakeholders.
- (xxv) The mechanical engineer will undertake the following, but not limited to:
- (a) Review the design of the electro-mechanical plants/ components and provide necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (b) Assist the team leader timely and effectively.
- (xxvi) **Construction Supervision Engineer.** The construction supervision Engineer shall have demonstrated experience of working with municipalities and other government officials. The basic requirements include:
- (a) Bachelor's degree in civil engineering;
 - (b) Preferably with 10 years of supervision experience for urban infrastructure and development related projects;
 - (c) Experience in supervision of road improvements/ drainage/ sewerage projects;
 - (d) Experience in preparation of ISWM strategy and implementation plan and SWM baseline data;
 - (e) With experience with large multilateral funded projects such as ADB, WB etc.;
 - (f) Ability to work in an interdisciplinary team;
 - (g) Skills in communicating with authorities and other stakeholders; and
 - (h) Demonstrated capabilities in report writing.
- (xxvii) The construction supervision engineer will undertake the following, but not limited to:
- (a) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract;
 - (b) Monitor and enforce Quality Assurance and Quality Control Plan;
 - (c) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract;
 - (d) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review of bills submitted and claimed for payment by the contractor and forward to project manager with recommendations;
 - (e) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable;
 - (f) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies;
 - (g) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations;
 - (h) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time

- taken in submission of a bill by the contractor and payment received by the contractor against such bill;
- (i) Prepare operation and maintenance procedures and check installation and commissioning;
 - (j) Provide sufficient on the job training to the PIU about the subprojects and its operation and maintenance; and
 - (k) Provide services during contract defect liability period.

V. INDICATIVE WORKPLAN

1. The supervision period for the sewerage, drainage, roads improvement works is 30 months. The team leader and the construction supervision engineers—2 nos. are to be engaged full time for the entire period of 30 months of construction contract. Environmental safeguard expert, social safeguard expert, road expert, and ISWM expert are to be engaged for 12 to 15 months on an intermittent basis to cover their services for the entire construction work. Other experts are to be engaged intermittently for a total of 2 to 6 months each spread over the entire period. The team leader shall be responsible for planning the inputs of the intermittent expert such that the entire supervision work is carried out smoothly without exceeding the person months.

VI. COMMUNICATIONS AND REPORTING

2. The reporting requirements of the CS are given in the **Table A8.1** below.

Table A8.1: Reporting Requirements

Reports	Timeline	Description
Monthly progress reports and quarterly progress reports	15 th day of every month and 15 th day after completion of each quarter.	<ul style="list-style-type: none"> • Progress on delivery of each of the outputs. • Disaggregated information on gender, caste and ethnic participation in training and works. • Key issues and constraints in implementation and construction. • Status of environmental and social safeguard requirements • Updated project schedule. • Updates physical progress and financial progress • Status of compliance of loan/grant covenants.
Semi-annual environmental monitoring Report	15 th day of the July 15 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
Semi-annual safeguard monitoring report	15 th day of the July 15 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
Annual progress report including annual environmental safeguard and social safeguard monitoring report	Each year	<ul style="list-style-type: none"> • Summary of reporting requirements outlined above for all aspects of works and activities under the Project.
Draft final report	On the specified delivery dates	<ul style="list-style-type: none"> • Detailed draft final report for outputs, including status reports of all supervision and construction works, issues, all deliverables under the contracts.
Final report	One month prior to contract completion date	<ul style="list-style-type: none"> • Subproject completion report, and summary of all other reports, progress and issues under the project,

**VII. COUNTERPART SUPPORT BY EXECUTING AGENCY/
IMPLEMENTING AGENCY**

3. The employer will provide the following inputs:
- (i) Assistance in obtaining visas, residence permits, exchange permits and any other documents required for the consultant in connection with the work; and
 - (ii) Counterpart engineers.

VIII. INPUTS TO BE PROVIDED BY CONSULTANTS

4. The consultant will provide the following inputs:
- (i) Transport from home office to Kathmandu and back;
 - (ii) Local transport, including vehicles, drivers and fuel as required;
 - (iii) Office space;
 - (iv) Office facilities, such as computers, printers, photocopier, UPS, telephones, and fax with the required consumables; and
 - (v) Support staffs and field technicians.

**APPENDIX 9: TERMS OF REFERENCE:
CONSTRUCTION SUPERVISION CONSULTANT SERVICES
IN BIRGUNJ MUNICIPALITY**

I. OBJECTIVE

1. The objective of the construction supervision consultant (CSC) services is to facilitate the effective project implementation of the Birgunj sub-metropolitan city project components. The consultant will work under the supervision of the project manager in the project implementation unit (PIU) of the municipality, and will assist the municipality in (i) supervising overall project implementation and management; (ii) construction management of subprojects¹; (iii) ensuring proper monitoring and reporting of project activities; and (iv) preparing specific operation and maintenance plans for subprojects, and prepare and update assets inventory of Birgunj municipality.

2. The selection and engagement of the CSC will be undertaken by PIU in accordance with the Quality and Cost Based Selection (QCBS) procedure (Quality-Cost) set out in ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). The cost for CSC will be financed by the project. The CSC will, through the PIU, also report to the project coordination office (PCO) which will guide, supervise and monitor the overall project implementation and assist the PIU in reviewing all technical and other submissions from the CSC.

3. Separate consultants will assist the PCO in overall management of the project, namely project management consultant (PMC). The CSC is expected to commence the assignment by August 2017. A total of inputs of 121 and 261 person months of national key and non-key personnel, respectively will be required for the CSC.

II. PROJECT BACKGROUND

4. Government of Nepal is negotiating a loan with the Asian Development Bank (ADB) for the Regional Urban Development Project (RUDP) in Nepal. The RUDP, in line with ADB's water and urban operation plans, will (a) construct and upgrade urban infrastructure in 8 towns in the Terai Region of Nepal; and (b) improve operational effectiveness of these 8 municipalities. The project will also build institutional capacity of DUDBC for urban planning, project planning and project preparation to proactively shape urbanization in Nepal and help to implement the National Urban Development Strategy. Birgunj is one of the eight municipal towns included in the RUDP. This subcomponent of the RUDP covers the construction and improvement of drainage, roads and footpath in NSMC.

III. SCOPE OF WORKS

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

a. Construction Management and Post Construction Phase

1. Construction Supervision

- (i) Quality Monitoring

¹ Subprojects are: (i) improvement and development of drainage systems; and (ii) improvement of urban roads and lanes.

- (a) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract.
 - (b) Monitor and enforce quality assurance and quality control plan.
 - (c) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract.
 - (d) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review bills submitted and claimed for payment by the contractor and forward to project manager with recommendations.
- (ii) Environmental and Social Compliance Monitoring
- (a) Monitor compliance with the EIA/ IEE and resettlement plans and any environmental and social development issues identified during supervision in coordination with PIU, PCO, CBO and other stakeholders. Review the monthly progress reports submitted by the contractor and field verify whether the contractor has complied with the approved conditions as stated in the EMP.
 - (b) Participate in a meeting of social safeguard desk of PIU to review grievances and any social issues arise while implementing approved resettlement plan.
 - (c) Prepare record of social safeguard meetings and share with PIU.
 - (d) Prepare quarterly and semi-annual monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU.
 - (e) Update and implement the environment management plan (EMP) and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the Project.
 - (f) Monitor and enforce, as detailed out in safety manual, the measures taken to ensure safety of the workers, other project personnel, general public and works.
 - (g) Make contractor and its personnel aware of EMP compliance requirements.
 - (h) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement in implementation. This will help to develop feeling of ownership among the stakeholders.
- (iii) Construction Site Management
- (a) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable.
 - (b) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in

- terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies.
 - (c) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations.
 - (d) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill.
- (iv) Post Construction Support
- (a) Prepare operation and maintenance procedures and check installation and commissioning.
 - (b) Provide sufficient on the job training, workshop, exposure visit to the PIU about the subprojects and its operation and maintenance.
 - (c) Provide services during contract defect liability period.
 - (d) Prepare inventory of assets of Birgunj sub-metropolitan city and establish an asset management system in the municipality.

2. Project Management at Municipal Level

- (i) Prepare a comprehensive implementation schedule and work plan for all subprojects, such as construction and improvement of drainage, roads and footpath, supported under the BSMC subproject, covering all stages of the implementation process from field surveys and updated on monthly basis.
- (ii) Build capacity of PIU on a regular basis in planning and managing all subprojects, and assist PIU on the project management including monitoring risk, cost control, scheduling, monitoring progress, auditing, reporting and compliance monitoring.
- (iii) Assist PIU in reporting to the PCO and conducting regular stakeholders' meetings to discuss progress and issues related to implementation, and prepare minutes for recording and circulation.
- (iv) Assist PIU to develop and implement procedures for timely payments to the contractors and maintain BSMC subproject wise contract ledger.
- (v) Support PIU in conducting financial accounting, preparing project accounting reports, in accordance with ADB's Disbursement Guidelines and provide trainings to the PIU staff for the same.
- (vi) Assist PIU in ensuring compliance with all loan covenants during implementation.
- (vii) Support PIU in obtaining, in a timely manner, the required clearances, permits, approvals, sanctions or any other information from relevant authorities so that the project activities are not unduly delayed.
- (viii) Assist PIU in carrying out inter-utility management coordination during the project implementation.
- (ix) Assist the municipality in the initial operation of the system built under the project. Support includes handover of the asset inventory, establishment or strengthening of units responsible for O&M of drainage system, and roads, and training to staff to a level commensurate with the roles and functions of these units, and preparation of O&M plan.

3. Gender Equality and Social Inclusion (GESI) Mainstreaming at Municipal Level

- (i) Ensure infrastructure designs are GESI responsive and constructed accordingly.
- (ii) Assist social development unit of the municipality to conduct regular coordination meeting.
- (iii) Assist social development unit to ensure that five-year as well as annual work plan of the municipality has GESI elements in accordance to GESI policy. Organize experience sharing workshops for GESI technical working team and social development unit staff in GESI mainstreaming tools and approaches and best practices of GESI in urban context.
- (iv) Organize GESI mainstreaming training for municipal staff, municipal political body representatives including relevant agencies for wider understanding on GESI; and conduct consultation/ workshops for concerned officials in municipality as and when necessary.
- (v) Design and organize orientation training for contractor and its personnel including labors on core labors standards, safety and security.
- (vi) Maintain dis aggregated data of labors of contractor and ensure equal wages for equal amount of work.
- (vii) Assist PIU to prepare and implement a detailed municipal-level GESI implementation plan in the framework provided by PCO/ PMC and ensure integration of GESI in all project components; facilitate annual review of implementation plan.
- (viii) Coordinate with PCO/ PMC GESI consultant for necessary inputs;
- (ix) Assist PIU to maintain gender, caste/ ethnicity disaggregated data on all relevant project activities including poverty related information; and prepare progress reports on GESI implementation plan as required.
- (x) Prepare quarterly progress report and submit to PIU.

IV. INDICATIVE CONSULTING INPUT

A	Technical Staff	man-months
1	Team leader (Drainage Specialist)	30
2	Road Construction & Utility Coordination Specialist	6
3	Electrical Engineer	3
4	Gender and Social Inclusion Expert (GESI)	5
5	Social Safeguard Specialist	5
6	Environmental Safeguard Specialist	5
7	Construction Supervision Engineer x 2	60
8	Asset Management Specialist	3
	Total	117

D	Support Staff (non-Key Staff)	man-months
1	a. Office manager/ Accountant–1 person	30
2	b. Office Administrator/ Assistant–1 person	30
3	c. Driver	30
4	d. Peon	30
5	e. Jr. Engineer x 4	120
6	Amin (Surveyor) -1 person	6
	Total	246

a. Expert Qualifications and Responsibilities

6. **Team Leader/ Drainage Engineer.** Team leader must have bachelor degree in civil engineering/ sanitary engineering/ environmental engineering, or related discipline. The basic requirements include:

- (i) Preferably master's degree in relevant engineering;
- (ii) Preferably 15 years of project management experience in infrastructure projects;
- (iii) Experience in working in team of design/ construction supervision consultant;
- (iv) Experience in planning, design and supervision of surface and subsurface drainages and sewerages;
- (v) Demonstrated capabilities to lead multidisciplinary teams and to work with a range of different stakeholders;
- (vi) Directly involved in multilateral funded projects such as ADB, World Bank (WB), etc.;
- (vii) Ability to work in an interdisciplinary team;
- (viii) Skills in communicating with authorities and other stakeholders; and
- (ix) Demonstrated capabilities in report writing.

7. The team leader will undertake the following, but not limited to:

- (i) Design of sewerages and drainages;
- (ii) Review the designs and carry out necessary adjustments, revisions specific to the site conditions without increase in the overall cost as far as practicable in coordination with the PIU;
- (iii) Plan for mobilization of intermittent expert and full time experts such that their availability and the timing of requirements of work are properly matched and the time inputs in the consultancy contract is not exceeded;
- (iv) Ensure that the resident construction supervision engineers visit the site regularly, check the quality of works, carry out necessary tests, maintain daily site records, prepare monthly progress reports, and check the contractor's IPCs and recommend payments in a timely manner;
- (v) Coordinate the works of other intermittent experts in a timely and effective manner;
- (vi) Review the contractor's claim, if any, in a timely manner and issue engineer's decision. Claims not settled and disputes arisen shall be referred to the dispute settlement mechanism provided in the contract without delay;
- (vii) Control variations and ensure that the essential variations orders are issued on time with clear indication of impacts on time and cost overruns in the contract;
- (viii) Interact with the PIU and concerned authorities in a timely manner to ensure timely handling of grievance and project completion without undue time and cost over-run;
- (ix) Ensure that as built drawings and maintenance manuals are prepared, concerned representative of the PIU/ municipality are given training and the project is handed over in a complete package; and
- (x) As drainage expert, plan the surface and subsurface drainage system, guide the drainage design engineer in detail design of drainages.

8. **Road Engineer.** The expert must have demonstrated experience of working in roads and other government institutions. The basic requirements include:

- (i) A master's degree in transportation/ highway engineering or related subjects;
- (ii) Preferably 10 years of experience in design/ supervision of roads with experience of implementing municipal roads/ surface water drainage works/ cycle ways and pedestrian access, street furniture and street lighting;

- (iii) Experience to include road alignments selection, soil and material investigations, pavement design and specifications;
 - (iv) Experience in preparation of estimates of various components of municipal roads/ highways and surface water drainage;
 - (v) Ability to work in an interdisciplinary team;
 - (vi) Skills in communicating with authorities and other stakeholders; and
 - (vii) Demonstrated capabilities in report writing.
9. The road engineer will undertake the following, but not limited to:
- (i) Review the design of road components and make necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (ii) Assist the team leader timely and effectively.
10. **Electrical Engineer.** The expert must have demonstrated experience of working in municipal areas or with government institutions. The basic requirements include:
- (i) Bachelor's degree in electrical engineering or related subject;
 - (ii) Preferably with 10 years of experience in related field;
 - (iii) Ability to work in an interdisciplinary team;
 - (iv) Skills in communicating with authorities and other stakeholders; and
 - (v) Demonstrated capabilities in report writing.
11. The electrical engineer will undertake the following, but not limited to:
- (i) Review the design of the electrical components and provide necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (ii) Assist the team leader timely and effectively.
12. **GESI and Social Development Expert.** The consultant must have demonstrated experience of working with senior government officials. The basic requirements include:
- (i) Master's degree in social development/ gender and development studies or related equivalent subjects preferably with 5 years of experience in mainstreaming, training and analysis of gender and social inclusion in projects and programs;
 - (ii) Demonstrated experience of GESI concept and experience in GESI mainstreaming approaches. Basic understanding of urban development and skills for incorporating GESI in urban development approaches and interventions;
 - (iii) Interpersonal skills of clear communication and facilitation; and
 - (iv) Experience of working in the project districts.
13. The GESI social development expert will undertake the following, but not limited to:
- (i) Ensure infrastructure designs are GESI responsive and constructed accordingly;
 - (ii) Assist social development unit of the municipality to conduct regular coordination meeting;
 - (iii) Assist social development unit to ensure that five-year as well as annual work plan of the Municipality has GESI elements in accordance to GESI policy. Organize experience sharing workshops for GESI technical working team and social development unit staff in GESI mainstreaming tools and approaches and best practices of GESI in urban context;
 - (iv) Organize GESI mainstreaming training for municipal staff, municipal political body representatives including relevant agencies for wider understanding on GESI; conduct consultation/ workshops for concerned officials in municipality as and when necessary;

- (v) Design and organize orientation training for contractor and its personnel including labors on core labors standards, safety and security;
- (vi) Maintain dis aggregated data of labors of contractor and ensure equal wages for equal amount of work;
- (vii) Assist PIU to prepare and implement a detailed municipal-level GESI implementation plan in the framework provided by PCO/ PMC and ensure integration of GESI in all project components; facilitate annual review of implementation plan;
- (viii) Coordinate with PCO/ PMC GESI consultant for necessary inputs;
- (ix) Assist PIU to maintain gender, caste/ethnicity disaggregated data on all relevant project activities including poverty related information; and prepare progress reports on GESI implementation plan as required; and
- (x) Prepare quarterly progress report and submit to PIU.

14. **Social Safeguard Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:

- (i) Master's degree in social sciences or related subject;
- (ii) Preferably with 10 years of experience in preparation of social impact assessments and resettlement action plans (RAPs), with preference for urban infrastructure and development related projects;
- (iii) Familiarity with applicable Nepalese legislation, especially related to land acquisition or expropriation;
- (iv) Familiarity with ADB's SPS (2009) is desirable;
- (v) Skills in communicating with project affected persons, authorities and other stakeholders;
- (vi) Experience with implementation of RAPs, including compensation, grievance redress, etc.;
- (vii) Experience in the preparation of social impact assessment plans and resettlement plans;
- (viii) Ability to work in an interdisciplinary team;
- (ix) Skills in communicating with authorities and other stakeholders; and
- (x) Demonstrated capabilities in report writing.

15. The social safeguard expert will undertake the following, but not limited to:

- (i) Collect and compile the study reports relating to Social Impact Assessment Plans (SIAP) and RAPs;
- (ii) Interact and educate the project affected families relating to the scope of SIAP, RAP and social safeguard policies of the government and ADB;
- (iii) Assist the PIU in implementing the SIAP and RAP; and
- (iv) Assist the team leader in matters relating to the implementation of SIAP and RAP and IPP, if any.

16. **Environmental Safeguard Expert.** The consultant must have demonstrated experience of working with senior government officials. The basic requirements include:

- (i) Master's degree in environmental sciences, natural resources management;
- (ii) Preferably with 15 years' experience working in environmental management with experience in the preparation of EIA/ IEE reports and implementing EMP;
- (iii) Knowledge of environmental management tools, familiarity with applicable Nepalese legislation, especially related to environmental protection, IEE and EIA procedures and land acquisition or expropriation;
- (iv) He/ she should have extensive experience working on environmental management plus health and safety issues but especially of urban nature with proven experience in working with a multi-stakeholder community. Relevant experience to urban sustainable development areas is preferred;

- (v) High communication and presentation skills and excellent command of English and Nepali languages is important and with proven training and mentoring skill;
 - (vi) Skills in communicating with authorities and other stakeholders; and
 - (vii) Experience of working for the ADB or other development partners' projects in the urban sector is highly desirable.
17. The environmental safeguard expert will undertake the following, but not limited to:
- (i) Ensure all environmental requirements as reported in the EIA/ IEE are incorporated into the bidding and contract documents;
 - (ii) Assist the PIU in monitoring compliance with the EIA/ IEE and Resettlement Plans and any environmental and social development issues identified during supervision phase in co-ordination with PIU, PCO, and other stakeholders;
 - (iii) Review the monthly progress reports submitted by the Contractor and field verify whether the contractor has complied with the approved conditions as stated in the EMP;
 - (iv) Assist PIU prepare quarterly monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU;
 - (v) Assist the PIU in updating and implementing the EMP and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the project;
 - (vi) Assist the PIU in monitoring and enforcing, as detailed out in Safety Manual, the measures taken to ensure safety of the workers, other project personnel, general public and works; and
 - (vii) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement. This will help to develop feeling of ownership among the stakeholders.
18. **Construction Supervision Engineers.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:
- (i) Bachelor's degree in civil engineering;
 - (ii) Preferably with 10 years of supervision experience for urban infrastructure and development related projects;
 - (iii) Experience in supervision of road improvements/ drainage projects;
 - (iv) With experience with large multilateral funded projects such as ADB, WB etc.;
 - (v) Ability to work in an interdisciplinary team;
 - (vi) Skills in communicating with authorities and other stakeholders; and
 - (vii) Demonstrated capabilities in report writing.
19. The construction supervision engineer will undertake the following, but not limited to:
- (i) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract;
 - (ii) Monitor and enforce quality assurance and quality control plan;
 - (iii) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract;
 - (iv) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review of bills submitted and claimed for payment by

- the contractor and forward to project manager with recommendations;
- (v) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable;
 - (vi) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies;
 - (vii) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations;
 - (viii) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill;
 - (ix) Prepare operation and maintenance procedures and check installation and commissioning;
 - (x) Provide sufficient on the job training to the PIU about the subprojects and its operation and maintenance; and
 - (xi) Provide Services during contract defect liability period.

20. **Asset Management Specialist.** The expert must have demonstrated experience of working in municipal areas or with government institutions. The basic requirements include:

- (i) Bachelor's degree in engineering or asset management/inventory or related subject;
- (ii) 5 years of experience in related field;
- (iii) Ability to work in an interdisciplinary team;
- (iv) Skills in communicating with authorities and other stakeholders; and
- (v) Demonstrated capabilities in report writing.

21. The asset management specialist will undertake the following, but not limited to:

- (i) Prepare an inventory of municipal assets and establish an asset inventory and management system; and
- (ii) Assist the team leader in implementing the asset management system.

V. INDICATIVE WORKPLAN

22. The supervision period for the drainage, roads and footpath improvement works is 30 months. The team leader and the construction supervision engineers–2 nos. are to be engaged full-time for the entire period of 30 months of construction contract. Other experts are to be engaged intermittently for a total of 2 to 8 months each spread over the entire period. The team leader shall be responsible for planning the inputs of the intermittent expert such that the entire supervision work is carried out smoothly without exceeding the person months.

VI. COMMUNICATIONS AND REPORTING

23. The reporting requirements of the SC are given in below.

Table A9.1: Reporting Requirements

Reports	Timeline	Description
Monthly progress reports and quarterly progress reports	7 th day of every month and 5 th day after completion of each quarter.	<ul style="list-style-type: none"> • Progress on delivery of each of the outputs. • Disaggregated information on gender, caste and ethnic participation in training and works. • Key issues and constraints in

Reports	Timeline	Description
		implementation and construction. <ul style="list-style-type: none"> • Status of environmental and social safeguard requirements • Updated project schedule. • Updates physical progress and financial progress • Status of compliance of loan/grant covenants.
Quarterly and Semi-annual environmental monitoring Report	7 th day of the July 7 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
Quarterly and Semi-annual safeguard monitoring report	7 th day of the July 7 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
Quarterly and Semi-annual GESI Action Plan monitoring report		<ul style="list-style-type: none"> • Following ADB's template
Annual progress report including annual environmental safeguard and social safeguard monitoring report	Each year	<ul style="list-style-type: none"> • Summary of reporting requirements outlined above for all aspects of works and activities under the Project.
Inception Report	One month after the commencements	<ul style="list-style-type: none"> • Background assessment • Detail action plan, inputs and outputs delivery schedule • TOC of major reports and plans to be prepared
Draft final report	On the specified delivery dates	<ul style="list-style-type: none"> • Detailed draft final report for outputs, including status reports of all supervision and construction works, issues, all deliverables under the contracts.
Final report	One month prior to contract completion date	<ul style="list-style-type: none"> • Subproject completion report, and summary of all other reports, progress and issues under the project,

ADB = Asian Development Bank, GESI = gender equality and social inclusion.

VII. EVALUATION OF CONSULTANT EOI APPLICATION

24. Applicant Consultant's expression of interest (EOI) application, which meets the eligibility criteria requirement given below and that mentioned in Expression of Interest Form will be ranked based on the set of preapproved Evaluation Criteria. A maximum of 6 consultants shall be short listed.

i) Eligibility Criteria	Compliance
The firm shall submit notarized copy of following documents:	
1) Certificate of Company Registration	
2) VAT registration	
3) Tax clearance up to fiscal year 72/73	
4) JV agreement in case of JV	
5) Power of Attorney of all individual firms and JV	

<u>ii) Evaluation Criteria</u>	Score
Management Competence (Firms experience in handling management of construction supervision services of urban infrastructure projects with adequacy of expertise of key staffs and support facilities.	20
Technical Competence (Firm's experience in providing construction supervision consulting services of infrastructure projects)	80
Total	100

**APPENDIX 10: TERMS OF REFERENCE:
CONSTRUCTION SUPERVISION CONSULTANT SERVICES IN NEPALGUNJ
MUNICIPALITY**

I. OBJECTIVES

1. The objective of the construction supervision consultant (CSC) services is to facilitate the effective project implementation of the Nepalgunj Sub-metropolitan City (NSMC) project components. The consultant will work under the supervision of the project manager in the project implementation unit (PIU) of the municipality, and will assist the municipality in (i) supervising overall project implementation and management; (ii) construction management of subprojects¹; (iii) ensuring proper monitoring and reporting of project activities; and (iv) preparing specific operation and maintenance plans for subprojects, and prepare and update assets inventory of Nepalgunj Municipality.
2. The selection and engagement of the CSC will be undertaken by PIU in accordance with the Quality and Cost Based Selection (QCBS) procedure (Quality-Cost) set out in ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). The cost for CSC will be financed by the project. The CSC will, through the PIU, also report to the project coordination office (PCO) which will guide, supervise and monitor the overall project implementation and assist the PIU in reviewing all technical and other submissions from the CSC.
3. Separate consultants will assist the PCO in overall management of the project, namely project management consultant (PMC). The CSC is expected to commence the assignment by August 2017. A total of inputs of 114 and 250 person months of national key and non-key personnel, respectively will be required for the CSC.

II. PROJECT BACKGROUND

4. The Government of Nepal is negotiating a loan with the Asian Development Bank (ADB) for the Regional Urban Development Project (RUDP) in Nepal. The RUDP, in line with ADB's water and urban operation plans, will (a) construct and upgrade urban infrastructure in 8 towns in the Terai Region of Nepal; and (b) improve operational effectiveness of these 8 municipalities. The project will also build institutional capacity of DUDBC for urban planning, project planning and project preparation to proactively shape urbanization in Nepal and help to implement the National Urban Development Strategy. Nepalgunj is one of the eight municipal towns included in the RUDP. This subcomponent of the RUDP covers the construction and improvement of drainage, roads and footpath in NSMC.

III. SCOPE OF WORKS

5. The scope of services of the CSC will include but not necessarily be limited to the following:
 - a. **Construction Management and Post Construction Phase**
 1. **Construction Supervision**
 - (i) Quality Monitoring
 - (a) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract.

¹ Subprojects are: (i) improvement and development of drainage systems; and (ii) improvement of urban roads and lanes.

- (b) Monitor and enforce quality assurance and quality control plan.
 - (c) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract.
 - (d) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review bills submitted and claimed for payment by the contractor and forward to project manager with recommendations.
- (ii) Environmental and Social Compliance Monitoring
- (a) Monitor compliance with the EIA/ IEE and resettlement plans and any environmental and social development issues identified during supervision in coordination with PIU, PCO, CBO and other stakeholders. Review the monthly progress reports submitted by the contractor and field verify whether the contractor has complied with the approved conditions as stated in the environment management plan (EMP).
 - (b) Participate in a meeting of social safeguard desk of PIU to review grievances and any social issues arise while implementing approved resettlement plan.
 - (c) Prepare record of social safeguard meetings and share with PIU.
 - (d) Prepare quarterly and semi-annual monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU.
 - (e) Update and implement the EMP and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the project.
 - (f) Monitor and enforce, as detailed out in Safety Manual, the measures taken to ensure safety of the workers, other project personnel, general public and works.
 - (g) Make contractor and its personnel aware of EMP compliance requirements.
 - (h) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement in implementation. This will help to develop feeling of ownership among the stakeholders.
- (iii) Construction Site Management
- (a) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable.
 - (b) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies.
 - (c) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations.

- (d) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill.

2. Post Construction Support

- (i) Prepare operation and maintenance procedures and check installation and commissioning.
- (ii) Provide sufficient on the job training, workshop, exposure visit to the PIU about the subprojects and its operation and maintenance;
- (iii) Provide services during contract defect liability period.
- (iv) Prepare inventory of assets of Nepalgunj sub-metropolitan city.

b. Project Management at Municipal Level

- (i) Prepare a comprehensive implementation schedule and work plan for all subprojects, such as construction and improvement of drainage, roads and footpath, supported under the NSMC subproject, covering all stages of the implementation process from field surveys and updated on a monthly basis.
- (ii) Build capacity of PIU on a regular basis in planning and managing all subprojects, and assist PIU on the project management including monitoring risk, cost control, scheduling, monitoring progress, auditing, reporting and compliance monitoring.
- (iii) Assist PIU in reporting to the PCO and conducting regular stakeholders' meetings to discuss progress and issues related to implementation, and prepare minutes for recording and circulation.
- (iv) Assist PIU to develop and implement procedures for timely payments to the contractors and maintain NSMC subproject wise contract ledger.
- (v) Support PIU in conducting financial accounting, preparing project accounting reports, in accordance with ADB's disbursement guidelines and provide trainings to the PIU staff for the same.
- (vi) Assist PIU in ensuring compliance with all loan covenants during implementation.
- (vii) Support PIU in obtaining, in a timely manner, the required clearances, permits, approvals, sanctions or any other information from relevant authorities so that the project activities are not unduly delayed.
- (viii) Assist PIU in carrying out inter-utility management coordination during the project implementation.
- (ix) Assist the municipality in the initial operation of the system built under the project. Support includes handover of the asset inventory, establishment or strengthening of units responsible for O&M of drainage system, and roads, and training to staff to a level commensurate with the roles and functions of these units, and preparation of an O&M plan.

c. Gender Equality and Social Inclusion (GESI) Mainstreaming at Municipal Level

- (i) Ensure infrastructure designs are GESI responsive and constructed accordingly.
- (ii) Assist social development unit of the municipality to conduct regular coordination meeting.
- (iii) Assist social development unit to ensure that five-year as well as annual work plan of the municipality has GESI elements in

- accordance to GESI policy. Organize experience sharing workshops for GESI technical working team and social development unit staff in GESI mainstreaming tools and approaches and best practices of GESI in urban context.
- (iv) Organize GESI mainstreaming training for municipal staff, municipal political body representatives including relevant agencies for wider understanding on GESI; and conduct consultation/ workshops for concerned officials in municipality as and when necessary.
 - (v) Design and organize orientation training for contractor and its personnel including labors on core labors standards, safety and security.
 - (vi) Maintain dis aggregated data of labors of contractor and ensure equal wages for equal amount of work.
 - (vii) Assist PIU to prepare and implement a detailed municipal-level GESI implementation plan in the framework provided by PCO/ PMC and ensure integration of GESI in all project components; and facilitate annual review of implementation plan.
 - (viii) Coordinate with PCO/ PMC GESI consultant for necessary inputs;
 - (ix) Assist PIU to maintain gender, caste/ethnicity disaggregated data on all relevant project activities including poverty related information; and prepare progress reports on GESI implementation plan as required.
 - (x) Prepare quarterly progress report and submit to PIU.

IV. INDICATIVE CONSULTING INPUT

Key Professionals Staff	Person-months
Technical Staff	
Team Leader/ Drainage Engineer	30
Drainage Engineer	2
Road Engineer	3
Electrical Engineer	2
GESI and social Development Expert	3
Social Safeguards Expert	6
Environmental Safeguard Expert	6
Construction Supervision Engineers x 2	60
Procurement and contract management specialist	2
Subtotal- Technical Staff	114

Support Staff	Person-months
Office Manager/ Accountant	30
Construction Supervisor Sub-Engineers *4 (sub-engineers)	120
Quantity Surveyor	2
CAD Operator	4
Support Staff	30
Office Attendant	30
Driver	30
Amin (Surveyor)	4
Subtotal-Support Staff	250

V. Expert Qualifications & Responsibilities

6. **Team Leader/ Drainage Engineer.** Team leader must have bachelor degree in civil engineering/ sanitary engineering/ environmental Engineering, or related discipline. The basic requirements include:
 - (i) Preferably master's degree in relevant engineer;

- (ii) Preferably 15 years of project management experience in infrastructure projects;
 - (iii) Experience in working in team of Design/ Construction Supervision Consultant;
 - (iv) Experience in planning, design and supervision of surface and subsurface drainages;
 - (v) Demonstrated capabilities to lead multidisciplinary teams and to work with a range of different stakeholders;
 - (vi) Directly involved in multilateral funded projects such as ADB, World Bank (WB), etc.;
 - (vii) Ability to work in an interdisciplinary team;
 - (viii) Skills in communicating with authorities and other stakeholders; and
 - (ix) Demonstrated capabilities in report writing.
7. The team leader will undertake the following, but not limited to:
- (i) Review the designs and carry out necessary adjustments, revisions specific to the site conditions without increase in the overall cost as far as practicable in coordination with the PIU;
 - (ii) Plan for mobilization of intermittent expert and full time experts such that their availability and the timing of requirements of work are properly matched and the time inputs in the consultancy contract is not exceeded;
 - (iii) Ensure that the resident construction supervision engineers visit the site regularly, check the quality of works, carry out necessary tests, maintain daily site records, prepare monthly progress reports, and check the contractor's IPCs and recommend payments in a timely manner;
 - (iv) Coordinate the works of other intermittent experts in a timely and effective manner;
 - (v) Review the contractor's claim, if any, in a timely manner and issue engineer's decision. Claims not settled and disputes arisen shall be referred to the dispute settlement mechanism provided in the contract without delay;
 - (vi) Control variations and ensure that the essential variations orders are issued on time with clear indication of impacts on time and cost overruns in the contract;
 - (vii) Interact with the PIU and concerned authorities in a timely manner to ensure timely handling of grievance and project completion without undue time and cost over-run;
 - (viii) Ensure that as built drawings and maintenance manuals are prepared, concerned representative of the PIU/ municipality are given training and the project is handed over in a complete package; and
 - (ix) As drainage expert, plan the surface and subsurface drainage system, guide the drainage design engineer in detail design of drainages.
8. **Road Engineer.** The expert must have demonstrated experience of working in roads and other government institutions. The basic requirements include:
- (i) A master's degree in transportation/ highway engineering or related subjects;
 - (ii) Preferably 10 years of experience in design/ supervision of roads with experience of implementing municipal roads/surface water drainage works/ cycle ways and pedestrian access, street furniture and street lighting;
 - (iii) Experience to include road alignments selection, soil and material investigations, pavement design and specifications;
 - (iv) Experience in preparation of estimates of various components of municipal roads/ highways and surface water drainage;
 - (v) Ability to work in an interdisciplinary team;
 - (vi) Skills in communicating with authorities and other stakeholders; and

- (vii) Demonstrated capabilities in report writing.
9. The road engineer will undertake the following, but not limited to:
- (i) Review the design of road components and make necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (ii) Assist the team leader timely and effectively.
10. **Drainage Engineer.** The consultant shall have demonstrated experience of drainage system. The basic requirements include:
- (i) Master's degree in hydraulic engineering/ sanitary engineering/ environmental engineering and preferably with 10 years of experience in infrastructure development projects;
 - (ii) Experience in design of storm water drainage and sanitation system;
 - (iii) Ability to work in an interdisciplinary team;
 - (iv) Skills in communicating with authorities and other stakeholders;
 - (v) Demonstrated capabilities in report writing.
11. The drainage engineer will undertake the following, but not limited to:
- (i) Review the design of the surface and subsurface drainages and make necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (ii) Assist the team leader timely and effectively.
12. **Electrical Engineer.** The expert must have demonstrated experience of working in municipal areas or with government institutions. The basic requirements include:
- (i) Bachelor's degree in electrical engineering or related subject;
 - (ii) Preferably with 10 years of experience in related field;
 - (iii) Ability to work in an interdisciplinary team;
 - (iv) Skills in communicating with authorities and other stakeholders; and
 - (v) Demonstrated capabilities in report writing.
13. The electrical engineer will undertake the following, but not limited to:
- (i) Review the design of the electrical components and provide necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (ii) Assist the team leader timely and effectively.
14. **Procurement and Contract Management Specialist.** The consultant will be responsible for procurement under ADB/ Government's procurement Act and regulations and procurement guidelines. The basic requirements include:
- (i) Master's degree in civil engineering, architecture, urban planning or other related discipline preferably with an experience of 10 years in procurement activities in civil engineering projects;
 - (ii) Must have in depth knowledge and understanding of technical, commercial and legal aspects of procurement in development projects, financed by the government and its development partners;
 - (iii) Specialized knowledge of and significant experience in substantive areas/aspects of procurement;
 - (iv) In depth knowledge of procurement practices (use of internationally accepted contract documents for works, goods and services, sound understanding of principles underlying good procurement practices and international agencies' procurement guidelines; understanding of ADB/ government's procurement act and regulations; and analytical capability in identifying and resolving procurement issues);

- (v) Ability to work in an interdisciplinary team;
- (vi) Skills in communicating with authorities and other stakeholders;
- (vii) Demonstrated capabilities in report writing.

15. The procurement and contract management specialist shall undertake the following, but not limited to:

- (i) Assist the procurement unit of the PIU to collect and compile all procurement document and maintain a systematic and organized filing and documentation of the entire procurement activities till contract signing;
- (ii) Assist the procurement unit of the PIU to keep systematic record and documentation of all IPCs, claims, disputes, dispute settlement activities related to the implementation of the contract;
- (iii) Assist the construction supervision engineers (CSEs) in maintaining a consistent work programme and subsequent revised programs without changing main activities so that the impacted schedule can be compared with the original schedule;
- (iv) Assist the CSEs to carry out delay analysis every six months;
- (v) Assist the PIUs in reviewing the application for the extension of time and determine the excusable delay, inexcusable delay, compensable delay and non-compensable delays; and
- (vi) Assist the team leader timely and effectively in respect of fulfilling the employers' responsibilities and identifying the contractor's caused delays and variations.

16. **Gender Equality and Social Inclusion (GESI) and Social Development Expert.**

The consultant must have demonstrated experience of working with senior government officials. The basic requirements include:

- (i) Master degree in social development/ gender and development studies or related equivalent subjects preferably with 5 years of experience in mainstreaming, training and analysis of gender and social inclusion in projects and programs;
- (ii) Demonstrated experience of GESI concept and experience in GESI mainstreaming approaches. Basic understanding of urban development and skills for incorporating GESI in urban development approaches and interventions;
- (iii) Interpersonal skills of clear communication and facilitation; and
- (iv) Experience of working in the project districts.

17. The GESI social development expert will undertake the following, but not limited to:

- (i) Ensure infrastructure designs are GESI responsive and constructed accordingly;
- (ii) Assist social development unit of the municipality to conduct regular coordination meeting;
- (iii) Assist social development unit to ensure that five-year as well as annual work plan of the municipality has GESI elements in accordance to GESI policy. Organize experience sharing workshops for GESI technical working team and social development unit staff in GESI mainstreaming tools and approaches and best practices of GESI in urban context;
- (iv) Organize GESI mainstreaming training for municipal staff, municipal political body representatives including relevant agencies for wider understanding on GESI; conduct consultation/ workshops for concerned officials in municipality as and when necessary;
- (v) Design and organize orientation training for contractor and its personnel including labors on core labors standards, safety and security;

- (vi) Maintain disaggregated data of labors of contractor and ensure equal wages for equal amount of work;
- (vii) Assist PIU to prepare and implement a detailed municipal-level GESI implementation plan in the framework provided by PCO/ PMC and ensure integration of GESI in all project components; facilitate annual review of implementation plan;
- (viii) Coordinate with PCO/ PMC GESI consultant for necessary inputs;
- (ix) Assist PIU to maintain gender, caste/ ethnicity disaggregated data on all relevant project activities including poverty related information; and prepare progress reports on GESI implementation plan as required; and
- (x) Prepare quarterly progress report and submit to PIU.

18. **Environmental Safeguard Expert.** The consultant must have demonstrated experience of working with senior government officials. The basic requirements include:

- (i) Master's degree in environmental sciences, natural resources management;
- (ii) Preferably with 15 years' experience working in environmental management with experience in the preparation of EIA/ IEE reports and implementing EMP;
- (iii) Knowledge of environmental management tools, familiarity with applicable Nepalese legislation, especially related to environmental protection, IEE and EIA procedures and land acquisition or expropriation;
- (iv) He/ she should have extensive experience working on environmental management plus health and safety issues but especially of urban nature with proven experience in working with a multi-stakeholder community. Relevant experience to urban sustainable development areas is preferred;
- (v) High communication and presentation skills and excellent command of English and Nepali languages is important and with proven training and mentoring skill;
- (vi) Skills in communicating with authorities and other stakeholders; and
- (vii) Experience of working for the ADB or other development partners' projects in the urban sector is highly desirable.

19. The environmental safeguard expert will undertake the following, but not limited to:

- (i) Ensure all environmental requirements as reported in the EIA/ IEE are incorporated into the bidding and contract documents;
- (ii) Assist the PIU in monitoring compliance with the EIA/ IEE and resettlement plans and any environmental and social development issues identified during supervision phase in coordination with PIU, PCO, and other stakeholders;
- (iii) Review the monthly progress reports submitted by the contractor and field verify whether or not the contractor has complied with the approved conditions as stated in the EMP;
- (iv) Assist PIU prepare quarterly monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU;
- (v) Assist the PIU in updating and implementing the EMP and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the project;
- (vi) Assist the PIU in monitoring and enforcing, as detailed out in Safety Manual, the measures taken to ensure safety of the workers, other project personnel, general public and works; and
- (vii) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement. This will help to develop feeling of ownership among the stakeholders.

20. **Social Safeguard Expert.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:
- (i) Master's degree in social sciences or related subject;
 - (ii) Preferably with 10 years of experience in preparation of social impact assessments and resettlement action plans (RAPs), with preference for urban infrastructure and development related projects;
 - (iii) Familiarity with applicable Nepalese legislation, especially related to land acquisition or expropriation;
 - (iv) Familiarity with ADB's SPS (2009) is desirable;
 - (v) Skills in communicating with project affected persons, authorities and other stakeholders;
 - (vi) Experience with implementation of RAPs, including compensation, grievance redress, etc.;
 - (vii) Experience in the preparation of social impact assessment plans (SIAP) and Resettlement Plans;
 - (viii) Ability to work in an interdisciplinary team;
 - (ix) Skills in communicating with authorities and other stakeholders; and
 - (x) Demonstrated capabilities in report writing.
21. The social safeguard expert will undertake the following, but not limited to:
- (i) Collect and compile the study reports relating to Social Impact Assessment Plans and Resettlement Action Plans;
 - (ii) Interact and educate the project affected families relating to the scope of SIAP, RAP and social safeguard policies of the government and ADB;
 - (iii) Assist the PIU in implementing the SIAP and RAP; and
 - (iv) Assist the team leader in matters relating to the implementation of SIAP and RAP and IPP, if any
22. **Construction Supervision Engineers.** The consultant must have demonstrated experience of working with municipalities and other government officials. The basic requirements include:
- (i) Bachelor's degree in civil engineering;
 - (ii) Preferably with 10 years of supervision experience for urban infrastructure and development related projects;
 - (iii) Experience in supervision of road improvements/ drainage projects ;
 - (iv) With experience with large multilateral funded projects such as ADB, WB etc.;
 - (v) Ability to work in an interdisciplinary team;
 - (vi) Skills in communicating with authorities and other stakeholders; and
 - (vii) Demonstrated capabilities in report writing.
23. The construction supervision engineer will undertake the following, but not limited to:
- (i) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract;
 - (ii) Monitor and enforce quality assurance and quality control plan;
 - (iii) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract;
 - (iv) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review of bills submitted and claimed for payment by the contractor and forward to project manager with recommendations;
 - (v) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable;

- (vi) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies;
- (vii) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations;
- (viii) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill;
- (ix) Prepare operation and maintenance procedures and check installation and commissioning;
- (x) Provide sufficient on the job training to the PIU about the subprojects and its operation and maintenance; and
- (xi) Provide services during contract defect liability period.

VI. INDICATIVE WORKPLAN

24. The supervision period for the drainage, roads and footpath improvement works is 30 months. The team leader and the construction supervision engineers–2 nos. are to be engaged full-time for the entire period of 30 months of construction contract. Other experts are to be engaged intermittently for a total of 2 to 6 months each spread over the entire period. The team leader shall be responsible for planning the inputs of the intermittent expert such that the entire supervision work is carried out smoothly without exceeding the person months.

VII. COMMUNICATIONS AND REPORTING

25. The reporting requirements of the SC are given in **Table A10.1**.

Table A10.1: Reporting Requirements

Reports	Timeline	Description
Monthly progress reports and quarterly progress reports	7 th day of every month and 5 th day after completion of each quarter.	<ul style="list-style-type: none"> • Progress on delivery of each of the outputs. • Disaggregated information on gender, caste and ethnic participation in training and works. • Key issues and constraints in implementation and construction. • Status of environmental and social safeguard requirements • Updated project schedule. • Updates physical progress and financial progress • Status of compliance of loan/grant covenants.
Quarterly and Semi-annual environmental monitoring Report	7 th day of the July 7 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
Quarterly and Semi-annual safeguard monitoring report	7 th day of the July 7 th day of the January	<ul style="list-style-type: none"> • Following ADB's template
Quarterly and Semi-annual GESI Action Plan monitoring report		<ul style="list-style-type: none"> • Following ADB's template
Annual progress report including annual environmental safeguard and social safeguard	Each year	<ul style="list-style-type: none"> • Summary of reporting requirements outlined above for all aspects of works and activities under the Project.

Reports	Timeline	Description
monitoring report		
Inception Report	One month after the commencements	<ul style="list-style-type: none"> Background assessment Detail action plan, inputs and outputs delivery schedule TOC of major reports and plans to be prepared
Draft final report	On the specified delivery dates	<ul style="list-style-type: none"> Detailed draft final report for outputs, including status reports of all supervision and construction works, issues, all deliverables under the contracts.
Final report	One month prior to contract completion date	<ul style="list-style-type: none"> Subproject completion report, and summary of all other reports, progress and issues under the project,

ADB = Asian Development Bank, GESI = gender equality and social inclusion.

VIII. EVALUATION OF CONSULTANT EOI APPLICATION

26. Applicant Consultant's expression of interest (EOI) application, which meets the eligibility criteria requirement given below and that mentioned in Expression of Interest Form will be ranked on the basis of the set of preapproved Evaluation Criteria. A maximum of 6 consultants shall be short listed.

27.

<u>i) Eligibility Criteria</u>	Compliance
The firm shall submit notarized copy of following documents:	
1) Certificate of Company Registration	
2) VAT registration	
3) Tax clearance up to fiscal year 72/73	
4) JV agreement in case of JV	
5) Power of Attorney of all individual firms and JV	

<u>ii) Evaluation Criteria</u>	Score
Management Competence (Firms experience in handling management of construction supervision services of urban infrastructure projects with adequacy of expertise of key staffs and support facilities.	20
Technical Competence (Firm's experience in providing construction supervision consulting services of infrastructure projects)	80
Total	100

**APPENDIX 11 : TERMS OF REFERENCE:
CONSTRUCTION SUPERVISION CONSULTANT SERVICES IN SIDDHARTHANAGAR
MUNICIPALITY**

I. OBJECTIVE

1. The objective of the construction supervision consultant services (CSC) is to facilitate the effective project implementation at the municipality level. The consultant will work under the supervision of the project manager in the project implementation unit (PIU) of the municipality, and will assist the municipality in (i) supervising overall project implementation and management; (ii) construction management of subprojects¹; (iii) ensuring proper monitoring of project activities; and (iv) preparing specific operation and maintenance plans for subprojects, and prepare and update assets inventory of Siddharthanagar municipality.
2. The selection and engagement of the CSC will be undertaken by PIU in accordance with the Quality and Cost Based Selection (QCBS) procedure (Quality-Cost) set out in ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). The cost for CSC will be financed by the project. The CSCs will, through the PIUs, also report to the project coordination office (PCO) which will guide, supervise and monitor the overall project implementation and assist the PIU in reviewing all technical and other submissions from the CSC.
3. Separate consultants will assist the PCO in overall management and implementation of the project, namely project management consultant (PMC). The CSC is expected to commence the assignment by February 2017. A total of 114 person months of national consulting services will be required for the CSC.

II. PROJECT BACKGROUND

4. The Government of Nepal is negotiating loan with Asian Development Bank (ADB) for the Regional Urban Development Project (RUDP) in Nepal. The RUDP, in line with ADB's water and urban operation plans, will (a) construct and upgrade urban infrastructure in 8 towns in the Terai Region of Nepal, and (b) improve operational effectiveness of these 8 municipalities. The project will also build institutional capacity of DUDBC for urban planning, project planning and project preparation in order to proactively shape urbanization in Nepal and implement the National Urban Development Strategy. Siddharthanagar is one of the eight municipal towns included in the RUDP. This subcomponent of the RUDP covers the construction and improvement of drainage, roads and footpath in Siddharthanagar municipality.

III. SCOPE OF WORKS

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

a. Construction Management and Post Construction Phase

¹ Subprojects are: (i) improvement and development of drainage systems; and (ii) improvement of urban roads and lanes.

1. Construction Supervision**(i) Quality Monitoring**

- (a) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract.
- (b) Monitor and enforce quality assurance and quality control plan.
- (c) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract.
- (d) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review of bills submitted and claimed for payment by the contractor and forward to project manager with recommendations.

b. Environmental and Social Compliance Monitoring

- (a) Ensure all environmental requirements as reported in the EIA/ IEE are incorporated into the bidding and contract documents.
- (b) Assist the PIU in monitoring compliance with the EIA/ IEE and Resettlement Plans and any environmental and social development issues identified during supervision phase in coordination with PIU, PCO, NGOs and other stakeholders. Review the monthly progress reports submitted by the contractor and field verify whether or not the contractor has complied with the approved conditions as stated in the EMP.
- (c) Assist PIU prepare quarterly monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU.
- (d) Assist the PIU in updating and implementing the environment management plan (EMP) and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the Project.
- (e) Assist the PIU in monitoring and enforcing, as detailed out in Safety Manual, the measures taken to ensure safety of the workers, other project personnel, general public and works.
- (f) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement. This will help to develop feeling of ownership among the stakeholders.

c. Construction Site Management

- (a) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable.
- (b) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies.

- (c) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations.
- (d) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill.

2. Post Construction Support

- (i) Prepare operation and maintenance procedures and check installation and commissioning.
- (ii) Provide sufficient on the job training to the PIU about the subprojects and its operation and maintenance.
- (iii) Provide services during contract defect liability period.

b. Project Management at Municipal Level

1. Prepare a comprehensive implementation schedule and work plan for all subprojects supported under the project, covering all stages of the implementation process from field surveys and updated on a monthly basis.
2. Build capacity of PIU on a regular basis in planning and managing all subprojects, and assist PIUs on the project management including monitoring risk, cost control, scheduling, monitoring progress, auditing, reporting and compliance monitoring.
3. Assist PIU in reporting to the PCO and conducting regular stake holders meetings to discuss progress and issues related implementation, and prepare minutes for recording and circulation.
4. Assist PIU to develop and implement procedure for timely payments to the contractors and maintain subproject wise contract ledger.
5. Support PIU in conducting financial accounting, preparing project accounting reports, and administer the ADB loan and grant in accordance with ADB's disbursement guidelines and provide trainings to the PIU staff for the same.
6. Assist PIU in ensuring compliance with all loan/ grant covenants during implementation.
7. Support PIU in obtaining, in a timely manner, the required clearances, permits, approvals, sanctions or any other information from relevant authorities so that the project activities are not unduly delayed.
8. Identify municipal level mitigation measures to minimize governance risk elaborate in the governance risk assessment and management plan for the project.
9. Assist PIU in carrying out inter-utility management coordination during the project implementation.
10. Assist the municipality in the initial operation of the system built under the project. Support includes establishment or strengthening of units responsible for O&M of drainage system, and roads, and training to staff to a level and degree commensurate with the roles and functions of these units.
11. Assist PIU in preparing and updating assets inventory of the municipality.

c. GESI Mainstreaming at Municipal Level

1. Support municipality to establish GESI technical working team and orientation provided on their roles and responsibility. This will ensure to establish GESI institutional structure in municipality.
2. Work closely with GESI technical working group to develop and implement the necessary interventions to revise systems, formats, mechanism and

- process of the municipality to integrate GESI mainstreaming in planning, budgeting and monitoring.
3. Assist social development unit of the municipality to conduct regular coordination meeting.
 4. Assist social development unit to organize workshop to prepare a five-year work plan in participatory process for GESI mainstreaming in municipality and prepare annual work plan based on the five-year work plan.
 5. Organize training including in-country exposure visit for GESI technical working team and social development unit staff in GESI mainstreaming tools and approaches and best practices of GESI in urban context.
 6. Conduct training of trainers for municipal staff on GESI mainstreaming in RUDP specific subsector in coordination with PCO/ PMSC.
 7. Organize GESI mainstreaming training for municipal staff, municipal political body representatives including relevant agencies for wider understanding on GESI; conduct consultation/ workshops for concerned officials in municipality as and when necessary.
 8. Assist PIU to prepare and implement a detail municipal-level GESI implementation plan in the framework provided by PCO/ PMSC and ensure integration of GESI in all project components; facilitate annual review of implementation plan.
 9. Provide technical inputs to PIU for ensuring GESI targets and approaches in community development program in poverty clusters; and assist in monitoring and disaggregated data collection and reporting.
 10. Coordinate with PCO/ PMSC GESI consultant for necessary inputs.
 11. Assist PIU to maintain gender, caste/ ethnicity disaggregated data on all relevant project activities including poverty related information; and prepare progress reports on GESI implementation plan as required.

IV. INDICATIVE CONSULTING INPUT

Key Professionals Staff	Person-month
Technical Staff	
Team Leader/ Drainage Engineer	30
Drainage Design Engineer	2
Road Construction & Utility Coordination Engineer	3
Electro-Mechanical Engineer/Electrical Engineer	2
Gender and Social Inclusion (GESI) Expert	3
Social Safeguards Expert	6
Environmental Safeguard Expert	6
Construction Supervision Engineers x 2	60
Procurement and contract management specialist	2
Subtotal- Technical Staff	114

Support Staff	Person-months
Office Manager/Accountant	30
Construction Supervisor Sub-Engineers *4 (sub-engineers)	120
Quantity Surveyor	2
CAD Operator	4
Support Staff	Person-months
Support Staff	30

Office Attendant	30
Driver	30
Amin (Surveyor)	4
Subtotal- Support Staff	250

V. Expert Qualifications and Responsibilities

6. **Team Leader cum Drainage Engineer.** Team Leader shall have bachelor degree in civil engineering/ architecture with a master degree in urban planning/ urban management/ urban ecological planning/urban environmental management, or related discipline. The basic requirements include:

- (i) Preferably 15 years of project management experience in urban infrastructure projects;
- (ii) Experience in working in team of design/ construction supervision consultant;
- (iii) Experience in planning, design and supervision of surface and subsurface drainages;
- (iv) Demonstrated capabilities to lead multidisciplinary teams and to work with a range of different stakeholders;
- (v) Directly involved in multilateral funded projects such as ADB, World Bank (WB) etc.;
- (vi) Ability to work in an interdisciplinary team;
- (vii) Skills in communicating with authorities and other stakeholders; and
- (viii) Demonstrated capabilities in report writing.

7. The team leader will undertake the following, but not limited to:

- (i) Review the designs and carry out necessary adjustments, revisions specific to the site conditions without increase in the overall cost as far as practicable in coordination with the PIU;
- (ii) Plan for mobilization of intermittent expert and full time experts such that their availability and the timing of requirements of work are properly matched and the time inputs in the consultancy contract is not exceeded;
- (iii) Ensure that the resident construction supervision engineers visit the site regularly, check the quality of works, carry out necessary tests, maintain daily site records, prepare monthly progress reports, and check the contractor's IPCs and recommend payments in a timely manner;
- (iv) Coordinate the works of other intermittent experts in a timely and effective manner;
- (v) Review the contractor's claim, if any, in a timely manner and issue engineer's decision. Claims not settled and disputes arisen shall be referred to the dispute settlement mechanism provided in the contract without delay;
- (vi) Control variations and ensure that the essential variations orders are issued on time with clear indication of impacts on time and cost overruns in the contract;
- (vii) Interact with the PIU and concerned authorities in a timely manner to ensure timely handling of grievance and project completion without undue time and cost over-run;
- (viii) Ensure that as built drawings and maintenance manuals are prepared, concerned representative of the PIU/ municipality are given training and the project is handed over in a complete package; and
- (ix) As drainage expert, plan the surface and subsurface drainage system, guide the drainage design engineer in detail design of drainages.

8. **Road Engineer.** The expert shall have demonstrated experience of working in urban areas and other government institutions. The basic requirements include:

- (i) A master's degree in transportation/ highway engineering or related subjects;
 - (ii) Preferably 15 years of experience in design/ supervision of roads with experience of detailed engineering designs of municipal roads/ surface water drainage works/ cycle ways and pedestrian access, street furniture and street lighting;
 - (iii) Experience to include road alignments selection, soil and material investigations, pavement design and specifications;
 - (iv) Experience in preparation of estimates of various components of municipal roads/ highways and surface water drainage;
 - (v) With experience with large multilateral funded projects such as ADB, WB etc.;
 - (vi) Ability to work in an interdisciplinary team;
 - (vii) Skills in communicating with authorities and other stakeholders; and
 - (viii) Demonstrated capabilities in report writing.
10. The road engineer will undertake the following, but not limited to:
- (i) Review the design of road components and make necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (ii) Assist the team leader in a timely and effective manner.
11. **Drainage Engineer.** The consultant shall have demonstrated experience of working with municipalities or other government institutions. The basic requirements include:
- (i) Master's degree in water resource engineering/ hydraulic engineering/ sanitary engineering/ environmental engineering and preferably with 15 years of experience in infrastructure development projects;
 - (ii) Experience in design of storm water drainage and sanitation systems including wastewater treatment plants including preparation of development plans;
 - (iii) Experience in designing waste treatment facilities (aerobic and anaerobic digestion plant) and final disposal sites (engineering landfill site/ sanitary landfill site) including leachate treatment would be an advantage;
 - (iv) With experience with large multilateral funded projects such as ADB, WB etc.;
 - (v) Ability to work in an interdisciplinary team;
 - (vi) Skills in communicating with authorities and other stakeholders;
 - (vii) Demonstrated capabilities in report writing.
12. The drainage engineer will undertake the following, but not limited to:
- (i) Review the design of the surface and sub-surface drainages and make necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
 - (ii) Assist the team leader timely and effectively.
13. **Electro-Mechanical/ Electrical Engineer.** The expert shall have demonstrated experience of working in municipal areas or with government institutions. The basic requirements include:
- (i) Bachelor's degree in electro-mechanical/ electrical engineering or related subject;
 - (ii) Preferably with 10 years of experience in planning and detailed engineering design of electro-mechanical elements for waste management systems;
 - (iii) With experience with large multilateral funded projects such as ADB, WB etc.;
 - (iv) Ability to work in an interdisciplinary team;
 - (v) Skills in communicating with authorities and other stakeholders;
 - (vi) Demonstrated capabilities in report writing.
14. The electro-mechanical engineer will undertake the following, but not limited to:

- (i) Review the design of the electro-mechanical plants/components and provide necessary adjustments to ensure fitness of purpose without increase in time and cost of construction; and
- (ii) Assist the team leader timely and effectively.

15. **Procurement and Contract Management Specialist.** The consultant will be responsible for procurement under ADB/ Government's procurement Act and regulations and procurement guidelines. The basic requirements include:

- (i) Master's degree in civil engineering, architecture, urban planning or other related discipline preferably with an experience of 10 years in procurement activities for civil engineering projects;
- (ii) Must have in depth knowledge and understanding of technical, commercial and legal aspects of procurement in development projects, financed by the government and its development partners;
- (iii) Specialized knowledge of and significant experience in substantive areas/aspects of procurement;
- (iv) In depth knowledge of procurement practices (use of internationally accepted contract documents for works, goods and services, sound understanding of principles underlying good procurement practices and international agencies' procurement guidelines; understanding of ADB/Government's procurement Act and regulations; analytical capability in identifying and resolving procurement issues);
- (v) Ability to work in an interdisciplinary team.
- (vi) With experience with large multilateral funded projects such as ADB, WB etc.;
- (vii) Skills in communicating with authorities and other stakeholders; and
- (viii) Demonstrated capabilities in report writing.

16. The procurement and contract management specialist shall undertake the following, but not limited to:

- (i) Assist the procurement unit of the PIU to collect and compile all procurement document and maintain a systematic and organized filing and documentation of the entire procurement activities till contract signing;
- (ii) Assist the procurement unit of the PIU to keep systematic record and documentation of all IPCs, claims, disputes, dispute settlement activities related to the implementation of the contract;
- (iii) Assist the construction supervision engineers (CSEs) in maintaining a consistent work programme and subsequent revised programs without changing main activities so that the impacted schedule can be compared with the original schedule;
- (iv) Assist the CSEs to carry out delay analysis every 6 months;
- (v) Assist the PIUs in reviewing the application for the extension of time and determine the excusable delay, inexcusable delay, compensable delay and non-compensable delays; and
- (vi) Assist the team leader timely and effectively in respect of fulfilling the employers' responsibilities and identifying the contractor's caused delays and variations.

17. **GESI and Social Development Expert.** The consultant shall have demonstrated experience of working with senior government officials. The basic requirements include:

- (i) Master's degree in social development/ gender and development studies or related equivalent subjects preferably with 10 years of experience in mainstreaming, training and analysis of gender and social inclusion in projects and programs;
- (ii) Demonstrated experience of GESI analytical and responsive skills in order to provide technical support to project team;

- (iii) Basic understanding of urban development and skills for incorporating GESI in urban development approaches and interventions;
 - (iv) Interpersonal skills of clear communication and facilitation;
 - (v) Previous experience of working with municipalities will be an advantage; and
 - (vi) Experience of working in the project districts.
18. The gender equality and social inclusion (GESI) social development expert will undertake the following, but not limited to:
- (i) Support municipality to establish GESI technical working team and orient them on their roles and responsibility;
 - (ii) Work closely with GESI technical working group to develop and implement the necessary interventions to revise systems, formats, mechanism and process of the municipality to integrate GESI mainstreaming in planning, budgeting and monitoring;
 - (iii) Assist social development unit of the municipality to conduct regular coordination meeting;
 - (iv) Assist social development unit to organize workshop to prepare a five-year work plan in participatory process for GESI mainstreaming in municipality and prepare annual work plan based on the five-year work plan;
 - (v) Organize training including in-country exposure visit for GESI technical working team and social development unit staff in GESI mainstreaming tools and approaches and best practices of GESI in urban context;
 - (vi) Conduct training of trainers for municipal staff on GESI mainstreaming in RUDP specific subsector in coordination with PCO/ PMSC;
 - (vii) Organize GESI mainstreaming training for municipal staff, municipal political body representatives including relevant agencies for wider understanding on GESI; conduct consultation/workshops for concerned officials in municipality as and when necessary;
 - (viii) Assist PIU to prepare and implement a detail municipal-level GESI implementation plan in the framework provided by PCO/ PMSC and ensure integration of GESI in all project components; facilitate annual review of implementation plan;
 - (ix) Provide technical inputs to PIU for ensuring GESI targets and approaches in community development program in poverty clusters; and assist in monitoring and disaggregated data collection and reporting;
 - (x) Coordinate with PCO/ PMSC GESI consultant for necessary inputs;
 - (xi) Assist PIU to maintain gender, caste/ ethnicity disaggregated data on all relevant project activities including poverty related information; and prepare progress reports on GESI implementation plan as required; and
 - (xii) Assist the team leader timely and effectively in matters related to GESI and social development.
19. **Environmental Safeguard Expert.** The consultant shall have demonstrated experience of working with senior government officials. The basic requirements include:
- (i) Master's degree in environmental sciences, natural resources management or other comparative university degree;
 - (ii) Preferably with 15 years' experience working in environmental management with experience in the preparation of IEE/ EIA reports and implementing environmental management plans (EMP);
 - (iii) Knowledge of environmental management tools, familiarity with applicable Nepalese legislation, especially related to environmental protection, IEE and EIA procedures and land acquisition or expropriation;
 - (iv) He/she should have extensive experience working on environmental management plus health and safety issues but especially of urban nature with proven experience in working with a multi-stakeholder community. Relevant experience to urban sustainable development areas is preferred;

- (v) High communication and presentation skills and excellent command of English and Nepali languages is important and with proven training and mentoring skill;
 - (vi) Skills in communicating with authorities and other stakeholders; and
 - (vii) Experience of working for the Asian Development Bank (ADB) or other development partners' projects in the urban sector is highly desirable.
20. The environmental safeguard expert will undertake the following, but not limited to:
- (i) Ensure all environmental requirements as reported in the EIA/ IEE are incorporated into the bidding and contract documents;
 - (ii) Assist the PIU in monitoring compliance with the EIA/ IEE and resettlement plans and any environmental and social development issues identified during supervision phase in co-ordination with PIU, PCO, NGOs and other stakeholders;
 - (iii) Review the monthly progress reports submitted by the contractor and field verify whether or not the contractor has complied with the approved conditions as stated in the EMP;
 - (iv) Assist PIU prepare quarterly monitoring and compliance reports for all works in accordance with resettlement plan for each of the subprojects and submit to PCO through PIU;
 - (v) Assist the PIU in updating and implementing the EMP and establishing a system and training staff to monitor the project's environmental indicators, review the data collected for the first year to evaluate the effectiveness with which the environmental mitigation and monitoring measures are implemented and recommend actions to be taken in accordance with ADB's Safeguards Policy Statement (2009) and EIA/ IEE prepared for the project;
 - (vi) Assist the PIU in monitoring and enforcing, as detailed out in safety manual, the measures taken to ensure safety of the workers, other project personnel, general public and works; and
 - (vii) Support PIU for conducting regular review meetings, public hearings and public audit to seek opinions for improvement. This will help to develop feeling of ownership among the stakeholders.
21. **Social Safeguard Expert.** The consultant shall have demonstrated experience of working with municipalities and other government officials. The basic requirements include:
- (i) Master's degree in social sciences or related subject;
 - (ii) Preferably with 10 years of experience in preparation of social impact assessments and resettlement action plans, with preference for urban infrastructure and development related projects;
 - (iii) Familiarity with applicable Nepalese legislation, especially related to land acquisition or expropriation;
 - (iv) Familiarity with ADB's SPS (2009) is desirable;
 - (v) Skills in communicating with project affected persons, authorities and other stakeholders;
 - (vi) Experience with implementation of RAPs, including compensation, grievance redress, etc.;
 - (vii) Experience in the preparation of social impact assessment plans and resettlement plans;
 - (viii) Ability to work in an interdisciplinary team;
 - (ix) Skills in communicating with authorities and other stakeholders; and
 - (x) Demonstrated capabilities in report writing.
22. The social safeguard expert will undertake the following, but not limited to:
- (i) Collect and compile the study reports relating to social impact assessment plans and resettlement action plans;

- (ii) Interact and educate the project affected families relating to the scope of SIAP, RAP and social safeguard policies of the government and ADB;
- (iii) Assist the PIU in implementing the SIAP and RAP; and
- (iv) Assist the team leader in matters relating to the implementation of SIAP and RAP and IPP, if any.

23. **Construction Supervision Engineers.** The consultant shall have demonstrated experience of working with municipalities and other government officials. The basic requirements include:

- (i) Bachelor's degree in civil engineering;
- (ii) Preferably with 10 years of supervision experience for urban infrastructure and development related projects;
- (iii) Experience in supervision of road improvements/ drainage/ sewerage projects;
- (iv) Experience in preparation of ISWM strategy and implementation plan and SWM baseline data;
- (v) With experience with large multilateral funded projects such as ADB, WB etc.;
- (vi) Ability to work in an interdisciplinary team;
- (vii) Skills in communicating with authorities and other stakeholders; and
- (viii) Demonstrated capabilities in report writing.

24. The construction supervision engineer will undertake the following, but not limited to:
- (i) Support the PIU to supervise all construction works to ensure quality of works as per technical specification, drawings, and condition of contract;
 - (ii) Monitor and enforce quality assurance and quality control plan;
 - (iii) Monitor construction and quality control methods, certify that quality of works conform to the specifications and drawings, assess the adequacy of the contractor's inputs in material, labor and construction method, furnish all revisions and detailed drawings as necessary during the continuance of the contract;
 - (iv) Develop and maintain detailed record of work activities accomplished by the contractors. Prepare and review of bills submitted and claimed for payment by the contractor and forward to project manager with recommendations;
 - (v) Furnish detailed drawings to the contractors, check contractors' designs and drawings wherever applicable;
 - (vi) Assess and enforce, as per standard construction management system, the adequacy of contractors' inputs in terms of materials, equipment, construction machinery, workers, funds and construction approach and methodologies;
 - (vii) Prepare measurements for completed works in progress, verify interim claims and bills for payments and forward to project manager with recommendations;
 - (viii) Review and examine the process of passing of contractor's bills and payments to contractors with special emphasis on minimizing the time taken in submission of a bill by the contractor and payment received by the contractor against such bill;
 - (ix) Prepare operation and maintenance procedures and check installation and commissioning;
 - (x) Provide sufficient on the job training to the PIU about the subprojects and its operation and maintenance; and
 - (xi) Provide Services during contract defect liability period.

VI. INDICATIVE WORKPAN

25. The supervision period for the drainage, roads and footpath improvement works is 30 (thirty) months. The team leader and the construction supervision Engineers–2 nos. are to be engaged full time for the entire period of 30 months of construction contract. The

environmental safeguard expert and social safeguard expert are to be engaged for 6 months each on intermittent basis so as to cover their services for the entire construction work. Other experts are to be engaged intermittently for a total of 2 to 3 months each spread over the entire period. The Team Leader shall be responsible for planning the inputs of the intermittent expert such that the entire supervision work is carried out smoothly without exceeding the person months.

VII. COMMUNICATIONS AND REPORTING

26. The reporting requirements of the SC are given in the Table A11.1 below.

Table A11.1: Reporting Requirements

Reports	Timeline	Description
Monthly progress reports and quarterly progress reports	15 th day of every month and 15 th day after completion of each quarter.	<ul style="list-style-type: none"> Progress on delivery of each of the outputs. Disaggregated information on gender, caste and ethnic participation in training and works. Key issues and constraints in implementation and construction. Status of environmental and social safeguard requirements Updated project schedule. Updates physical progress and financial progress Status of compliance of loan/grant covenants.
Semi-annual environmental monitoring Report	15 th day of the July 15 th day of the January	<ul style="list-style-type: none"> Following ADB's template
Semi-annual safeguard monitoring report	15 th day of the July 15 th day of the January	<ul style="list-style-type: none"> Following ADB's template
Annual progress report including annual environmental safeguard and social safeguard monitoring report	Each year	<ul style="list-style-type: none"> Summary of reporting requirements outlined above for all aspects of works and activities under the Project.
Draft final report	On the specified delivery dates	<ul style="list-style-type: none"> Detailed draft final report for outputs, including status reports of all supervision and construction works, issues, all deliverables under the contracts.
Final report	One month prior to contract completion date	<ul style="list-style-type: none"> Subproject completion report, and summary of all other reports, progress and issues under the project,

VIII. COUNTERPART SUPPORT BY EXECUTING/ IMPLEMENTING AGENCY

27. The employer will provide the following inputs:
- Assistance in obtaining visas, residence permits, exchange permits and any other documents required for the Consultant in connection with the work; and
 - Counterpart engineers.

IX. INPUTS TO BE PROVIDED BY THE CONSULTANT

28. The Consultant will provide the following inputs:
- (i) Transport from home office to Kathmandu and back;
 - (ii) Local transport, including vehicles, drivers and fuel as required;
 - (iii) Office space;
 - (iv) Office facilities, such as computers, printers, photocopier, UPS, telephones, and fax with the required consumables; and
 - (v) Support staffs and field technicians.

APPENDIX 12: COMMUNITY AWARENESS AND PARTICIPATION PLAN (CAPP)

A. Introduction

1. The community awareness and participation plan (CAPP) has been prepared for the Regional Urban Development Project (RUDP) to ensure inclusive and effective participation of all stakeholders, especially women, poor, female headed households (FHHs), socially excluded¹ and vulnerable groups.² Effective and meaningful participation of stakeholders is the key in building ownership and long-term sustainability of the project activities. Wider outreach and their involvement in project activities ensures that voices from all including from poor, excluded and vulnerable segments of the community are heard at various levels of decision-making. RUDP adopted a participatory process that involved identifying stakeholders and including them in stakeholder analysis during the design of the project. As RUDP will be implemented in municipalities with varying population densities (e.g. relatively higher densities in Biratnagar, Birgunj, Siddharthanagar, and Nepalgunj; medium-density in Dhangadhi and Bheemdatt; and lower-density in Godawari and Shuklaphanta) the mode of consultation and participation should also vary. Information disclosure and public awareness are essential for maintaining public support, trust, ownership and mitigating grievances from citizens during construction activities, and also for ownership in the post-construction phase. The stakeholders are to be made fully aware of roles and responsibilities, scope, design, schedule, impacts, and overall benefits of the project. These activities require a coordinated effort between the executing and implementing agencies as well as public and private sectors, and civil society, including marginalized or vulnerable groups.

2. The implementation arrangements include design and supervision consultant (DSC) or construction supervision consultant (CSC) for non-Province 7 municipalities; and both Design and supervision consultant (DSC) and institutional development consultant (IDC) for Province 7 project municipalities as well as social mobilisers to ensure meaningful, widespread, and ongoing consultations and public awareness during project implementation. The DSC/ CSC/ IDC will work in close coordination with the municipalities and PIUs and will provide technical guidance and support to municipalities and monitor activities.

B. The Community Awareness and Participation Plan

3. Awareness raising is important to ensure that communities are well informed, mobilized and participate in project related activities to maximize the benefits and help ensure smooth implementation. Information disclosure, dissemination and community awareness are essential for transparency, securing community support and building ownership, and timely and effective redressal of grievances during the implementation period. Awareness building and educational activities will target all residents of the municipalities and relevant stakeholder groups within the project area with a special emphasis on the poor, FHHs, socially excluded and vulnerable households. The PIU will oversee these activities through DSC/ CSC/ IDC consultants. Key activities of the CAPP are listed in Table A14.2.

¹ Socially excluded include those that are excluded socially or culturally such as women, *Dalit*, *Indigenous eople*, *Indigenous Nationalities*, *Madhesis*, *Tharu*, *Muslim*, *oppressed Class*, *Pichhada Classe*, Minorities, the marginalized farmers, labours, youth, children senior citizens, gender and sexual minorities persons with disabilities, person in pregnancy incapacitated or helpless, backward region and indigent Khas Arya. (Source: Constitution of Nepal).

² Vulnerable groups include female headed households, households with physically disabled family member, households having senior citizen without able bodied family member, households severely affected by natural calamities or disaster.

Table A12.1: Community Awareness and Participation Plan

Activity	Target Stakeholders	Type of Participation	Objectives	Time Frame
1. Project orientation workshops for government officials organized by PCU/ PCO	25 officials and municipality staff per project orientation workshop consisting of representatives from the MOUD, DUDBC, municipalities, PMC, PIU, RPIU, PISU staff, other relevant organizations and local officials.	Consultation on proposed project activities, indicators and targets Information sharing <ul style="list-style-type: none"> • Shared responsibility in facilitating the implementation of activities 	Introduce the project, objectives and scope <ul style="list-style-type: none"> • Define the link between project interventions and health, hygiene, sanitation, time savings, improved infrastructure and increased livability of municipalities • Discuss roles and accountabilities of various government units; and relationships between entities • Discuss ADB and the government's safeguard policies, expected IPs issues and resettlement impacts, adopted avoidance/mitigation measures, required clearances and permits • Grievance management process and procedures • Gather input and recommendations for effective project implementation 	Year 1 (immediately): 9 project orientation workshops (Kathmandu + 8 project municipalities)
2. Project orientation workshops for local community groups targeting women, poor, socially excluded and vulnerable population participation (one time in each wards)	At least 30 community members at ward level from the subproject sites with adequate geographical representation. The members to include heads of the families including FHHs, WCF, TLO representatives, user committees, CSOs and community leaders <ul style="list-style-type: none"> • At least 33% women • 40% from socially excluded and vulnerable households as per their population. 	Information sharing <ul style="list-style-type: none"> • Consultation • Shared responsibilities and expectations 	<ul style="list-style-type: none"> • Through presentations introduce the project and benefits • Demonstrate the link between interventions and improved infrastructures, health, sanitation, SWM, reduction in drudgery and time savings, improved access and quality of services • Explain PBGSED mechanism, objective, scope, target group, and other details • Gather concerns and views related to project design and implementation • Explain grievance mechanism • Explain initiatives to promote GESI under the project; increased representation in decision-making, employment opportunities; reduction in drudgery, increased capacity and skill on small infrastructure design, operation and maintenance, contract management and improved access and affordability of services • Explain ADB's and the government's safeguards measures; grievance redress mechanism to the 	Year 1: Just before start of civil work

Activity	Target Stakeholders	Type of Participation	Objectives	Time Frame
	<ul style="list-style-type: none"> • Slum/squatter dwellers and poor • Affected Populations 		<p>affected persons;</p> <ul style="list-style-type: none"> • Explain importance of timely but affordable tariff collection for proper operations of SWM and sewerage system (where applicable) • Build awareness on the need to protect and keep clean public spaces and entities 	
<p>3. Develop and disseminate communication materials using innovative mediums including audio video, print media and live demonstrations through TLO/ WCF</p> <p>Information materials to be in simple, easy to understand and local language</p>	<ul style="list-style-type: none"> • communities in general • poor settlements and vulnerable households • slums/squatter settlements 	<p>Information sharing/ dissemination</p> <ul style="list-style-type: none"> • Knowledge generation • Community/family awareness on health and hygiene • Community initiated mobilization 	<ul style="list-style-type: none"> • Project information sharing with the project beneficiaries on 3Rs, zero waste, segregation at source and ISWM • Demonstrate the link between interventions and health, hygiene, sanitation of community in general and specifically for women, children, elderly, and other vulnerable groups • Collect and address concerns related to sanitation and hygiene and ISWM. • Improved knowledge and practice on community health and hygiene, and on reducing solid wastes and in applying 3R 	Years 1- 4
<p>4. Development of training and communications materials for social mobilizers (1 event per municipality)</p>	<p>In total 25 Social mobilisers with 3 Social mobilisers each from the municipality</p>	<ul style="list-style-type: none"> • Information sharing/ dissemination • Knowledge generation • Community-initiated mobilization 	<ul style="list-style-type: none"> • Improved health knowledge and sanitation practices among project population • Active participation and awareness of community health and hygiene issues 	Year 1

Activity	Target Stakeholders	Type of Participation	Objectives	Time Frame
5. Development of training and communications materials for municipality staff on urban infrastructure and local governance	10 staff per municipality	<ul style="list-style-type: none"> • Capacity and knowledge improved • Information sharing/ dissemination 	<p>Link between project activities and improved urban services</p> <p>Active participation of municipal staff in the TOT</p>	Year 1, 2, and 3
6. Development of training and communications materials related to PBGSED for users committee (33% women and 40% from socially excluded and vulnerable communities)	User committee members at least 33% women, and at least 40% from socially excluded and vulnerable groups.	<ul style="list-style-type: none"> • Capacity and knowledge improved • Information sharing/ dissemination 	<ul style="list-style-type: none"> • Active participation of users committee in accessing PBGSED for meeting prioritized needs • Effective operation and management of small community grants by the community 	Year 1
7. Project orientation workshop for contractors	Management, laborers, field supervisors,	<ul style="list-style-type: none"> • Information sharing 	<ul style="list-style-type: none"> • Sensitize on avoiding public nuisances, minimizing public inconveniences, and avoiding disruption to the public activities/mobility • Awareness creation on health and hygiene, HIV/AIDS, other communicable diseases and core labor standards and gender issues • Best construction practices for safety during construction activities and EMP compliance 	Years 1-4: Upon contractor mobilization
8. Consultation on project's resettlement plans and	Affected persons	<ul style="list-style-type: none"> • Information sharing • Consultation • Negotiation 	<ul style="list-style-type: none"> • Introduce the project • Mitigate potential conflict • Solicit the views of affected persons on resettlement and compensation 	Years 1-3

Activity	Target Stakeholders	Type of Participation	Objectives	Time Frame
framework (minimum 3 meetings) in all program cities with identified APs			<ul style="list-style-type: none"> • Agree on resettlement processes, location, timing and compensation • Disseminate/share about the likely impacts of the subproject, summary of the RIPP including entitlements, grievance redress mechanism and contact information 	
9. Annual Project Steering Committee Meetings	MOUD, DUDBC, DWSS, DOR, Solid Waste Management Technical Support Center (SWMTSC), MOFALD, MOE, MOWSS, NPC, MOF, project municipalities, MuAN.	<ul style="list-style-type: none"> • Make key policy recommendations review project performance and discuss key policy-related issues to facilitate project implementation • Maintain collaboration amongst central level agencies 	<ul style="list-style-type: none"> • Review compliance with social safeguards, environment, and GESI frameworks and plans • Discuss progress in implementation, including problems encountered and means to mitigate/address them 	Year 1-4
10. Annual participatory community monitoring meetings (every year in all project municipalities)	Community representatives/ TLOs (at least 50% women) volunteers and civil society representatives, <ul style="list-style-type: none"> • Ward members, NGOs • Slum dwellers & poor 	<ul style="list-style-type: none"> • Information sharing • Agreeing on recommendations to to address problems 	<ul style="list-style-type: none"> • Discuss issues and concerns during project implementation • Discuss and recommend measures to mitigate and address problems • Monitor progress of project implementation and compliance with social safeguards/ provisions • Share salient features of the annual progress report and action plan for the coming year 	1 to 4 years

CBOs = community-based organization, CSC = construction supervision consultant, CSOs = civil society organization, DOR = Department of Roads, DSC = design and supervision consultant, DUDBC=Department of Urban Development and Building Construction, DWSS= Department of Water Supply and Sanitation, EMP = environmental management plan, FHHs = female headed households, IDC = institutional development consultant, ISWM = integrated solid waste management, MOE = Ministry of Environment, MOF = Ministry of Finance, MOFALD = Ministry of Federal Affairs and Local Development, MOUD = Ministry of Urban Development, MuAn = Municipality Association of Nepal, NPC = National Planning Commission, PBGSED = performance based grant for socioeconomic development, PCU = project coordination unit, PIU = project implementation unit, PMC = project management consultant, PPMS = project progress management system, QPRM = quarterly progress review meeting, RPIU = regional project implementation unit, TLO = Tole Lane Organisation, WCFs = Ward Citizen Forum.

b. Activities

4. **Activity 1: Baseline survey and consultations to understand social dynamics.**

The key RUDP stakeholders are the communities living in 167 municipal wards in eight project municipalities, with an average poverty rate of 19%.¹ The DSC/ CSC/ IDC with support from social mobilizers will be responsible for conducting detailed baseline socioeconomic survey of subproject sites and developing indicators to identify the poor, socially excluded, FHHs, vulnerable groups, squatters/ slums, poverty clusters and other affected populations due to the project. Data disaggregated by sex/ caste/ ethnicity/ vulnerability/ regional identity will be collected on access to municipal services (including sanitation, drainage, and solid waste management) and representation in local governance. The database will be maintained by each respective project municipality.

5. **Activity 2: Identifying stakeholders and stakeholders mapping.** An indicative list of the key stakeholders is:

- (i) Government agencies and their employees, in particular DUDBC, DWSS, DOR, District Survey Office, Nepal Electricity Authority, and local bodies;
- (ii) Beneficiary groups, particularly the women, poor, FHHs, socially excluded and vulnerable persons;
- (iii) Community/ political party leaders, public representatives;
- (iv) CBOs, NGOs, social and cultural groups, TLOs, and Ward Citizen Forums;
- (v) Committees and sub-committees of the municipal bodies;
- (vi) Media, including print and electronic media;
- (vii) Women groups, caste and ethnic groups;
- (viii) Contractors' employees;
- (ix) Vendor associations and labor union federations; and
- (x) Private sector institutions.

6. **Activity 3: Selection of key messages for community outreach and awareness building in communities.** A list of indicative key messages to be developed and disseminated by PMC for awareness generation and community participation includes the following:

- (i) Objective, rationale, scope, design, implementation arrangements, timeframe, impact, outputs and other details of the project;
- (ii) Project target groups and beneficiaries, project initiatives to promote GESI in decision-making, capacity and skill development, as appropriate;
- (iii) Expected project benefits including reduction in drudgery, time poverty and employment opportunities;
- (iv) Extent and type of disturbances and inconveniences caused by the project during implementation, and the proposed mitigation measures;
- (v) Expected likely impacts of the subproject, summary of the RIPP including entitlements, grievance redress mechanism and contact information;
- (vi) Importance of improved health, hygiene and sanitation practices accompanying the infrastructure improvements;
- (vii) Promotion of good practices and behavior in maintaining public assets and infrastructure for improved livability and quality of life;
- (viii) Civic education on duties and responsibilities of citizens, such as paying taxes; maintaining public infrastructure; not digging roads without a permit;

¹ Poverty is defined as percentages of people who are poor per the \$1.25 a day income poverty line and the national average of population living below poverty line is estimated at 23.8% in 2015. Nepal Small Area Estimation of Poverty, 2011, CBS, GoN.

- (ix) maintaining greenery; not destroying street lights or footpath fencing, and sensitive towards pedestrians and drivers especially at ramps and crossing points.
- (x) Explanation of local bodies/ municipalities efforts to be more responsive to citizens;
- (xi) Promoting GESI related existing policy provisions for the poor, women, socially excluded and vulnerable groups like targeted grants, GESI responsive budgeting, GESI responsive monitoring;
- (xii) Proper solid waste management, 3 R's (reduce, reuse and recycle) of waste; and the need to keep public spaces and water bodies clean;
- (xiii) ADB's and the government's environmental and social safeguard measures; grievance redress mechanism for the affected persons;
- (xiv) Importance of cost recovery and affordable tariffs for proper O&M of sewerage (Biratnagar);
- (xv) Importance of cost recovery and affordable tariffs for proper operations and maintenance of SWM and necessity of timely but affordable tariff collection for proper operations of SWM (Province 7 municipalities);
- (xvi) O&M of the assets created under the project and community/ TLO/ citizens' duties to support municipalities for effective O&M; and
- (xvii) Objective, criteria, scope, impact, outcome, budget, target beneficiaries of the performance-based grant for socioeconomic development (PBGSED) for the poor, women, socially excluded and vulnerable groups (Province 7 municipalities).

7. Activity 4: Design and implementation of information, education, and communication (IEC) program. The project will identify, develop and disseminate communication materials using innovative measures. The awareness creation and dissemination of IEC will be carried out through community mobilization and through informational materials.

- (i) **Public awareness through community mobilization and engagement** will be carried out in coordination with local communities, TLOs, WCFs and other stakeholders with support from local social mobilizers recruited by the DSC/ CSC/ IDC. The social mobilizers will conduct the following activities in coordination with ward and VDC offices. The following tools will be used by the social mobilizers with support from DSC/ CSC/ IDC consultants:
 - (a) Community/ street meetings;
 - (b) Orientation to TLO, WCF, contractors and laborers;
 - (c) Distribution of notices prior to and during construction works;
 - (d) Mass/ public consultation;
 - (e) Focus group discussions; and
 - (f) Coordination amongst stakeholders.
- (iii) **Public awareness through information dissemination** will be through information materials developed in simple, local language, as per international standards, and easy to understand by the general public. Different mediums and approaches will be used such as audio, video, print and live demonstrations and provided to household level and through TLO/ WCF with support from DSC/ CSC/ IDC consultants, social mobilizers and municipalities. Campaigns will be tailored for different target groups and city-specific needs while developing appropriate methods and mechanisms for information dissemination. The PIU/ PISUs will assess the impact of the campaigns with support from DSC/ CSC/ IDC and modify the approaches as required to increase effectiveness and outreach. The project website will also disclose key project-related information, including the scope, cost, and

financial and institutional arrangements, GESI action plan, safeguards reports such as initial environmental examination (IEE) and resettlement plans and progress on procurement, contract awards and disbursements. This will be carried out by the Communication Expert of the PMC in consultation with the GESI and safeguard experts. The following communications tools will be used:

- (a) Leaflet, poster, flipchart, stickers, hoarding boards;
- (b) Radio/ TV jingles/ public service announcements, both audio and visual;
- (c) Street plays;
- (d) Press conferences and press releases for important milestones;
- (e) Site visits by journalists/ community leaders;
- (f) Regular media disclosures;
- (g) Municipality and project websites containing project progress reports and training manuals; and
- (h) Live demonstrations on 3Rs, compost making

8. **Activity 5: Pre-construction awareness program:** Before commencing the construction activities, the PIU/ PISU with support from DSC/ IDC consultants will carry out the baseline survey/data collection, orient social mobilizers on their roles, carry out community mobilization and awareness raising campaigns, design, develop and disseminate information, and form users committees for the community-managed small contracts.

9. **Activity 6: Outreach to contractors and laborers.** As contractors and laborers are the main interface between construction and residents, efforts will be made to educate them on project aspects such as components, benefits, safeguards, risks, and mitigation measures. They shall be educated on the importance of avoiding public nuisances, minimizing public inconveniences, and avoiding disruptions to mobility. Awareness raising activities shall also focus on health and hygiene, HIV/ AIDS and other communicable diseases, core labor standards, and other GESI related issues. They shall also be educated on the safety and security during construction activities, and quality of works. The PMC will be responsible for this task with support from PISU.

10. **Activity 7: Facilitating implementation:** During the construction phase, key aspects of the IEC and other activities will focus on facilitating the smooth construction of infrastructure with (a) minimum disturbances to the community and (b) environment for contractors to carry out their works with minimum disruption. The PIU/ PISUs will be responsible for providing information on timing and duration of works, and in engaging with stakeholders and receiving their feedback and grievances with the support of DSC/ CSC/ IDC and social mobilizers.

11. **Activity 8: Post-construction facilitation:** The IDC consultants will develop training packages to develop municipality staff capacity for effective O&M and service delivery. Training materials and manuals will be developed and disseminated to the staff. These will cover key customer service elements, including public relations, of the O&M phase.

12. **Activity 9: Implementation and Feedback.** The RUDP through DSC/ CSC/ IDC will be responsible for ensuring annual participatory community monitoring with community representatives (50% women), civil society organization representatives, and TLO and WCF members, including slum/ squatters populations. The PISU will be responsible for (a) recording and implementing recommendations, (b) ensuring compliance with social safeguards provisions, and (c) sharing the annual progress report and action plan for the coming year based on stakeholder consultations. The project website managed by PCO with support from PMC for easy access to stakeholders will be updated periodically to have the proposed plan, progress of implementation, and outcomes.