

Project Administration Manual

Project Number: 48218-003
Loan Number: LXXXX
November 2017

Nepal: Rural Connectivity Improvement Project

ABBREVIATIONS

ADB	–	Asian Development Bank
ADS	–	Agriculture Development Strategy
CPF	–	community participation framework
CPP	–	community participation plan
CSC	–	construction supervision consultant
DOLIDAR	–	Department of Local Infrastructure Development and Agricultural Roads
EMP	–	environmental management plan
FMA	–	financial management assessment
FTP	–	full technical proposal
GESI	–	gender equality and social inclusion
GRC	–	grievance redressal committee
IEE	–	initial environmental examination
km	–	kilometer
MOFALD	–	Ministry of Federal Affairs and Local Development
NCB	–	national competitive bidding
PCU	–	project coordination unit
PAM	–	project administration manual
PIU	–	project implementation unit
PMC	–	project management consultant
QCBS	–	quality- and cost-based selection
SOE	–	statement of expenditures
SPS	–	Safeguard Policy Statement (2009)
TRTA	–	transaction technical assistance
VDC	–	village development committee

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

The Ministry of Federal Affairs and Local Development (MOFALD) through the Department of Local Infrastructure Development and Agricultural Road (DOLIDAR) is wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by MOFALD 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. Nepal's agriculture suffers generally from low productivity caused by high transaction costs stemming from poor connectivity between farms and markets, poor economies of scale and quality of produce, compounded by weak agricultural research and development. Its three distinct agro-ecological zones of terai (lowland), hills, and mountains influence agricultural production and define economic opportunities and constraints facing farmers. While the geography creates difficulties, the wide range of agro-ecological zones and microclimates makes possible the production of a broad spectrum of agricultural outputs. This creates a potential to improve agricultural productivity and farm incomes, and meet demands of domestic, regional and global markets. Recognizing this vast potential, the Government of Nepal took a bold step to bring in much needed development to the sector by signing the Agriculture Development Strategy (ADS) in 2015.¹ The government recognized that dramatic changes were needed, such as improving connectivity, promoting agribusiness and increasing commercialization across the sector, if the sector was to perform to its potential and raise the sector's long-term annual growth rate from 3% to the government's goal of 5%. The ADS recognizes access as one major constraint to developing agriculture, particularly commercial agriculture value chains. Transport in many high-potential agricultural production areas is limited to earth roads which are not operational after rains, resulting in high transport costs and losses of production quality and quantity. Only 17% of the rural population in Nepal has access to all-weather roads, compared with 60% in India and 37% in Bangladesh. The project will improve rural roads to all-weather standards, serving the productive agricultural areas and the rural population in 16 districts² and ensuring roads are maintained in a sustainable manner.

2. The project is aligned with the following impact: connectivity between rural communities, productive agricultural areas and socioeconomic centers in Nepal improved.³ The project will have the following outcome: transport efficiency on project roads increased.⁴

3. The project will have two outputs: Output 1: Rural road conditions between the selected rural communities, productive agricultural areas, and socioeconomic centers improved; and Output 2: Capacity of rural infrastructure agency and road users in project areas capacity enhanced. Road conditions of about 388 kilometers (km) rural roads between the selected rural communities, productive agricultural areas and socioeconomic centers will be improved to all-weather standards with safety features,⁵ and be maintained for 3 years.⁶ The capacity development will involve (i) trainings on safeguards, road safety awareness, road asset management, contract management, and rural road design and construction; (ii) development of vision, policy, business plan, and institutional structure frameworks for state-of-the-art rural road agency; (iii) development of pavement design, quality control and road safety guidelines; and (iv) development of detailed design for future pipeline. Awareness training of road users will include road safety, and prevention of human trafficking, and sexually transmitted infection.

¹ Ministry of Agricultural Development. 2015. *Agriculture Development Strategy (ADS) 2015 to 2035*. Kathmandu.

² Panchthar, Ilam, Jhapa, Morang, Sunsary, Dhankuta, Sindhuli, Kavre, Sindhupalchowk, Dolakha, Bhaktapur, Kathmandu, Chitwon, Parbat, Rolpa and Rukum.

³ Government of Nepal, National Planning Commission. 2016. *The Fourteenth Plan (FY2017–2019)*. Kathmandu.

⁴ The design and monitoring framework is in Appendix 1

⁵ Road safety measures such as cautionary and informatory signs, guard posts, speed breakers, and object markers.

⁶ Performance-based maintenance will be undertaken for three years after construction.

Indicative Activities	2017							2018		Responsible Agency
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Loan effectiveness								X		ADB/MOF

ADB = Asian Development Bank, CSRN = consulting services recruitment notice, DOLIDAR = Department of Local Infrastructure Development and Agricultural Roads, IEE = initial environmental examination, MOF = Ministry of Finance, MOFALD = Ministry of Federal Affairs and Local Development, MOLJPA = Ministry of Law, Justice and Parliamentary Affairs, NCB = national competitive bidding.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

Table 3: Project Implementation Organizations: Roles and Responsibilities

Project Implementation Organizations	Management Roles and Responsibilities
<p>Executing agency: Ministry of Federal Affairs and Local Development (MOFALD) through the Department of Local Infrastructure Development and Agricultural Roads (DOLIDAR)</p>	<p>MOFALD through DOLIDAR will be responsible for:</p> <ul style="list-style-type: none"> • overall coordination of project implementation • interagency coordination • timely counterpart fund availability • compliance with loan covenants • arrangements for financial audits and implementation of recommended actions for improving financial management
<p>Project Coordination Unit (PCU)</p>	<p>The PCU has been established within DOLIDAR in Kathmandu and is headed by a Project Director with overall responsibility for executing the project. The PCU is responsible for overall project management covering:</p> <ul style="list-style-type: none"> • consultant recruitment and procurement of works and goods; • payments of goods, works and consultants or Project Coordinator delegates authority to PIU project manager to do so; • overall contract supervision and quality assurance control; • project performance monitoring; • project financial management including timely submission of withdrawal applications, maintenance of financial records and accounts; and • submission of quarterly and annual project progress reports, semi-annual safeguard monitoring reports (environment), and project completion report.
<p>Project Implementation Units (PIUs)</p>	<p>Five PIUs will be established at provincial level, each located in Jhapa, Kathmandu, Parbat, Rolpa, and Rukum. Each PIU will be headed by a Project Manager and will be responsible for day-to-day management of the civil works contracts in their respective areas. The functions of the PIUs will include:</p> <ul style="list-style-type: none"> • close coordination with PCU on management of civil works contracts, timely disbursements, compliance with loan covenants and any project management issues; • day-to-day inspection of civil works and quality assurance control; • monitoring of environmental management plan implementation; • addressing of project related grievances on gender and safeguards; • preparation of progress reports for assigned contracts; • verification and certification of contractors' claims and submission of required documents for withdrawal applications; and • maintenance of project financial and other records.
<p>ADB</p>	<p>The Asian Development Bank (ADB) will monitor and review overall implementation of the project including compliance with loan agreement, project agreement and ADB guidelines. ADB will:</p> <ul style="list-style-type: none"> • field biannual review missions, midterm review mission, and project completion review mission to assess project implementation progress and compliance with loan covenants; • review PCU's submissions for procurement of goods, civil works, and services; and • ensure timely disbursement of funds subject to PCU's submission of withdrawal applications.

Source: Asian Development Bank.

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Federal Affairs and Local Development (MOFALD) through Department of Local Infrastructure Development and Agricultural Roads (DOLIDAR)

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Implementing Agency

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Asian Development Bank

Environment, Natural Resources and Agriculture Division (SAER)

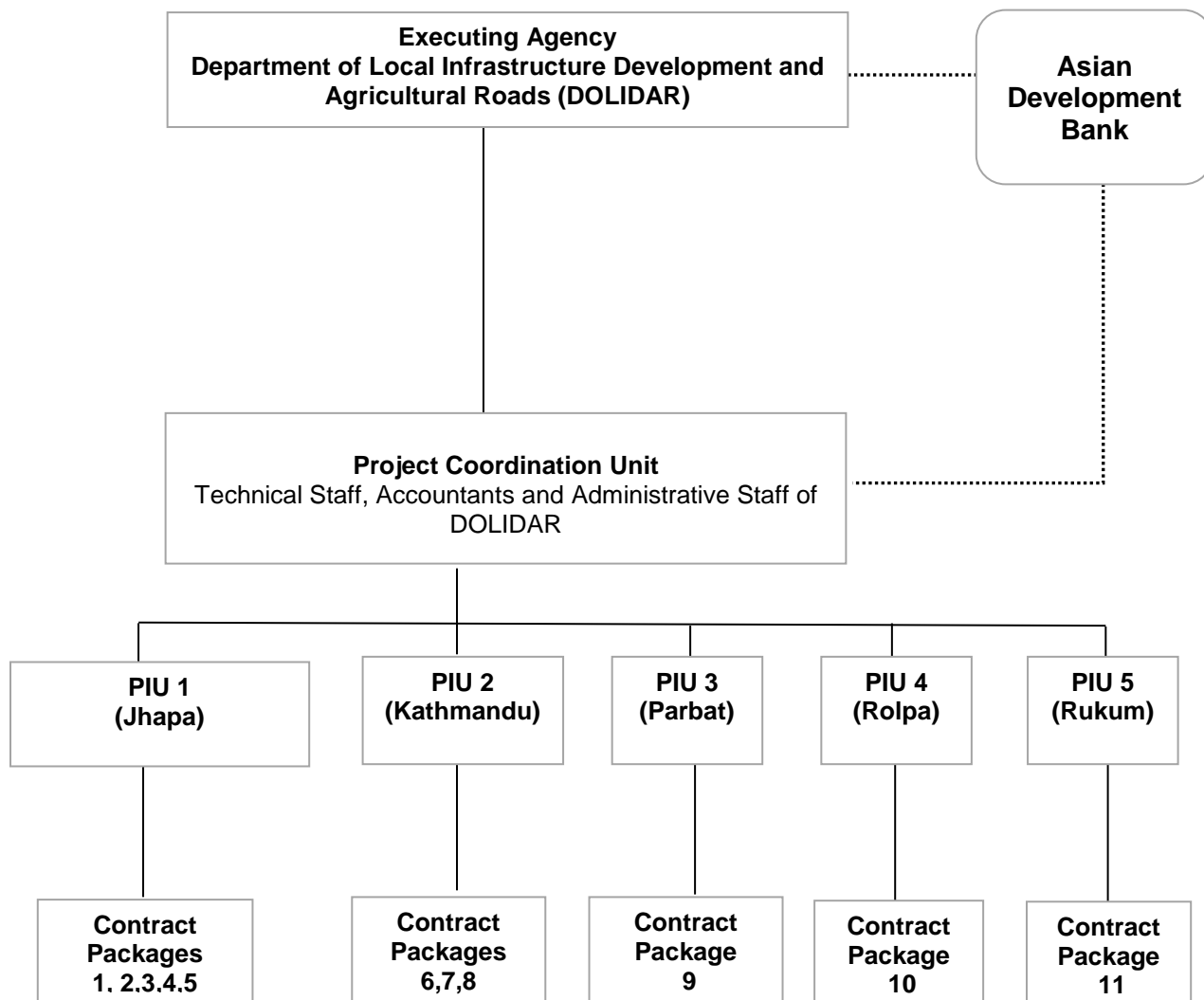
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C. Project Organization Structure

4. The following flow chart and table show the reporting lines and essential internal structures of the project implementation units (PIUs) and their staffing assignments.



Note: The PCU will have one project coordinator (gazetted I class officer), two senior divisional engineers, one under-secretary (account), one account officer, three civil engineers, one sociologist, two admin, one accountant, two computer operators, five drivers and five office assistants. Each PIU is headed by a project manager (Senior Divisional Engineer- gazetted II class officer), who will be supported by engineers, one account officer or, accountant, one administrative staff, at least one computer operator, two support staff, and one driver for each contract package. For PIUs assigned with more than one contract package, field offices will be established under the existing District Technical Offices (DTO) to lead the implementation of individual civil works packages.⁷ Each DTO will designate an engineer from its full time permanent staff to implement the project while DTOs remain in existence; thereafter permanent engineers from PIUs will replace the DTO engineers assigned to the field offices.

⁷ DTO offices are located at Panchthar, Ilam, Jhapa, Morang, Sunsari, Sindhuli, Kavre and Chitwan.

Table 4: Staffing Assignments and Recruitment Plan

	PCU	PIU 1	PIU 2	PIU 3	PIU 4	PIU 5	Remarks
A. Permanent							
Project Director (Gaz I)	1						
Senior Divisional Engineer (Gaz II)	2	1	1	1	1	1	
Under Secretary Account (Gaz II)	1						
Account officer (Gaz III)	1	1	1				
Engineer (Gaz III)	3	6	5	1	1	1	Engineers will be stationed at field offices.
Accountant (Non Gaz I)	1			1	1	1	
Sociologist	1						
Admin (Non Gaz I)	2	1	1	1	1	1	
Sub Total (A)	12	9	8	4	4	4	
B. Contracting							
Computer Operator	2	2	2	1	1	1	
Office Assistants	5	2	2	2	2	2	
Driver	5	5	4	1	1	1	
Sub Total (B)	12	9	8	4	4	4	
Total (A + B)	24	18	16	8	8	8	

PCU = project coordination unit, PIU = project implementation unit.

Total Staff: 82

Permanent Staff: 41

Temporary/Contract Staff: 41

IV. COSTS AND FINANCING

5. The project is estimated to cost \$135.7 million. The investment plan is summarized in Table 5.

Table 5: Summary Cost Estimates
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Rural road conditions improved ^c Capacity of rural infrastructure agency and road users enhanced ^d	102.5
2. enhanced ^d	10.5
Subtotal (A)	113.0
B. Contingencies^e	21.2
C. Financial Charges during Implementation^f	1.5
Total (A+B+C)	135.7

^a Includes taxes and duties of \$17.3 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties of about \$17.3 million.

^b In mid-2017 prices as of 3 July 2017.

^c Includes social and environment mitigation, equipment and vehicles.

^d Includes the cost of (i) construction supervision consultant, (ii) project management consultant, and (iii) detailed project report consultant.

^e Physical contingencies computed at 9% for civil works and 3% for consulting services. Price contingencies computed at 0.3% to 1.5% on foreign exchange costs and 6.0% to 6.5% on local currency costs in line with escalation rates published by the Asian Development Bank at <http://lnadbg1.asiandevbank.org/erd0004p.nsf/>; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate. In case there are savings from the "Unallocated" category, ADB in consultation with the Borrower, would prioritize reallocation of such savings to the "Civil Works" category and utilization for additional civil works.

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

Source: Asian Development Bank.

6. The government has requested a concessional loan in various currencies equivalent to SDRXXX (\$100 million equivalent) ⁸ from ADB's ordinary capital resources 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.

7. The summary financing plan is in Table 6. ADB will finance the expenditures in relation to investment costs, recurrent costs, contingencies and financing charges during implementation.

Table 6: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (concessional loan)	100.00	74.00
Government	35.72	26.00
Total	135.72	100.00

Source: Asian Development Bank estimates.

⁸ SDR[] = \$1.00 as of [].

A. Cost Estimates Preparation and Revisions

8. The cost estimates were prepared by ADB with information on the investment costs extracted from the consultant's detailed project report.⁹ The cost estimates were based on July 2017 prices.

B. Key Assumptions

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

- (i) Exchange rate: NRe103 = \$1.00 (as of July 2017).
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 7: Escalation Rates for Price Contingency Calculation (%)

Item	2017	2018	2019	2020	2021	2022	Average
Foreign rate of price inflation	1.50	2.90	4.50	6.00	7.60	9.20	6.36
Domestic rate of price inflation	10.50	19.56	27.93	36.89	46.47	56.72	39.61

Source: Asian Development Bank estimates.

⁹ DOLIDAR used its own resources to prepare feasibility and detailed design of candidate roads.

C. Detailed Cost Estimates by Expenditure Category

Table 8: Cost Estimates by Expenditure Category
(\$ million)

Items	Total Cost	% of Base costs
A. Investment Costs		
1 Civil Works	97.49	86.3%
2 Equipment and Vehicles	2.00	1.8%
3 Social and Environment Mitigation	1.00	0.9%
4 Consultancy Services	10.54	9.3%
Subtotal (A)	111.03	98.2%
B. Recurrent Costs		
Project Management	2.00	1.8%
Subtotal (B)	2.00	1.8%
Total Base Cost	113.03	100.0%
C. Contingencies		
1 Physical Contingencies	14.07	12.4%
2 Price Contingencies	7.08	6.3%
Subtotal (C)	21.15	18.7%
D. Financing Charges During Implementation		
	1.54	1.4%
Subtotal (D)	1.54	
Total Project Cost (A+B+C+D)	135.72	120.1%

Note: Numbers may not sum precisely because of rounding.

^a Includes taxes and duties of about \$17.3 million.

^b Social and Environment Mitigation includes affected household livelihood skills training program.

^c Project Management includes office equipment, staff salaries, office and travel expenses of project staff, etc.

Source: Asian Development Bank estimates.

D. Allocation and Withdrawal of Loan Proceeds

10. Dollar equivalent for the ADB loan will be converted to SDR at the time of loan negotiations.

11. The ADB loan will be used for (i) civil works, (ii) equipment and vehicles, (iii) social and environment mitigation, (iv) consulting services, (v) project management, (vi) contingencies, and (vii) interest during construction.

Table 9: Allocation and Withdrawal of Loan Proceeds

Category			ADB financing Basis
Number	Item	Total Amount Allocated for ADB Financing (SDR) Category	Percentage and Basis for Withdrawal from the Loan Account
1	Civil Works	55,758,042.42	80% of total expenditure
2	Equipment and Vehicles; Project Management	1,424,980.00	50% of total expenditure
3	Social and Environment Mitigation	712,490.00	100% of total expenditure
4	Consultancy Services	6,386,760.36	85% of total expenditure
5	Interest During Construction	1,100,084.56	100% of total amount due
6	Unallocated	5,866,642.66	
	TOTAL	71,249,000.00	

E. Detailed Cost Estimates by Financier

Table 10: Cost Estimates by Financier
(\$ million)

Item	ADB		Government		Total Costs	Taxes & Duties
	Amount	%	Amount	%		
A. Investment Costs						
1 Civil Works	78.00	80.0%	19.49	20.0%	97.49	12.67
2 Equipment and Vehicles	1.00	50.0%	1.00	50.0%	2.00	0.26
3 Social and Environment Mitigation	1.00	100.0%	0.00	0.0%	1.00	-
4 Consultancy Services	8.96	85.0%	1.58	15.0%	10.54	1.37
Subtotal (A)	88.96	80.1%	22.07	19.9%	111.03	14.30
B. Recurrent Costs						
Project Management	1.00	50.0%	1.00	50.0%	2.00	0.26
Subtotal (B)	1.00	50.0%	1.00	50.0%	2.00	0.26
Total Base Cost	89.96	79.6%	23.07	20.4%	113.03	14.56
C. Contingencies						
1 Physical Contingencies	4.98	35.4%	9.09	64.6%	14.07	1.83
2 Price Contingencies	3.25	45.9%	3.83	54.1%	7.08	0.92
Subtotal (C)	8.23	38.9%	12.92	61.1%	21.15	2.75
D. Financing Charges During Implementation						
	1.54	100.0%	0.00	0.0%	1.54	-
Subtotal (D)	1.54	100.0%	0.00	0.0%	1.54	-
Total Project Cost (A+B+C+D)	100.00	74.0%	35.72	26.0%	135.72	17.31
% Total Project Cost		74.0%		26.0%	100%	

Note: Numbers may not sum precisely because of rounding.

^a Social and Environment Mitigation includes affected household livelihood skills training program.

^b Project Management includes office equipment, staff salaries, office and travel expenses of project staff, etc., bank charges, local transport, insurance and office equipment, and operations.

Source: Asian Development Bank estimates.

F. Detailed Cost Estimates by Outputs and/or Components

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

Item	Total Cost	Output 1 Rural road conditions between the selected rural communities, productive agricultural areas, and socioeconomic centers improved		Output 2 Capacity of rural infrastructure agency and road users in project areas capacity enhanced	
		Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs					
1. Civil Works	97.49	97.49	100.00	0.00	00.00
2. Equipment and Vehicles	2.00	2.00	100.00	0.00	00.00
3. Social and Environment Mitigation ^a	1.00	1.00	100.00	0.00	00.00
4. Consulting Services	10.54	0.00	0.00	10.54	100.00
B. Recurrent Costs	2.00	2.00	100.00	0.00	00.00
Project Management					
Total Base Cost	113.03	102.49	90.68	10.54	9.32
C. Contingencies					
Physical Contingencies	14.07				
Price Contingencies	7.08				
Subtotal	21.15				
D. Financing Charges During Implementation	1.54				
Total Project Cost	135.72				

^a Social and Environment Mitigation includes affected household livelihood skills training program.

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

G. Detailed Cost Estimates by Year

Table 12: Detailed Cost Estimates by Year
(\$ million)

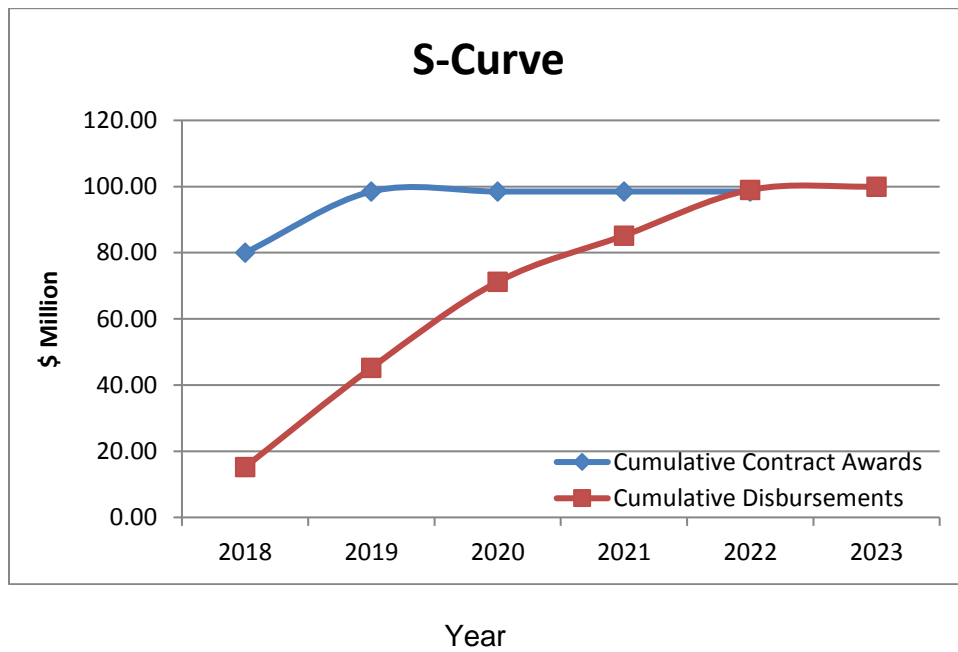
Cost Incurred by Year	Total Cost	Cost per year				
		2018	2019	2020	2021	2022
Annual Expenditure %		15%	20%	30%	20%	15%
Investment Costs						
Civil Works	97.49	14.62	19.50	29.25	19.50	14.62
Equipment and Vehicles	2.00	0.30	0.40	0.60	0.40	0.30
Social and Environment Mitigation	1.00	0.15	0.20	0.30	0.20	0.15
Consultancy Services	10.54	1.58	2.11	3.16	2.11	1.58
Subtotal (A)	111.03	16.65	22.21	33.31	22.21	16.65
Recurrent Costs						
Project Management	2.00	0.30	0.40	0.60	0.40	0.30
Subtotal (B)	2.00	0.30	0.40	0.60	0.40	0.30
Total Base Cost	113.03	16.95	22.61	33.91	22.61	16.95
Contingencies						
Physical Contingencies	14.07	2.11	2.81	4.22	2.81	2.11
Price Contingencies	7.08	1.06	1.42	2.12	1.42	1.06
Subtotal (C)	21.15	3.17	4.23	6.35	4.23	3.17
Financing Charges During Implementation						
	1.54	0.23	0.31	0.46	0.31	0.23
Subtotal (D)	1.54	0.23	0.31	0.46	0.31	0.23
Total Project Cost (A+B+C+D)	135.72	20.36	27.14	40.72	27.14	20.36

Note: Numbers may not sum precisely because of rounding.

Source: Asian Development Bank estimates.

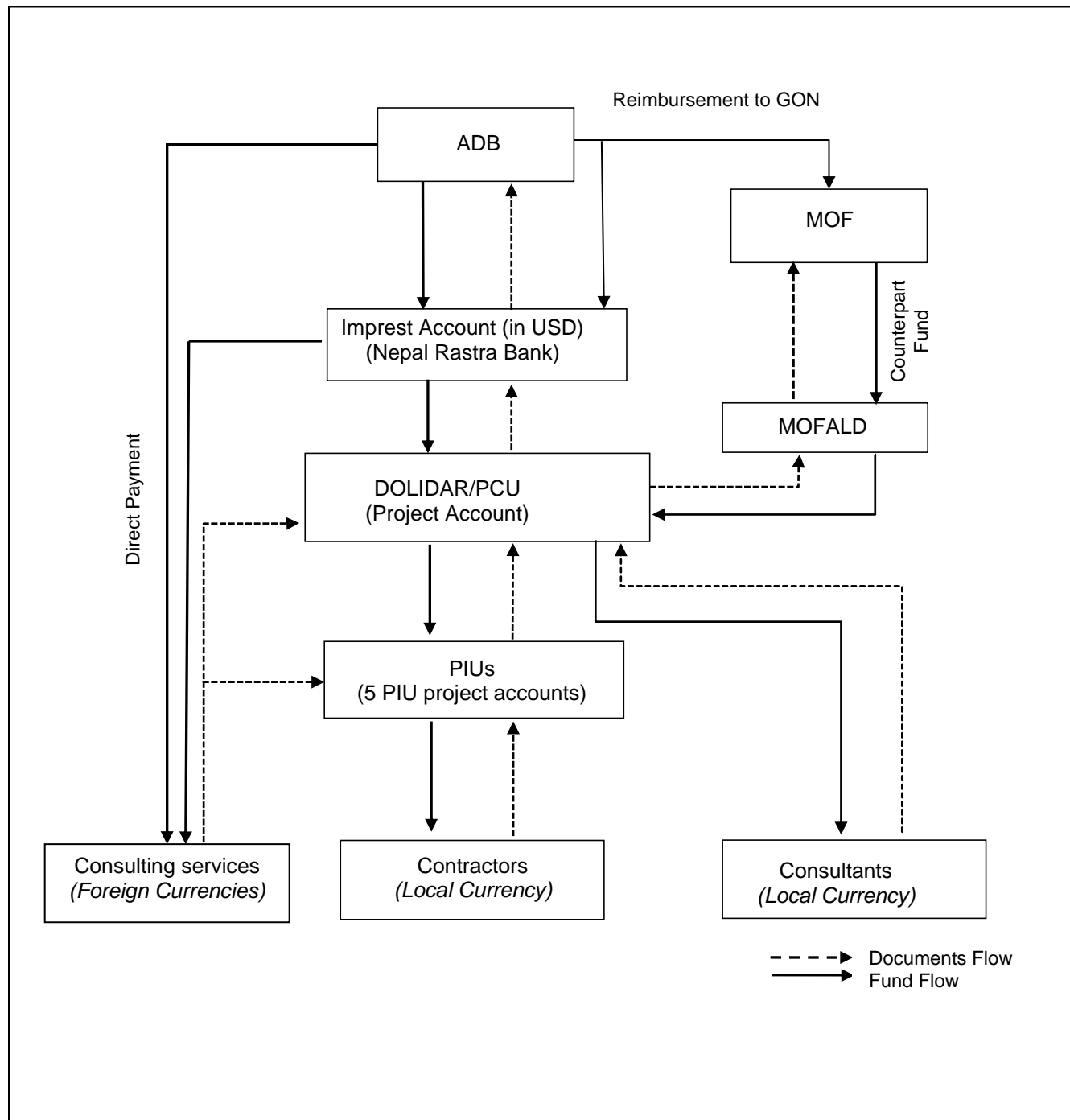
H. Contract and Disbursement S-Curve

Year	Contract Awards (in USD million)							Disbursements (in USD million)						
	Q1	Q2	Q3	Q4	Total	Cumulative	%ge	Q1	Q2	Q3	Q4	Total	Cumulative	%ge
2018	10	10	20	40	80	80.00	81%			9.50	5.70	15.20	15.20	15%
2019	5	5	8.5	0	18.5	98.50	100%	10.00	10.00	5.00	5.00	30.00	45.20	45%
2020	0	0	0	0	0	98.50	100%	8.00	8.00	5.00	5.00	26.00	71.20	71%
2021	0	0	0	0	0	98.50	100%	5.00	5.00	2.00	2.00	14.00	85.20	85%
2022	0	0	0	0	0	98.50	100%	5.00	5.00	2.00	1.80	13.80	99.00	99%
2023	0	0	0	0				1.00	-	-	-	1.00	100.00	100%



I. Fund Flow Diagram

12. The following diagram shows how the funds will flow from ADB and the Borrower to implement project activities.



ADB = Asian Development Bank, DOLIDAR = Department of Local Infrastructure Development and Agricultural Road, GON = Government of Nepal, MOF = Ministry of Finance, MOFALD = Ministry of Federal Affairs and Local Development, PCU = project coordination unit, PIUs = project implementation units.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

13. The financial management assessment (FMA) was conducted in July 2017 in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects and the Financial Due Diligence: A Methodology Note. The FMA considered the capacity of the Department of Local Infrastructure Development and Agricultural Roads (DOLIDAR), which is the executing agency, including funds-flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements. Based on the assessment, the key financial management risks identified are (i) weak internal audit function, (ii) weak human resource capacity in ADB policies and procedures, and (iii) non-use of the available government accounting and monitoring software. It is concluded that the overall premitigation financial management risk of DOLIDAR is moderate. DOLIDAR has used advance fund and statement of expenditure (SOE) procedures for its other ADB-funded projects including the Earthquake Emergency Assistance Project; Community Irrigation Project; and Decentralized Rural Infrastructure and Livelihood. The established accounting, reporting and budgeting procedures in place are in line with government regulations, and adequate accounting staff are in place.

14. DOLIDAR has agreed to implement an action plan as key measures to address the deficiencies. The financial management action plan is provided in Table 14. In the action plan table, the key risks identified pertain to internal audit, staffing, and use of up-to-date accounting system. To address the weakness of internal audit, DOLIDAR has agreed to develop internal control guidelines to strengthen the internal audit. Meanwhile, a financial expert will be engaged to conduct internal checks and control. Project implementation staff will be trained on financial and procurement rules and guidelines of both the Government of Nepal and ADB by January 2019. The financial expert will further provide support to DOLIDAR to use the Computerized Government Accounting System. Financial management risks and risk-mitigation measures should be reviewed and updated throughout the life of the project.

15. A summary of the overall risks is given below.

Table 13: Control Risk Summary

Risk Type	Risk Description	Risk Assessment	Mitigation Measures or Action Plans
1. Country Level	Absorption capacity of GON departments for capital expenditure and adequacy of O&M budget	Moderate	Close monitoring the activities will reduce the country specific risk in the project.
2. Executing Entity	Experience of the DOLIDAR as executing and implementing agency for implementing the project	Low	The Executing and implementing agency of the proposed project, DOLIDAR, has experience in implementing ADB-financed projects.
3. Funds Flow	Timely release of counterpart fund to the project	Low	This is a high priority project with GON commitment, and therefore, the usual delays in allocation and release of funds are not expected. GON assurance is required to release the counterpart funds on a timely basis to DOLIDAR, and Direct Payment procedure is to be used as well.

Risk Type	Risk Description	Risk Assessment	Mitigation Measures or Action Plans
4. Staffing	Dedicated finance and accounting staff for the DOLIDAR	Moderate	The PCU, established within DOLIDAR at the central level, will be the implementing agency. Five PIUs will be established at the regional level. Each PIU comprises senior divisional engineer, engineers, accountant, administration officer, computer operator, assistants, and drivers. Further, there will be eight field offices to be established at project sites. One construction supervision consultant will be engaged under the RCIP who will act as the engineer for the construction contracts.
5. Accounting Policies and Procedures	Proper well documented policies and procedures and scope for improvement in the implementation of PEFA recommendations	Moderate	Existing GON policies and procedures are followed. GON is in the process of implementing the PEFA recommendations on a phased basis. The compliance status of project loan covenants will be reported and assessed through the quarterly progress reports and verified by ADB review missions
6. Internal Audit	Implementation of internal audit recommendation effectively Internal Audit function generally weak	Substantial	Full time accounting support to improve the internal control system in PCU is recommended. A thorough checking of vouchers may be done by a finance section at PCU before making payments.
7. External Audit	Timely completion of External Audit Function	Low	OAG has the constitutional mandate to conduct external audits of donor funded projects. Annual project audit reports are produced within 6 to 9 months of the end of the financial year.
8. Reporting and Monitoring	Financial Reports and disbursement reports need to be form part of quarterly progress report	Moderate	DOLIDAR will be required to report in accordance with the ADB requirements with inherent adequate control mechanisms. Financial Reports and disbursement reports need to be form part of quarterly progress report.
9. Information Systems	Optimal use of technology in the finance and accounts wing for the preparation of accounts and reporting requirements.	Moderate	The project to use the existing CGAS software in addition to the existing use of spread sheet. Possibility of Integration of the ADB reports in the existing software to be considered.
Overall Control Risk		Moderate	

ADB = Asian Development Bank, CGAS = Computerized Government Accounting System, DOLIDAR = Department of Local Infrastructure Development and Agricultural Roads, GON = Government of Nepal, OAG = Office of the Auditor General, O&M = operation and maintenance, PIU = project implementation unit, PCU = project coordination unit, PEFA = Public Expenditure Financial Accountability.

Sources: Asian Development Bank and the Department of Roads.

16. A summary of the financial management action plan is given below.

Table 14: The Financial Management Action Plan

Key Risks	Risk Mitigating Activity	Timeline	Responsible Entity
Staffing	All approved staff must be in place	Before commencement of project	DOLIDAR
Internal audit	A thorough checking of vouchers may be done by a trained financial expert at PCU before making payment.	During project implementation	DOLIDAR
Training on ADB Policies and procedure	Impart training to all field staff who is involved in the ADB project	During project implementation	ADB
Reporting and monitoring	Prepare quarterly report for the ADB project with financial and disbursement report as well as variance analysis of physical and financial progress.	During project implementation	DOLIDAR

ADB = Asian Development Bank, DOLIDAR = Department of Local Infrastructure Development and Agricultural Roads, PCU = Project Coordination Unit.

Source: Asian Development Bank and Department of Roads.

B. Disbursement

1. Disbursement Arrangements for ADB Funds

17. 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.¹⁰ Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control.

18. ADB's direct payment, reimbursement and advance fund procedures will be used for disbursement of project funds. Direct payment by ADB may be used for payments to contractors and consultants in foreign currencies. Advance fund and reimbursement procedure will be utilized for financing ADB part of (i) payments to civil works contractors, consultants, and suppliers, (ii) recurrent costs including for training and social and environment mitigation. Under the advance fund procedure, contractors submit claims in local currency to their respective PIUs. The PIU makes the payment of the claims using government budget and sends expenditure statement to the project coordination unit (PCU). The PCU will either claim the ADB part by submitting the withdrawal application for reimbursement or transfer the ADB part from advance fund to central treasury and submit the withdrawal application for replenishment and liquidation. The PCU consolidates claims, including from consultants, and prepares the withdrawal application for direct payment, reimbursement and liquidation and replenishment of the advance fund. Monthly reports on consolidated expenditures are sent by the PCU to DOLIDAR/MOFALD, which are then forwarded to MOF.

19. **Advance fund procedure.** Immediately after loan effectiveness, the PCU will establish and maintain an advance account for the ADB loan at the Nepal Rastra Bank to be used exclusively for ADB's share of eligible expenditures. The currency of the advance account is the US dollar. The advance account is to be used exclusively for ADB's share of eligible expenditures.

¹⁰ Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning

The PCU who administers the advance account is accountable and responsible for proper use of advances to the advance account including advances to any sub-accounts.

20. 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 PCU may request for initial and additional advances to the advance account based on an Estimate of Expenditure Sheet¹¹ 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 PCU in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing advance account.

21. **Statement of expenditure procedure.** 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.

22. Before the submission of the first withdrawal application (WA), the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the government, together with the authenticated specimen signatures of each authorized person. The minimum value per WA is stipulated in the *Loan Disbursement Handbook* (2017, as amended from time to time). Individual payments below such amount should be paid by DOLIDAR and subsequently claimed to ADB through the advance fund procedure, unless otherwise accepted by ADB. The borrower should ensure sufficient category and contract balances before requesting disbursements. Use of ADB's Client Portal for Disbursements (CPD)¹² system is encouraged for submission of WAs to ADB.

2. Disbursement Arrangements for Counterpart Fund

23. Both the government counterpart funds and the ADB funds for the project will be sufficiently allocated in the budget annually. The PCU and PIUs will prepare the disbursement projections and transmit to the government, to earmark the required funds for budgeting purposes.

24. The PCU will submit to ADB annual contract awards and disbursement projections before the start of each calendar year using ADB's standard templates. The PCU is responsible for (i) requesting budgetary allocations for both the counterpart funds and ADB funds, (ii) collecting supporting documents for the project, (iii) preparing and sending withdrawal applications to ADB and (iv) submitting audited project financial reports on time.

C. Accounting

25. DOLIDAR will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project following cash-based accounting system following the government's rules. DOLIDAR will prepare project financial statements (PFS) in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices. The PFS shall include, at a minimum, a

¹¹ Estimate of Expenditure sheet is available in Appendix 8A of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time)

¹² The CPD facilitates online submission of WA to ADB, resulting in faster disbursement. The forms to be completed by the Borrower are available online at <https://www.adb.org/documents/client-portal-disbursements-guide>.

statement of receipts and payments with accompanying notes and schedules. PFS shall include all expenditures incurred under the project including loan and government counterpart funds. These shall be prepared to ensure maximum alignment to Nepal Public Sector Accounting Standards and Government of Nepal's Financial Procedures, Act and Rules. Detailed Statement of Audit Needs shall be provided during implementation.

D. Auditing and Public Disclosure

26. DOLIDAR will cause the detailed PFS to be audited in accordance with auditing standards and by an independent auditor acceptable to ADB. The audited project financial statements, together with the auditor's report and management letter, will be submitted in the English language to ADB within 6 months of the end of the fiscal year by DOLIDAR.

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

28. 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.

29. The government, MOFALD and DOLIDAR have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited PFS.¹³ 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.

30. 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*.¹⁴ After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the PFS no later than 14 days of ADB's confirmation of their acceptability by posting

¹³ ADB's approach and procedures regarding delayed submission of audited project financial statements:

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

¹⁴ Public Communications Policy: <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.¹⁵

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

31. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2015, as amended from time to time)¹⁶ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).¹⁷ The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, MOFALD and DOLIDAR have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

32. **Advance contracting.** The works and services packages to be financed by the project through advance contracting are (i) 11 civil works for upgrading and maintaining rural roads; and (ii) consulting services for construction supervision (CSC-01) and project management consultants (procurement, quality control, social safeguard, environment safeguard, road maintenance/road safety). Eligible expenses for setting up the PCU and PIUs (office equipment, vehicles, and personnel) may also be part of advance contracting and retroactive financing. Table 14 indicates the schedule for advance contracting for civil works and CSC-01, including status for each activity.

33. **Retroactive financing.** Retroactive financing is allowed for reimbursement of eligible expenses mentioned in para. 31, up to a maximum amount equivalent to 20% of the total ADB loan and grant, incurred before loan effectiveness, but not more than 12 months before the signing of the loan agreement.

¹⁵ This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraph 97(iv) and/or 97(v).

¹⁶ Available at: <https://www.adb.org/sites/default/files/institutional-document/31482/procurement-guidelines-april-2015.pdf>

¹⁷ Available at: <https://www.adb.org/sites/default/files/institutional-document/31481/guidelines-use-consultants.pdf>

Table 15: Advance Actions

Activity	Responsible	Due date	Comment
CSC-01 (Construction Supervision Consultant)			
Preparation and submission of S-0 to ADB	DOLIDAR	16 Jun 2017	Actual
Short listing and RFP, Submission 1 to ADB	DOLIDAR	21 Aug 2017	Actual
RFP issued to short listed firms	DOLIDAR	11 Sep 2017	Actual
Receipt of RFP	DOLIDAR	15 Oct 2017	
Technical proposal evaluation, Submission 2 to ADB	DOLIDAR	05 Nov 2017	
Technical and price evaluation, Submission 3 to ADB	DOLIDAR	16 Dec 2017	
Draft Contract, Submission 4	DOLIDAR	26 Jan 2018	
Consultant mobilization	DOLIDAR	27 Feb 2018	
Upgrading and maintaining rural roads in Jhapa (NCB-01), Panchthar (NCB-02), Sunsari and Dhankuta (NCB-03) and Rolpa (NCB-04)			
Submission bid document to ADB	DOLIDAR	22 Jun 2017	Actual
Advertisement of invitation for bids	DOLIDAR	10 Aug 2017	Actual
Receipt of bids	DOLIDAR	15 Sep 2017	Actual
Technical bid evaluation report submission to ADB	DOLIDAR	7 Oct 2017	
Price bid evaluation report submission to ADB	DOLIDAR	24 Nov 2017	
Contract acceptance letter / award	DOLIDAR	8 Jan 2018	
Mobilization	DOLIDAR	8 Feb 2018	
Upgrading and maintaining rural roads in Dolakha, Sindhupalchok, and Kavrepalanchok (NCB-07), Parbat (NCB-10), Rukum (NCB-11)			
Submission of bid document to ADB	DOLIDAR	21 Aug 2017	
Advertisement of invitation for bids	DOLIDAR	23 Aug 2017	
Receipt of bids	DOLIDAR	25 Sep 2017	
Technical bid evaluation report submission to ADB	DOLIDAR	17 Oct 2017	
Price bid evaluation report submission to ADB	DOLIDAR	4 Dec 2017	
Contract acceptance letter / award	DOLIDAR	18 Jan 2018	
Mobilization	DOLIDAR	18 Feb 2018	

ADB = Asian Development Bank, CDCL = Construction Development Corporation Limited, CS = consulting services, CW = civil works, RFP = request for proposal

B. Procurement of Goods, Works, and Consulting Services

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

35. National competitive bidding (NCB) will be used for civil works contracts of \$10 million or less and goods contracts of \$2 million or less.¹⁸ Shopping will be used for procurement of works and goods estimated to cost less than \$100,000.¹⁹

36. The government will inform ADB of the changes made to the national procurement regulations, if any, and carry out a joint review of the NCB Annex if necessary to ensure consistency with ADB guidelines. The procurement plan should be updated whenever change in the procurement arrangements and/or the NCB Annex is required and agreed.

37. An 18-month procurement plan, indicating threshold and review procedures, goods, works, and consulting services contract packages and national competitive bidding guidelines, is in Attachment A (Procurement Plan). All consultants will be recruited according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time).²⁰ The terms of reference for all consulting services are detailed in attachments B, C, D and E.

38. All procurement activities will be the responsibility of the project director of the project coordination unit (PCU), who will be supported by his staff and consultants. ADB will closely monitor all major procurement activities. Civil works contracts will comprise 11 NCB packages. All contracts will be procured in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).

39. International consultants, in association with domestic consultants, will be engaged as construction supervision consultant (CSC) to support the PCU in (i) contract administration and construction supervision for the road construction component, and (ii) implementing gender equality and social inclusion (GESI) plan including road safety, HIV/AIDS and human trafficking. The CSC will also support the road sector institutions in the fields of road technologies, road asset management/maintenance and project management. About 24 person-months of international consultants and 2,797 person-months of national consultants will be required for this. These consultants will be recruited under a firm, using ADB's quality- and cost-based selection (QCBS) under full technical proposal (FTP). The project management consultants (PMC) will be engaged through individual consultant selection method for project management support, capacity building and monitoring compliance with social and environment safeguards. About 99 person-months of national consultants will be required. The detailed project report consultants will be recruited to prepare detailed design of new roads for future pipeline. About 70 person-months of national consultants will be required for this. These consultants will be recruited under a firm, using ADB's QCBS under FTP. For the piggy-backed transaction technical assistance (TRTA), a firm of international consultants in association with domestic consultants will be recruited using ADB's QCBS under simplified technical proposal for institutional strengthening of DOLIDAR. About 16 person-months of international consultants and 24 person-months of national consultants will be required under the TRTA consultant package.

C. Procurement Plan

40. Project procurement classification is B, and the project procurement risk is assessed as low. The procurement plan is in Attachment A and describes all procurement of good and works

¹⁸ ADB has allowed use of NCB for all the packages considering that these are rural roads and the likely participants which are likely to be more effective for executing the works are domestic contractors.

¹⁹ Vehicles and motorbikes procured under the project will be used by the PCU and PIUs.

²⁰ Checklists for actions required to contract consultants by method are available in the e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>

to be undertaken for the project based on the Procurement Capacity Assessment undertaken for DOLIDAR.

D. Consultants' Terms of Reference

41. The consultants' terms of reference are provided in the following:

Construction Supervision Consultants	Attachment B
Project Management Consultants (Individual)	Attachment C
Detailed Project Report Consultants	Attachment D
Transaction Technical Assistance	Attachment E

VII. SAFEGUARDS

42. **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 ADB's Safeguard Policy Statement (2009).

A. Environment

43. The project is classified as category B in accordance with ADB's Safeguard Policy Statement (2009) (SPS). The environmental management plan (EMP) outlines measures to mitigate all anticipated environment impacts during project construction and operation and will be included in the contract agreement with the respective civil works contractor. Specific mitigation measures with details on location, time and responsible agency for implementation are given in the EMP.

44. **Implementation arrangements for environment safeguards.** The responsibilities of various agencies and parties for implementing environment safeguards are provided below.

45. The **PCU** is the project management unit and responsible for the overall compliance with ADB's SPS and the applicable laws and rules under the Ministry of Population and Environment. The PCU will have an environmental consultant (PCU-ES) to coordinate with the PIUs and ensure project implementation complies with the PAM and EMP. The PCU-ES is responsible for:

- (iii) Ensuring compliance with all environment related statutory requirements by the DOLIDAR and the contractor.
- (iv) Reviewing and finalizing Road Specific EMPs prepared by the CSC.
- (v) Timely endorsement and signing of key documents and forwarding to the respective agency for processing of required clearances and permits to include but not limited to: forestry clearance; tree cutting permit; permission for construction material quarrying; consent to operate hot mix plants, crushers, and batching plants; consent for disposal of sewage from labour camp; and pollution under control for motor vehicles, etc. and disclosure on ADB and DOLIDAR websites.
- (vi) Ensuring all contractors obtain permits, licenses, etc. for activities such as operation of asphalt plants, quarries, borrow areas, etc. before the implementation of the respective construction activity.
- (vii) Taking proactive and timely measures to address any environment safeguards related challenges at the national or state/district levels such as delays in processing of clearances during pre-construction stage and significant grievances during construction stage.

- (viii) Carrying out field verification and reviewing environmental compliances by the contractor during project implementation.
- (ix) Reviewing and finalizing periodic environmental monitoring reports submitted by the CSC; assisting in complying with disclosure of periodic environmental monitoring reports.
- (x) Ensuring grievance redress mechanism as envisaged in the EMP is in place.

46. **Project Implementation Unit (PIU).** The PIUs through the Executing Engineer will be responsible for supervising implementation of the EMP and environmental monitoring plan (EMoP) by the contractor through the following:

- (i) Review all sub-plans identified in the initial environmental examination (IEE) and EMP to be prepared by the Contractor to include camp layout, waste/debris management plan, borrow area management plan, traffic management plan with guidance from the CSC-ES;
- (ii) Review monthly environmental monitoring reports prepared by the Contractor-Environment Focal Person (EFP);
- (iii) Conduct monthly site and follow-up inspection to ensure the veracity of the submitted monitoring reports and enforce the EMP and EMoP;
- (iv) Conduct compliance conference with the Contractor to discuss non-compliance and agree on corrective measures with guidance from the CSC-ES;
- (v) Recommend sanctions to the PCU in case of recalcitrant contractors.

47. **Construction Supervision Consultant – Environment Specialist (CSC-ES).** The main responsibility of the CSC-ES is to support the PCU and PIU and ensure that the construction works are in accordance with the environmental management plan and other environment-related stipulations of the construction contract documents through the performance of the following:

- (i) Prepare road-specific EMPs and EMoPs with support from the PCU-ES, guided by the general EMP and based on the more detailed survey
- (ii) Conduct environmental site induction training²¹ for all contractors and PIUs to ensure understanding of the EMP, domestic environmental laws and regulations requirements particularly on the required clearances and permits, occupational and community health and safety, timely mobilization of the Contractor's EFP, and review of sub-plans required in the EMP and advise the PIU on their adequacy
- (iii) Ensure contractors secure necessary permits and clearances
- (iv) Ensure the environmental monitoring report template is adapted by the contractor's in the preparation of submission of self-monitoring reports
- (v) Conduct periodic²² compliance inspection monitoring with the jurisdictional PIU of all roads to confirm the self-monitoring reports prepared by the Contractor
- (vi) Prepare summary monthly, quarterly, and semi-annual monitoring reports from the periodic compliance inspection monitoring, and review the environmental self-monitoring reports prepared by the Contractor's EFP for the review and guidance of the PCU and PIUs

²¹ Site induction training includes but is not limited to: (i) discussion and review of EMP and EMoP detailing how specific environmental risks associated with their scope of work will be managed for legal compliance, inspection and audits, and progress tracking and reporting; (ii) environmental training and awareness needs shall be determined and documented via a training needs analysis prior to commencement; (iii) health and safety awareness course which details general environmental awareness and specific performance requirements expected on site; and (iv) grievance redress mechanism.

²² At least three times: pre-, during, and post-construction stages.

- (vii) Advise the Contractor through the PCU and PIUs on how to comply with requirements to address non-compliances
- (viii) Report apparent unanticipated impacts, recommend mitigation measures to be implemented by the PCU, and update the IEE report

48. **Contractor.** The Contractor is the principal agent to implement the EMP and EMoP during the pre-construction and construction stages. Specifically, the contractor will:

- (i) Appoint the Contractor's EFP and attend the site induction workshop to be organized by the CSC;
- (ii) Obtain necessary environmental license(s), permits, etc. from relevant agencies as specified in the IEE and project administration manual for associated facilities for project road works, quarries, hot-mix plant, etc. prior to commencement of civil works contracts;
- (iii) Revise the EMP and EMoP, as advised by the PMU-ES and CSC-ES, as part of detailed engineering design;
- (iv) Implement all mitigation measures in the EMP and activities in the EMoP;
- (v) Submit pre-, during-, and post- self-monitoring reports to the PIU with guidance from the CSC-ES;
- (vi) Ensure that all workers, site agents, including site supervisors and management, participate in training sessions delivered by CSC-ES;
- (vii) Ensure compliance with environmental statutory requirements and contractual obligations;
- (viii) Collect the baseline data on environmental quality before the start of physical works²³ and continue collection of environmental quality data as given in the EMP during construction and operation;
- (ix) Participate in resolving issues as a member of the Grievance Redress Committee (GRC);
- (x) Respond promptly to grievances raised by the local community or any stakeholder, and implement environmental corrective actions or additional environmental mitigation measures as necessary; and
- (xi) Based on the results of EMP monitoring, cooperate with the PIU to implement environmental corrective actions and corrective action plans, as necessary.

49. **ADB** has the responsibility to:

- (i) Review rapid environment assessment (REA) checklist and endorse or modify classification proposed by DOLIDAR;
- (ii) Review IEE report and disclose the final reports on the ADB website as required
- (iii) Issue subproject's approval based IEE report;
- (iv) Monitor implementation of the EMP through due diligence missions;
- (v) Provide assistance to DOLIDAR, if required, in carrying out its responsibilities and for building capacity for safeguard compliance;
- (vi) Monitor overall compliance of the subprojects to this PAM; and
- (vii) If necessary provide further guidance to the DOLIDAR on the format, content, and scope of the IEE report and annual monitoring reports for submission to ADB.

²³ Pre-construction monitoring report.

B. Grievance Redress Mechanism

50. DOLIDAR will establish a grievance redress mechanism to voice and resolve social and environmental concerns linked to the project and ensure greater accountability of the project authorities towards all affected persons. This mechanism is not intended to bypass the government's own legal process, but to provide a time-bound and transparent mechanism that is readily accessible to all segments of the affected people and road residents. All costs involved in resolving the complaints (meetings, consultations, communication and reporting/information dissemination) will be borne by the project.

Table 16: Grievance Redress Mechanism

Field-Level Committee	Local-Level Committee	Project-Level Committee
<ul style="list-style-type: none"> • DOLIDAR field engineer • Social mobilizers • Contractor's Environmental/Social Focal Point 	<ul style="list-style-type: none"> • Project Manager PIU • Municipality/Rural Municipality Representative • Chief District Office Representative • District Coordination Committee Representative • CSC Social mobilizer • CSC Social Expert and Environment Expert • 2 representatives designated by affected community local level (man/woman) 	<ul style="list-style-type: none"> • Project Director PCU • Senior Divisional Engineer • Finance Representative • PCU Sociologist • PCU Environment Expert • PCU Social Development Expert

CSC = construction supervision consultant, DOLIDAR = Department of Local Infrastructure Development and Agricultural Roads, PCU = project coordination unit

C. Involuntary Resettlement and Indigenous Peoples

51. The project is categorized as C for involuntary resettlement given its moderate physical and economic impacts. The construction will be carried out mostly within the existing road corridor/right-of-way, with widening and minor realignments in some cases, which will require narrow strips of land to be made available. In such cases, eminent domain will not be used but instead a voluntary land donation system will be used in accordance with ADB's requirements. The government will ensure (i) full consultation with landowners and any non-titled affected people on alignment selection; (ii) that voluntary donation does not severely affect the living standards of the affected persons, (iii) that any voluntary donation is confirmed through verbal and written record; and (iv) that an adequate grievance mechanism is in place. The project is categorized as C for indigenous peoples. The social assessment identified the presence of indigenous peoples (*Janajati*) in all the subproject roads. However, these groups are largely assimilated into the local population.

52. In accordance with the community consultation and social impact mitigation process outlined in the community participation framework (CPF), transect walks have been conducted in all the 27 subprojects under the project. Community participation plans (CPPs) have been prepared following the transect walks for all the project roads. Assessment of institutional capacities and arrangements confirmed that the involved agencies are capable to effectively implement the requirements of the CPFs, community consultations and monitoring. They will be assisted by the CSC social safeguard expert and social mobilizers in continuing with community consultations during implementation, redressal of grievances and social safeguard monitoring.

VIII. GENDER AND SOCIAL DIMENSIONS

53. **Poverty reduction and social impact.** There are 7.5 million people (28.5% of country's population) living in 16 districts crossed by the project roads. However, all-weather roads constitute 35% of the total road network in these districts compared to the national average of 67%. Household surveys carried out in the project area reveal that the poverty rate is about 14%, which is below the national average of 25.2%. The major sources of income are agricultural produce (20%), trade and business (12%) and services (10%). The results of 30% household surveys and 178 focus group discussions conducted as part of the poverty and social assessment indicate that the project will increase economic and employment opportunities. The project will generate an estimated 3.8 million person-days of employment over the construction and maintenance periods.

54. **Gender.** The poverty and social analysis included a gender assessment based on the socioeconomic characteristics of 6,742 women and consultations with 584 women. Overall, women were supportive of the project and viewed it as a way to facilitate their access to economic opportunities and services.

55. **Gender equality and social inclusion (GESI) action plan.** The project is categorized as *effective gender mainstreaming* (EGM). The social due diligence identified gender-specific issues and social risks related to the project. They are presented in the report and recommendation of the President (RRP) to the Board and summary poverty reduction and social strategy (SPRSS). To address these issues, a GESI action plan has been developed with proactive gender-mainstreaming and mitigation measures.²⁴ The PCU will be responsible for the implementation of the GESI action plan with the support of the gender and social specialist team (GESI team) of the CSC. The GESI team will consist of four social cum gender experts, one road safety expert and four field-based social mobilizers. This team will be responsible for conducting the various community awareness campaigns outlined in the project, monitoring GESI targets and compliance with core labor standards, and preparing the GESI monitoring report (Attachment F).

GENDER EQUALITY AND SOCIAL INCLUSION ACTION PLAN

Activities	Indicators and Targets	Responsibility	Time Frame
Output 1: Rural road conditions between the selected rural communities, productive agricultural areas, and socioeconomic center improved			
1. Ensure participation and representation of women and all caste, ethnic, and minority groups in project orientation, planning, public and social auditing of rural road projects	<ul style="list-style-type: none"> 33% women participation in project orientation, planning, public and social auditing of project roads 	PCU/PIU/CSC	Year 1
2. Provide HIV/AIDs, STI, human anti-trafficking awareness to the communities	<ul style="list-style-type: none"> Public preventative human trafficking and HIV/AIDs & STI awareness-raising sessions reached 4,000 people with 40% women participation, and 27 schools along project roads 	PCU/PIU/CSC/ Social Mobilizers	Year 2 onwards

²⁴ GESI Action Plan (accessible from the list of linked documents in Appendix 2).

Activities	Indicators and Targets	Responsibility	Time Frame
3. Ensure implementation of core labor standards with gender inclusive provisions and women friendly work environment	<ul style="list-style-type: none"> • Orient contractors and laborers on safety and occupational health standards for laborers with emphasis on women laborer's work environment, such as providing separate toilets for women and men, water facility (Target: Each contractor oriented 2 times a year, 1 each at central and local levels) • Women and men laborers receive equal payment for work of equal value 	PCU/PIU/CSC/ Contractors	Year 1
4. Involve local communities and ensure women participation in road construction, maintenance and bioengineering activities	<ul style="list-style-type: none"> • 3.8 million person-days employment generated (at least 15% for women) by road construction, maintenance, and bioengineering activities 	PCU/PIU/CSC/ Contractors	Year 1–4
Output 2: Rural infrastructure agency capacity enhanced			
5. Develop and provide road safety awareness program to the community integrating issues of women, disabled, elderly and vulnerable groups	<ul style="list-style-type: none"> • Road safety awareness targets 4,000 people with at least 40% women, 40% participation from excluded groups (<i>dalit</i>, <i>janajati</i>, OBC) and other vulnerable people • Road safety awareness orientation conducted in 27 schools (1 in each road corridor) with 50/50 percentage girl and boy participation 	PCU/PIU/CSC	Year 2 onwards
6. Develop and deliver special livelihood enhancement skills training in the areas of agriculture, forestry, livestock, micro enterprise, health etc., to the affected, poor and disadvantaged families	<ul style="list-style-type: none"> • All affected vulnerable households due to road construction (at least 1 person from each affected household) identified through vulnerability assessment and 200 vulnerable households (including <i>dalit</i>, <i>janajati</i>, and OBC) living in project areas trained in different livelihood skills training • Livelihood enhancement skills training reached 100% of project affected vulnerable households comprising 33% women, and including <i>dalit</i> (13%), <i>janajati</i> (37%), and OBC (10%), and 200 vulnerable households living in the project areas 	PCU/PIU/Training consulting firm	Year 1 onwards
7. Provide technical training to DOLIDAR staff in different areas (project management, asset management, contract administration)	<ul style="list-style-type: none"> • 100% of the PCU and PIU staff, including all women staff, with increased knowledge and skills on safeguards, road safety awareness, performance-based 	PCU/DOLIDAR	Year 2 onwards

Activities	Indicators and Targets	Responsibility	Time Frame
	maintenance, contract management, rural road design and rural road construction		
8. Provide gender and social inclusion sensitization/training focusing on project's GESI action plan to PIU, rural municipality, GRC/GRSCs members	<ul style="list-style-type: none"> At least 20% of the members of the GRC/GRSCs orientated on gender equality and social inclusion and the requirements of GESI action plan. Cluster offices integrated GESI activities in their annual program and implemented such activities 	PCU/PIU/CSC GESI Expert	Year 1–2
9. Assign dedicated Sociologist in DOLIDAR and GESI expert in project consultant team	<ul style="list-style-type: none"> 1 full time dedicated sociologist of DOLIDAR provided support to PCU on GESI. At PCU level, one social expert will be engaged for 18 person-months overseeing all the social aspect including gender action plan implementation. At PIU level, four social and gender specialists will be engaged for 48 person-months; and four social mobilizers for 48 person-months 	PCU/DOLIDAR	Year 1
10. Establish project monitoring system with gender, caste, ethnicity, and minority group disaggregated data	<ul style="list-style-type: none"> Output and outcome data disaggregated by sex, caste, ethnicity, and minority groups are available 	PCU/CSC/PIU	Year 1

DOLIDAR=Department of Local Infrastructure Development and Agricultural Roads, GRC = grievance redressal committee, GRSC=Grievance Redressal Sub-committee, OBC=Other Backward Class, PCU=project coordination unit, PIU=Cluster Project Office, STI=sexually transmitted infection.

56. **Labor.** Project construction is expected to generate employment opportunities for local communities during the construction and maintenance phases. Provisions are in the bidding and contractual documents for the contractors to ensure that all the civil works comply with core labor standards (e.g., no child labor; no bonded labor; no work discrimination due to gender, race, and ethnicity; and freedom of association and collective bargaining). This will be monitored by the CSC and reported in the project quarterly progress reports.

57. **HIV and human trafficking.** The National Center for AIDS and Sexually Transmitted Disease Control under the Ministry of Health and Population coordinates activities by stakeholders committed under the National AIDS Strategy, 2006–2011.²⁵ This emphasizes prevention as the most effective response. Anti-human trafficking activities are coordinated by the Ministry of Women, Children, and Social Welfare. A large amount of information and print material on human trafficking has been developed with the support of the United States Agency for International Development, which will be reproduced for use in project areas. The project incorporates measures to mitigate HIV risks and anti-human trafficking by having consultants undertake awareness programs in the corridors of influence. The contractors will carry out sexually transmitted infection (STI) and human trafficking awareness sessions for their laborers

²⁵ National Center of AIDS and STD Control. 2011. *National HIV/AIDS Strategy*. Kathmandu.

at work sites, which will be monitored by the CSC and reported in the project quarterly progress reports.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Project Design and Monitoring Framework

Impact the Project is Aligned with Connectivity between rural communities, productive agricultural areas, and socio-economic centers in Nepal improved (Fourteenth Plan, FY2017–2019) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Transport efficiency on project roads increased	By 2024: a. Average travel time along project roads reduced by 60% (2017 baseline: 5 minutes/km) b. Average daily vehicle-km increased to 110,000 (2016 baseline: 50,000 vehicle-km)	Post-implementation measurement and traffic survey by DOLIDAR	Extreme weather conditions cause significant damage to the road network.
Outputs 1. Rural road conditions between the selected rural communities, productive agricultural areas, and socioeconomic centers improved	By 2023: 1a. At least 388 km of rural roads improved to all-weather standards with safety features and maintained under PBM contracts (2017 baseline: 0) 1b. 3.8 million person-days employment generated (at least 15% for women) by road construction, maintenance, and bioengineering activities (2017 baseline: N.A.)	1a–b. Quarterly monitoring reports and PCR by DOLIDAR	Unstable political environment could delay implementation.
2. Capacity of rural infrastructure agency and road users in project areas enhanced	By 2023: 2a. 100% of DOLIDAR staff, provincial and municipal officials, including all women staff, increased knowledge and skills on safeguards, road safety awareness, performance-based maintenance, contract management, rural road design, and rural road construction (2017 baseline: 0) 2b. Vision, policy, business plan, and institutional structure frameworks for dedicated rural road agency developed (2017 baseline: N.A.) 2c. 4,000 people with at least 40% women, 40% from vulnerable groups, ^b and students and teachers from 27 schools along project roads acquired knowledge on road safety (2017 baseline: N.A.) 2d. 4,000 people with at least 40% women, and students and teachers from 27 schools along project roads	2a–e. Post-implementation survey by DOLIDAR	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
	acquired knowledge on human trafficking and STI (including HIV/AIDS) prevention (2017 baseline: N.A.) 2e. At least 33% women participated in project orientation, planning, and public and social auditing of project roads (2017 baseline: N.A.)		
Key Activities with Milestones Output 1: Rural road conditions between the selected rural communities, productive agricultural areas, and socio-economic centers improved 1.1 Award and mobilize construction supervision consultant by Q1 2018. 1.2 Award contracts for improving about 388 km of roads to all-weather standards by Q3 2018 and complete construction by Q3 2020, and maintain until Q3 2023. Output 2: Capacity of rural infrastructure agency and road users in project areas enhanced. 2.1 Mobilize project management consultants and other capacity development consultants by Q4 2018. 2.2 Develop capacity development training programs for DOLIDAR and project communities by Q3 2019. 2.3 Conduct the training programs by Q4 2020. 2.4 Develop detailed design for future pipeline, low-cost pavement design, and rural road safety guidelines by Q1 2021. 2.5 Develop vision, policy, business plan, and institutional structure frameworks for dedicated rural road agency by Q3 2019.			
Inputs ADB: \$100.00 million (concessional ordinary capital resources loan) Government: \$35.72 million Technical Assistance (TASF 6 grant): \$1.00 million			
Assumptions for Partner Financing Not Applicable.			

ADB = Asian Development Bank, DOLIDAR = Department of Local Infrastructure Development and Agricultural Roads, km = kilometer, PBM = performance-based maintenance, PCR = project completion report, PCU = project coordination unit, PIU = project implementation unit, STI = sexually transmitted infection, TASF = technical assistance special fund.
^a Government of Nepal, National Planning Commission. 2016. *The Fourteenth Plan (FY2017–2019)*. Kathmandu.

^b Vulnerable groups are defined as those suffering the effects of marginalization within or outside their community because of their ethnicity, gender, caste, religion, disability, health, education, or socio-economic status. For the purposes of this project, this specifically includes *Dalit*, *Janajati*, disabled, disaster-affected, marginalized, and endangered indigenous groups that are politically, socially, or economically excluded.

Source: Asian Development Bank.

B. Monitoring

58. **Project performance monitoring.** The achievement of the project performance targets will be assessed following the design and monitoring framework. DOLIDAR, assisted by the CSC, will establish a project performance management system. Indicators to be monitored include (i) agricultural produce; (ii) traffic volume; (iii) bus and freight transport fares; (iv) travel time or riding speed; (v) vehicle operating costs; (vi) surface roughness; and (vii) road accidents. In addition, socioeconomic secondary data will be obtained at the divisional level, including (a) number of businesses; (b) household income; (c) vehicle ownership; (d) unemployment rate; (e) land value; (f) average travel time to schools; and (g) average travel time to hospitals. These indicators will be monitored before and after construction, both on the project roads and on some control roads. In addition, every year during the project period, DOLIDAR will also monitor the

(i) road maintenance budget; (ii) staff–km ratio of rural roads; and (iii) road maintenance cost per kilometer. Achievement of the capacity development activities will also be monitored. For civil works, progress will be monitored and reported monthly by the CSC. The project beneficiaries' satisfaction will be surveyed during and after project implementation. Disaggregated baseline data for output and outcome indicators gathered during project processing will be updated and reported through the quarterly progress reports from DOLIDAR, and after each ADB review mission. These quarterly reports will provide information necessary to update ADB's project performance reporting system.²⁶

59. **Compliance monitoring.** Compliance with covenants will be monitored through ADB's project administration missions—including project inception mission to discuss and confirm the timetable for compliance with the loan covenants; project review missions to assess the government's compliance with particular loan covenants and, where there is any noncompliance or delay, discuss proposed remedial measures with the government; and mid-term review mission, if necessary, to assess whether the covenants are still relevant or need to be changed, or waived due to changing circumstances.

60. **Environmental safeguard monitoring and reporting.** DOLIDAR is responsible for undertaking environmental due diligence and monitoring the implementation of environmental mitigation measures for all project roads. The due diligence report as well as monitoring implementation of the EMP needs to be documented systematically. ADB must be given access to undertake environmental due diligence for all project roads, if needed.

61. The monitoring reports will document progress made in EMP implementation, with particular attention to compliance with each EMP component. DOLIDAR, through their PCU and PIUs with support from the CSC, will submit semi-annual monitoring reports to ADB.

62. Monitoring during construction is primarily the responsibility of the contractor through self-reporting and relates to the status of EMP and EMoP implementation, including complaints received. The PCU and PIU, with support from the CSC, are responsible for monitoring the compliance with construction contracts, effectiveness of mitigation measures, complaints, and overall environmental quality from the results of the third-party ambient environmental monitoring hired by the contractor. Ambient monitoring will follow the approach to selecting quantitative standards, as recommended in the ADB's SPS.

63. **Involuntary resettlement monitoring.** DOLIDAR, with the support of PIUs, the CSC, and an individual consultant to be recruited in the PCU, will set up an internal monitoring system with a set of process, outcome and impact baseline indicators. They will prepare semi-annual social safeguard monitoring reports that will be submitted to ADB. The individual consultant will carry out assessment of the social safeguard monitoring through field work, data verification and consultations, and provide separate semi-annual reports to DOLIDAR and ADB. ADB will also assess the progress of social safeguard activities during review missions.

64. **Gender and social dimensions monitoring.** The GESI activities will be monitored by the social expert at PCU and submit semi-annual reports to ADB. ADB will assess the progress of these activities during review missions.

²⁶ ADB's project performance reporting system is available at:
<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

C. Evaluation

65. The project inception mission will be fielded soon after the legal agreements for the project are declared effective; thereafter, regular reviews will follow, at least annually. As necessary, special loan administration missions and a midterm review mission will be fielded, under which any changes in scope or implementation arrangements may be required to ensure achievement of project objectives. DOLIDAR will monitor project implementation in accordance with the schedule and time-bound milestones, and keep ADB informed of any significant deviations that may result in the milestones not being met. Within 6 months of physical completion of the project, DOLIDAR will submit a project completion report to ADB.²⁷

D. Reporting

66. DOLIDAR 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, (d) updated implementation plan for the next 12 months; and (iii) a project completion report within 6 months of physical completion of the project. To ensure that projects will continue to be both viable and sustainable, project accounts and the executing agency audited financial statement together with the associated auditor's report should be adequately reviewed.

E. Stakeholder Communication Strategy

67. Transect walks have been carried out by the PIUs on each project road involving the local community. Consultation meetings have been held with the local community involving village development committees (VDCs), chairman/members, and the stakeholders. The PIUs explained various features of the project including design, environmental considerations, land requirement and the process of voluntary donation, and mitigation measures. A project information booklet in *Nepali* has been distributed to the community during these consultation meetings. Affected persons have been informed of the project's social impacts, voluntary donation, and grievance redress procedures through the village-level consultation process undertaken along with the transect walks. During implementation, the supervision consultant safeguard team along with PIU staff will continue with the community consultations and the grievance redress process. The consultation activities and GRC meetings undertaken during the project implementation will be documented in the safeguard monitoring reports.

68. Concerned stakeholders including local communities, local forestry officials, relevant government agencies and nongovernment organizations have been consulted on environmental issues during project preparation. Technical recommendations on project design and biodiversity conservation provided by them have been included in the project.

69. Project information will be disclosed to the general public and concerned stakeholders as per the following table.

Table 17: Documents for Disclosure

²⁷ Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

Project Document	Means of Communications	Frequency	Audience
Project Data Sheet	ADB website	Initial project data sheet no later than 30 calendar days of approval of the concept paper; quarterly updates afterwards	General public
Design and Monitoring Framework	ADB website	Draft design and monitoring framework after fact-finding mission	General public
Initial Environmental Examination Reports	ADB website DOLIDAR website	Prior to Board consideration	General public, project-affected people in particular
Community Participation Frameworks and Community Participation Plans	ADB website DOLIDAR website	Post fact-finding mission	General public, project-affected people in particular
Gender Equality and Social Inclusion Action Plan	ADB website DOLIDAR website	Post fact-finding mission	General public, project-affected people in particular
Summary Poverty Reduction and Social Strategy	ADB website	Post fact-finding mission	General public, project-affected people in particular
Legal Agreements	ADB website	No later than 14 days of Board approval of the project	General public
Project Administration Manual	ADB website	After loan negotiations	General public
Social and Environment Monitoring Reports	ADB website and DOLIDAR website	semi-annually	General public

ADB = Asian Development Bank, DOLIDAR = Department of Local Infrastructure Development and Agricultural Roads.

Source: Asian Development Bank and Department of Local Infrastructure Development and Agricultural Roads.

VII. ANTICORRUPTION POLICY

70. The government, MOFALD and DOLIDAR were advised of ADB's Anticorruption Policy (1998, as amended to date). ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.²⁸ 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/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.²⁹

71. To support these efforts, relevant provisions are included in the loan agreement/regulations and the bidding documents for the project.

72. The government will publish pertinent information relating to the project on DOLIDAR's website, including business opportunities associated with the project, and information in relation to procurement of goods, works, and consulting services.

VIII. ACCOUNTABILITY MECHANISM

73. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.³⁰

IX. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

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

²⁸ Anticorruption Policy: <https://www.adb.org/sites/default/files/institutional-document/32026/anticorruption.pdf>

²⁹ ADB's Integrity Office web site: <http://www.adb.org/integrity/unit.asp>

³⁰ Accountability Mechanism. <https://www.adb.org/site/accountability-mechanism/main>

Attachment A: Procurement Plan

Basic Data

Project Name: Rural Connectivity Improvement Project	
Project Number: 48218-003	Approval Number:
Country: Nepal	Executing Agency: Department of Local Infra Development & Agricultural Roads
Project Procurement Classification: B	Implementing Agency: N/A
Project Procurement Risk:	
Project Financing Amount: US\$ 135,720,000 ADB Financing: US\$ 100,000,000 Cofinancing (ADB Administered): Non-ADB Financing: US\$ 35,720,000	Project Closing Date: 31 July 2023
Date of First Procurement Plan:	Date of this Procurement Plan: 2 October 2017

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

1. Procurement and Consulting Methods and Thresholds

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 for Goods	US\$ 2,000,000 and Above	
National Competitive Bidding for Goods	Between US\$ 100,000 and US\$ 1,999,999	
Shopping for Goods	Up to US\$ 99,999	
International Competitive Bidding for Works	US\$ 10,000,000 and Above	
National Competitive Bidding for Works	Between US\$ 100,000 and US\$ 9,999,999	
Shopping for Works	Up to US\$ 99,999	

Consulting Services	
Method	Comments
Quality- and Cost-Based Selection for Consulting Firm	
Individual Consultants Selection for Individual Consultant	

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

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	Procurement Method	Review (Prior/Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
DoLIDAR/RCIP /Works/NCB-01/2074/075	Upgrading and maintaining 43.52 km of rural roads in Jhapa District	7,862,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding

							Document: Small Works
DOLIDAR/RCIP /Works/NCB-02/2074/075	Upgrading and maintaining 38.41 km of rural roads in Panchthar District	10,265,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-03/2074/075	Upgrading and maintaining 44.93 km of rural roads in Sunsari and Dhankuta Districts	8,896,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-04/2074/075	Upgrading and maintaining 19.69 km of rural roads in Rolpa District	4,886,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-05/2074/075	Upgrading and maintaining 22.79 km of rural roads in Illam District	6,130,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-06/2074/075	Upgrading and maintaining 44.10 km of rural roads in Morang District	9,920,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-07/2074/075	Upgrading and maintaining 43.11 km of rural roads in Dolakha,	11,580,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic

	Sindhupalchok, and Kavrepalanchok Districts						Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-08/2074/075	Upgrading and maintaining 36.65 km of rural roads in Sindhuli, Kathmandu, and Bhaktapur Districts	8,900,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-09/2074/075	Upgrading and maintaining 38.49 km of rural roads in Chitwan District	10,170,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-10/2074/075	Upgrading and maintaining 24.21 km of rural roads in Parbat District	7,250,000.00	NCB	Prior	1S2E	Q3 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works
DoLIDAR/RCIP /Works/NCB-11/2074/075	Upgrading and maintaining 30.05 km of rural roads in Rukum District	9,570,000.00	NCB	Prior	1S2E	Q2 / 2017	Prequalification of Bidders: N Domestic Preference Applicable: N Advance Contracting: Y Bidding Document: Small Works

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

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	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
CDTA-04	Capacity Development Consultant	1,000,000.00	QCBS	Prior	Q2 / 2018	STP	Assignment: National Quality-Cost Ratio: 90:10 Advance Contracting: N
CSC-01	Construction Supervision consultant	6,560,000.00	QCBS	Prior	Q2 / 2017	FTP	Assignment: International Quality-Cost Ratio: 80:20 Advance Contracting: Y
DPR-03	Detailed Project Report Consultant	3,000,000.00	QCBS	Prior	Q3 / 2018	FTP	Assignment: National Quality-Cost Ratio: 80:20 Advance Contracting: N
IC-02	Project Management Consultants	1,000,000.00	ICS	Prior	Q3 / 2017	NA	Assignment: National Expertise: Project Management Advance Contracting: Y

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

The following table lists 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	Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
Motorbikes /Scooters-01	Procurement of motorbikes/scooters	60,000.00	1	SHOPPING	Post		Q1 / 2018	Advanced Contracting: N
Office Equipment	Procurement of equipment	100,000.00	4	SHOPPING	Post		Q1 / 2018	Advanced Contracting: N Comments: No. of contracts to be determined
Vehicles-01	Procurement of four-wheeled drive pick-up	250,000.00	1	NCB	Prior	1S1E	Q3 / 2017	Prequalification of Bidders: N

								Domestic Preference Applicable: N Advanced Contracting: Y Bidding Document: Goods
Vehicles-02	Procurement of four-wheeled drive vehicle	650,000.00	1	NCB	Prior	1S1E	Q3 / 2018	Prequalification of Bidders: N Domestic Preference Applicable: N Advanced Contracting: N Bidding Document: Goods

B. Indicative List of Packages Required Under the Project

The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
None							

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

C. National Competitive Bidding

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:

1. 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.

2. 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.
3. 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.
4. 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.
5. Bids shall be opened at a single location immediately after the deadline for submission. Multiple locations for submission and opening are not acceptable.
6. 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).
7. Extension of bid validity of more than 4 weeks beyond the original validity shall not be allowed without the prior concurrence of ADB.
8. Cancellation of bidding and re-bidding shall not be carried out without the prior concurrence of ADB.
9. Percentage variations from rates fixed by a district rate fixation committee shall not be used for the purpose of evaluating bids.

In the event of a conflict between these provisions and the law, these provisions shall prevail.

Attachment B: Terms of Reference for Consulting Services of Construction Supervision Consultant for Rural Connectivity Improvement Project

1. Title

- 1.1 Construction Supervision for Rural Connectivity Improvement Project (the Project) in Nepal.

2. Background

- 2.1 In Nepal, the agriculture sector contributes 65–70% of employment and 35% of gross domestic product. Poverty however remains widespread in rural areas. The Government of Nepal (the Government) signed the Agricultural Development Strategy (ADS) in 2015 recognizing that the agriculture sector was performing below its potential in providing food and fiber, materials for processing and manufacturing, and employment and income. The Government recognized that dramatic changes in strategy were needed if the sector was to perform to its potential and raise the sector's longer manual growth rate from 3% to GON's goal of 5%. The ADS underscores access as one of the major constraints to the development of commercial agriculture value chains. Transport in many high-potential production areas is limited to basic tracks or undeveloped roads, resulting in high transport costs and losses of quality and quantity. Only 17% of the rural population in Nepal has access to all-weather roads, compared with 60% in India and 37% in Bangladesh.
- 2.2 The Government has requested financial assistance from Asian Development Bank (ADB), for the project. The project will focus on improving rural roads to all-weather standards, serving the agriculture sector and the rural population and ensuring roads are maintained in a sustainable manner. The impact of the project will be improved connectivity between rural communities and productive agricultural areas and socioeconomic centers in Nepal. The outcome will be increased transport efficiency on project roads. The project will deliver two outputs: (i) improved road conditions between the selected rural communities and productive agricultural areas and socioeconomic centers, and (ii) enhanced capacity of road agency. This first component will design, improve, and maintain about 385.9 km of rural roads. The rural roads will be improved to all weather standards, and be maintained for 3 years. The second component will build the capacity of the executing agency (EA) in road asset management, project management, road safety and contract administration. Consulting services will be engaged to assist with development of the EA's capacity.
- 2.4 Under the project, 27 roads (385.9 km) have been selected to upgrade as shown in Table 1. The 27 roads have been packaged into 11 contracts ranging from \$4.7million to \$11.6 million. Procurement will be done using national competitive bidding and single stage – two envelope method, with appropriate amendments to incorporate local requirements covering rural access roads including post construction performance-based maintenance.

Table 1: List of Roads with Packaging**A. Eastern Cluster**

Package No.	Road Section	Length of Road Section (km)	Length (km) of the Package	District	State
1	Amaldagi - Samayaghad -Babwari - Solmari road	11.5	43.5	Jhapa	1
	Charpane-Chaitubari-Matigada-Sadhukuti-Khodamara-Rajgadh	15.5			
	Kharsangwari-Jalthal-Mangalware-Baundoka-Adhikari Chowk Sadak	6.5			
	Padajungi (Lakhanpur)-Guhawari-Laladhbandra-Jharka-Baluwathan-Chapramari-Khajurgachhi	10.0			
2	Nepaltar-Shantidada-Gagrebhangyang-Mangalbare-Dhuseni-Gajrmukhi-Ebhang-Chaturmoad Aadipur-Larmwa-Gharti Dobhan-Chapeti-Beldagi Damak Road (Ebhang-Chaturemoad Sector)	13.3	22.8	Ilam	1
	Mangalbare - Phungfung - Ektappa Sikari Bhanjyang- Phakphok - Ra.ma.bi. Khambang Chowk - Thingepur - Aamchok - Jungetar - Phuyatappa - Rabi road (Suru bindu khanda)	9.5			
3	Phidim-Nagin-Sidin-Prangbung-Falot Road (Phidim -Ludintar Road)	23.6	38.5	Panchthar	1
	Samdin - Chokmangu - Nawamidada - Faktep Ghurbisepanchami Road (Samdin - Nawamidada Sector)	14.9			
4	Khorshane - Kerawari -Singhadevi Road (23 km left to be upgraded out of 38 km)	13.6	44.1	Morang	1
	Laxmimarga - Dangihat - Banaul-Babiyabirta - Amahi Road (29 km left to be upgraded out of 31 km)	30.5			

Package No.	Road Section	Length of Road Section (km)	Length (km) of the Package	District	State
5	Jhumka - Shinghiya - Ramdhuni - Prakashpur - Madhuwan - Shukrabare - Paschimbushaha - Laukahi - Boarder Road	21.8	44.9	Sunsari	
	Inaruwa - Satterjhoda - Chhitaha - Purbakushaha - Biratnagar Road	12.8			
	Mudheshanischare - Dadagaun - Chanuwa Road	10.3		Dhankuta	
SUB TOTAL					193.8 km

B. Central/ East Cluster

Package No.	Road Section	Length of Road Section (km)	Length (km) of the Package	District	State
6	Nayapul - Pawati - Dadakharka Road	12.1	43.1	Dolakha	
	Barhabise - Maneswara - Ghumthang - Listi - Bhairabkunda	12.4		Sindupalchowk	
	Dolalghat - Phalate - Kolati - Dhadkharka- Pokharichauri - Gurase Road	18.6		Kavre	
7	Tallo - Ranibas - Harshadi - Tadi - Dhanshari	12.8	36.7	Sindhuli	3
	Dhudhuli - Lakhima - Ratmata Kartha - Thakur Damar - Arunathakur	13.0		Sindhuli	
	Badbhanjyang - Sanomasino - Thulomasino - Satghumti Road	6.4		Kathmandu	
	From Bansbari- Bageswori Purano Health Post to VDC Building	4.5		Bhaktapur	
SUB TOTAL					79.8 km

C. Central /West Cluster

Package No.	Road Section	Length of Road Section (KM)	Length (KM) of the Package	District	State
8	Phisling - Tolang - Baspur - Oralang - Mayatar - Tarse - Upradanggadi - Shaktikhor bazar Road	38.4	38.4	Chitwan	3
9	Lunkhu- Mudikuwa Road	12.4	24.2	Parbat	4
	Armadi- Banau Road	11.8		Parbat	
SUB TOTAL					62.6 km

D. Western Cluster

Package No.	Road Section	Length of Road Section (KM)	Length (KM) of the Package	District	State
10	Mijhing-Ruinibang-Badachaur-Ghumchaal-Harjang-Syuri-Gaam Road	13.7	19.7	Rolpa	5
	Mijhing-Dhulewodaar-Namjaa-Sirp-Pang Road	6.0			
11	Sital Pokhari- Jhulkhet-Chunwang Road	18.4	30.0	Rukum	
	Solawang Raule Baluwa Naigadpul Jamaabagar Simalchaur Hukaam Ranmamaikot Road's (Naigadpul-Jamabagar Sector)	11.6			
SUB TOTAL					

TOTAL 388 km

2.5 **Implementation Arrangements.** The Department of Local Infrastructure Development and Agriculture Roads (DOLIDAR) will be the project executing agency, responsible for overall project coordination, management, and implementation. The project coordination unit (ADB), established within DOLIDAR at the central level will be the implementing agency. Four project implementation units (PIUs) will be established at the regional level. Further, there will be 11 field offices to be established at project sites. One construction supervision consultant is to be engaged under the RCIP who will act as the engineer for the construction contracts. The period of construction is envisaged to be 2years plus the defects liability period (DLP) of 1year and 2 years of the performance-based maintenance (PBM). The project implementation period is 5years.

- 2.6 The works will include the following, as required, largely on existing alignments:
- (i) Subgrade, sub-base, base course and bituminous pavement;
 - (ii) Widening of formation width in cutting and embankment filling, masonry, gabion, structural and bio-engineering works;
 - (iii) Improvements to geometrics (it includes improvement of horizontal and vertical alignment); and improvements to or replacement/construction of side drains and cross drainage structures;
 - (iv) Repair, replacement and/or construction of minor/bridges;
 - (v) Realignments of roads as per requirements;
 - (vi) Traffic safety features including road signs and markings including traffic control during construction;
 - (vii) Environmental/social protection measures;
 - (viii) Slope stability including construction of retaining walls, gabion wall, and breast walls; and
 - (ix) PBM for upgraded roads after DLP.
- 2.7 The project coordinator of the project will be the representative of the Employer for the project. The PIUs for each civil works package shall be the representatives of the project coordinator to ensure proper project management/administration and quality assurance of each package.
- 2.8 The Employer has prepared detailed project reports (DPRs) for each road sections under the project. As such, all DPRs for engineering designs, drawings and relevant data necessary for the proper and timely supervision of the construction works are available. A copy of the DPRs and the Contracts for the civil works packages will be provided to the CSC after signing the CSC contract.

3. Objective

- 3.1 The objective of CSC is to implement the project as follows:
- (i) To review the DPRs prior to implementation activities and propose revision/constructive suggestions, if needed;
 - (ii) To monitor the preconstruction activities;
 - (iii) To monitor and verify the construction survey to be carried out by the contractors;
 - (iv) Comprehensive supervision of project implementation activities carried out by the civil works contractors to ensure complete compliance with the drawings, technical specifications and various stipulations contained in the Contract Documents, with high standards of quality assurance in supervision and in the execution of work;
 - (v) To assist in taking remedial actions to avoid slippages, cost over runs, delays by the civil works contractors;
 - (vi) To ensure high standards of quality assurance in the execution of work and completion of the works within stipulated time limit;
 - (vii) To assure efficient construction supervision by personnel who are experienced in modern methods of construction supervision and contract management;
 - (viii) To establish efficient contract management system;
 - (ix) To ensure the full compliance with environmental and social safeguard requirements of the Government of Nepal and ADB to support the Client to obtain necessary statutory clearances on a timely basis;
 - (x) To update environment and social safeguard planning documents when necessary;
 - (xi) To play a role as an external monitor on social safeguard aspects;
 - (xii) To support the PCU regarding financial management aspects;

- (xiii) To ensure safety during construction and adherence to all environment management regulations prescribed under the contracts;
- (xiv) To check and verify DPRs of the new road subprojects for the preparation of the next phase of this project; and
- (xv) To assure efficient supervision of PBM for upgraded roads after DLP.

4. Main Features of the Contract Management Framework

- 4.1 The civil construction contracts will be based on the General Conditions of Contract for Procurement of Works-Small Contracts adopted by Standard Bidding Document of ADB, with appropriate amendments to incorporate local requirements.
- 4.2 DOLIDAR will act as "the Employer" for the civil works contracts. Within DOLIDAR, the project coordinator will be delegated the powers and authorities of the Employer for each of the civil works contracts.
- 4.3 CSC will act as a representative of "the Project Manager" for the civil works contracts and have full responsibility for administering these contracts except for issues for which the civil works contracts require the Project Manager to obtain the Employer's prior approval, such as:
 - (i) Sub-Clause 36.1: Agreeing or determining an extension of time and/or additional cost.
 - (ii) Sub-Clause 47: Instructing a Variation, except;
 - a. in an emergency situation as determined by the Project Manager, or
 - b. if such a Variation would increase the Accepted Contract Amount by less than the percentage specified in the Contract Data.
 - (iii) Sub-Clause 47.2: Scrutinizing and examining the proposal for Variation submitted by the Contractor in accordance with Sub-Clause 47.3 and/or 47.4, 47.5 and 47.6 and submit with recommendation to the project manager.
 - (iv) Recommendation of additional/extra items including fixation of their rates.
 - (v) Sub Clause 13.1: Recommendation for approval of subletting of any part of works.
 - (vi) Issuing the order for stopping, suspending and recommendation for terminating the contract for works.
 - (vii) Sub Clause 46.1(a): Each Variation resulting in an increase in excess of 25% of any single Bill of Quantities (BoQ) item or 1% of the Accepted Contract Amount for the Permanent Works shall require the approval of the Employer.
 - (viii) Sub Clause 46.1(b): The Employer's approval shall also be required for any variation after the sum of all variations issued earlier has reached 15% or more of the Accepted Contract Amount of the Permanent Works.
 - (ix) All variations of contractors' works shall be governed by the civil works contracts of the relevant packages.

5. Scope of Services

- 5.1 The principal responsibilities of the CSC will include, but not limited to, the following:
 - (i) To carry out all the delegated duties of the "Project Manager" as specified in the civil works contracts, within any limitations specified therein.
 - (ii) To conduct a review of DPRs according to the site conditions and identify issues and propose modifications.
 - (iii) To verify contractors' construction mobilization program and submit to project coordinator for approval.
 - (iv) To approve and monitor the contractors' work program including activity scheduling and resource programming and immediately submit to the project coordinator.

- (v) To give orders for the commencement of work as approved by the project coordinator.
- (vi) To ensure that the construction works are in accordance with the technical specifications, environmental management plan (EMP) and other stipulations of the construction contract documents with special emphasis on road safety before, during and after the construction.
- (vii) To ensure the implementation of environmental and community participation framework, social safeguard documents, and gender equality and social inclusion (GESI) action plan.
- (viii) To perform the role as an external monitor on social safeguard and GESI aspects and prepare biannual and annual monitoring reports.
- (ix) To monitor implementation of the EMP and prepare semi-annual environmental monitoring report for review and approval of Client and ADB.
- (x) To update the environment, community participation framework and social safeguard planning documents when needed.
- (xi) To assist the Client to obtain the necessary statutory clearances of the government.
- (xii) To impose and enforce a system of quality assurance of work; approve materials and their sources, review bituminous mix designs and concrete mix designs proposed by the contractors and approve/suggest modifications to the contractors' proposed mix designs, laying methods, sampling and testing procedures and quality control measures to ensure the required standard and consistency in quality.
- (xiii) To check the laboratory and field tests carried out by the contractors and to develop a mechanism to involve the team leader/resident engineers/assistant resident engineers in carrying out an adequate number of independent tests other than the regular testing done by laboratory personnel.
- (xiv) To monitor and check the daily quality control and quantity measurements of the works carried out under the contracts, keep all measurement records as per the directions of the Client and forward interim payment certificates to the project coordinator when the quality of the works is satisfactory and the quantities are correct.
- (xv) To direct the contractors to take all necessary steps including those mentioned in the works contract/environmental management plan to protect the environment and their workforce on and off the site which arises due to construction operation.
- (xvi) To verify works completed prior to the project coordinator's issuance of interim payment certificates to the contractors, and certify partial works completion where applicable. Details of interim progress payments are to be recorded in a measurement book before issuance of interim certificates. For this purpose, the Consultant will maintain a stage passing register on an activity's completion/partial completion before it is covered up by next activity.
- (xvii) To monitor contractors' mobilization process and preconstruction activities.
- (xviii) To assure efficient supervision of PBM for upgraded roads after the DLP.
- (xix) To assist the client in conducting trainings and workshops.

5.2 Other responsibilities of the CSC will be to carry out all such duties which are incidental to, but still essential for, the effective implementation of the construction contracts including the following:

- (i) To prepare a construction supervision manual defining routines and procedures to be adopted in contract management, construction supervision and administration of the contracts, standard contract administration letters as well as a maintenance manual for the defects liability period and during PBM Contract;
- (ii) To assist/advise the Client in handing over the sites.

- (iii) To verify the list of items and quantity of all items in the bill of quantities (BoQ) and proposed modifications to the same, if necessary for the approval of the Client.
 - (iv) To monitor, through the use of MS Project software or the like, and prepare and issue reports as stated in para. 6 below covering (a) the physical and financial progress of the works, (b) progress with associated pre-construction activities and (c) performance against indicators set down in the EMP.
 - (v) To write a daily project diary which shall record all events pertaining to the administration of the contracts, requests from and orders given to the contractors, and any other information which may be of assistance in resolving queries which may arise concerning the execution of the works.
 - (vi) To advise the Client on all matters relating to the execution of the works and on claims submitted by the contractors, and to make recommendations thereon, including possible recourse to dispute resolution methods. CSC shall also participate in the meeting of the dispute redressal mechanism for providing necessary assistance to the Client.
 - (vii) To prepare, as necessary, detailed recommendations to the Client for contract variations and addenda to ensure the best possible technical results are achieved with the available funds.
 - (viii) To assist the Client in taking over completed works from contractors, in particular by preparing lists of defects to be corrected by the contractors.
 - (ix) To prepare specific project management reports when directed by the Client which shall include an analysis of the problems encountered and proposed solutions.
 - (x) To assist the Client in providing clarifications/explanations to observations, if any, made from time to time by the Auditor and during /statutory audit.
 - (xi) Participate in the regular or ad-hoc meetings with PCU, PIUs and Contractors to discuss progress and issues, and propose solutions and draft the minutes of the meeting and submit to the Client for necessary action.
 - (xii) To assist the Client in co-ordination with other agencies and hold co-ordination meetings to facilitate the proper and timely implementation of the project.
 - (xiii) To prepare revised estimates, if required, and accordingly advise the Client in modifying the cash flow estimate.
 - (xiv) To supervise and lead all the staff in the CSC team to ensure they are motivated to perform their individual tasks while subject to an appropriate internal control regime.
 - (xv) To carry out any other duties relevant to the project agreed during contract negotiations.
 - (xvi) To prepare project accounts.
 - (xvii) Any other relevant tasks assigned by the Client.
- 5.3 The team leader will carry out minor design changes, subject to the Client's prior approval where so required. The team leader and the contractors shall provide the Client/Employer with necessary site information. The team leader shall prepare the design change report, if any. S/He shall be responsible for preparing variation orders consequent to any design changes.
- 5.4 In accordance with the civil works contracts, the team leader shall delegate authority to one or more his/her representatives as appropriate for effective implementation of the civil works. In such cases, duties and authorities should remain vested in the team leader who may at any time revoke such delegation. The duties of the delegated team leader's representatives may include the following:

- (i) To ensure that the civil works is executed in accordance with the technical specifications, environmental management measures and other contract documents.
- (ii) To verify the quantities of all items in the BoQ and propose modifications to the same if necessary for the approval of the Client.
- (iii) To ensure recording of all measurements of civil works in measurement books. All quantity measurements and calculations required for payment purposes are to be verified and checked by the Resident Engineer/Assistant Resident Engineer or other prescribed persons.
- (iv) To be pro-active and identify likely bottlenecks and undertake measures with the approval of the Project Coordinator and also recommend to the Project Coordinator actions to expedite progress in the event of construction problems resulting in works falling short of schedule.
- (v) In consultation with the relevant PIU staff and the contract management specialist of CSC, to interpret and apply the contract provisions, in particular with respect to claims submitted by the contractors for time extensions and/or extra payments and in general with respect to the contractors' conformance and compliance with his contractual obligations.
- (vi) To prepare detailed recommendations to the Project Coordinator or the heads of relevant PIUs for contract variations and addenda, as necessary, to ensure the best possible technical results.
- (vii) To monitor and check the daily quality control and quantity measurements of the works carried out under the contracts and submit for countersign of the interim payment certificates when the quality of the works is satisfactory and the quantities are correct. Any instances of non-conformance in the contractors' work with the technical specifications should be reported to the Project Coordinator and the heads of relevant PIUs.
- (viii) To supervise the contractors in all matters concerning safety and care of the works (including the erection of temporary signs at road works), temporary works, labor camps and plant sites. If required, to request the contractors to provide any necessary improvements.
- (ix) To review and approve the construction zone safety plans of contractors. To direct the contractors to carry out such works or to do such things as may be necessary to avoid or to reduce the risk of any emergency affecting the safety of life or of adjoining property. To advise the Project Coordinator or his nominee and the head of relevant PIUs immediately when these risks become reasonably practicable.
- (x) To write a daily project diary which shall record all events pertaining to the administration of the civil works contracts, including requests from and orders given to the contractors, and any other information which may be of assistance in resolving queries which may arise concerning execution of the contractors' works. To facilitate an impartial assessment of the work progress and application of the Liquidated Damages Clause of civil works contracts, the diary should specify days on which civil works were not possible due to the weather or other conditions beyond the control of the contractors.
- (xi) To verify, and if necessary order correction of, the "as built drawings" supplied by contractors.
- (xii) To assist the Project Coordinator and the heads of PIUs with the execution of the Taking Over of completed works by the Employer from the contractors for relevant contracts, in particular by preparing lists of defects to be corrected by the contractors.
- (xiii) To approve the setting out of the works, materials and sources of materials.

- (xiv) To organize and participate in regular or ad-hoc meetings with PCU, related PIUs and contractors to discuss progress and issues and propose solutions.
 - (xv) To carry out other such duties under the terms of the contract which may from time to time, be delegated, in writing, by the Project Coordinator and/or the heads of the PIUs.
 - (xvi) To hold daily/weekly meetings and relate to the work program and requests made by contractors to approve works so that no delays occur. Also, ensure that the critical construction activities in his jurisdiction are always supervised.
- 5.5 The CSC will process interim and final payments to the Contractor in accordance with the contract of the civil works. Interim monthly payments shall be based on interim payment certificates processed by the CSC following interim payment applications submitted by the Contractor.
- 5.6 In processing contractual payments, the measurements for the works shall be permanently recorded 100% by the concerned field sub engineer/quantity surveyor in the measurement book issued exclusively for a particular package. After the completion of the works, all the measurement books so issued shall have to be deposited to the respective PIUs. Measurements for hidden items such as reinforcement works (Steel) etc. shall be recorded by the field sub engineer/quantity surveyor beforehand as a record measurement and shall have to be fully checked by the respective resident/assistant resident engineer. The resident engineer of the relevant package shall certify during the processing of interim payment that he has checked 25% of the measurements and quality control test. The team leader of the CSC will certify during the processing of interim payments that he has checked at least 5% of the measurements and quality control tests.
- 5.7 The quality control test shall be done 100% by laboratory technician of the CSC .At least 25% of these tests shall have to be done in the presence of the material engineer. The tests being performed shall be intimated to the heads of the PIUs in advance for getting their representatives associated for quality control test checking. The documents for each test performed shall be signed by each observer present and copies of such documents shall be regularly submitted to the PIU for record in addition to the monthly reports.
- 1.8 However, before processing the interim payment certificate for payment, the heads of the PIUs shall check at least 5%of the recorded field measurements. Heads of the PIUs shall check the quality control tests at least 5% of the tests.
- 5.9 The team leader shall intimate the details of these check tests to the PIU in-charge before undertaking them, so that the PIU officers could associate, if they wish to do so. The team leader or any of his concerned experts shall do the repeat tests or measurements, if directed by the Project Coordinator, in the presence of the PIU in-charge of the construction package. In case of any conflict, the CSC may do the test check in the presence of the Project Coordinator or his authorized representative limited to 5% of the total measurement/quality control tests.
- 5.10 The CSC shall, if so required by the Client, provide any additional services at rates or on person-month rates as per the contract, or as mutually agreed upon, as a variation order.
- 5.11 The consulting services shall include organizing in house and overseas training for capacity development of Client personnel in different disciplines.

6. Outputs: Reporting Requirements

- 6.1 All original drawing, work sheets, field notes, computer program, reports, and other documents relating to the study shall become the property of the Client.
- 6.2 The CSC shall submit the following reports, manuals and outputs in a format approved by the Client:

Table 2: Reports to be submitted by the CSC

Sl. No.	Report	Frequency	Due Date	No. of Copies	No. of CDs
1.	Inception Report	One Time	30 days after commencement of services.	5	1
2.	Design Review Report	One Time	60 days after commencement of services	5	1
3.	Construction Supervision Manual	One Time	60 days after commencement of services	5	1
4.	Quality Assurance (QA) Document	One Time	60 days after commencement of service	5	1
5.	Progress Reports (Monthly & Quarterly)	Every month/3 months	7th of month following the reporting month/quarter	5	1
6.	Social Safeguard and GESI Monitoring Reports (Bi-annual & Annual)	Every 6 months	7th of month following the reporting month	5	1
7.	Project Completion Report	One Time	Before the completion of defects liability period of all civil works packages	10	5

- i. **Inception Report.** The inception report shall contain the details of all meetings held with the Client and any initial meetings held with the contractors and decisions taken therein, the resources mobilized by the CSC as well as the contractors and the Consultant's perception in the management and supervision of the civil works. The report shall also include the Master Work Programme and Resources Mobilization for the Project.
- ii. **Design Review Report.** The CSC shall undertake a detailed project review of the design as included in the civil works contract drawings for the purpose of identifying any defects/omissions, which compromise the completeness or consistency of the design. This review shall be carried out immediately after the services commence and a detailed 'Design Review Report' shall be submitted to the Client. This report will set out all findings and recommendations for making good any defects/omissions identified in civil works designs. Notwithstanding the above, the CSC shall also inform the Client of any defect/omission which may have a substantial impact on the Project if the defect/omission is uncovered. When defects in design are noted or designs are found inadequate, CSC shall prepare revised detail designs suitable for construction in adequate time so as not to delay the contractors' works.
- iii. **Construction Supervision Manual.** The primary objective of the construction supervision manual will be to evolve guidelines for administration, supervision and management of the project and the construction contracts to be implemented. Such a manual is not intended to be a contractual document nor is it to take precedence over the contract specifications. The manual will merely act as a guide and reference to the various staff in the management and supervision of the project in discharging their

duties in a smooth and systematic manner.

- iv. **Quality Assurance Document.** The documents shall be evolved on the basis of the relevant manual for quality system for rural roads as per the country specifications.
- v. The **monthly progress reports** shall contain details of all meetings, decisions taken therein, mobilization of resources (Consultant and the contractors), physical and financial progress and the projected progress for the forthcoming periods and implementation of environment, social and resettlement safeguard requirements. The report shall clearly bring out the delays, if any, reasons for such delay(s) and the recommendations for corrective measures. The report shall also contain the performance data for contractors' plant and equipment. S-curves for both physical and financial progress in comparison with the figures of target and actual/prospective progress should be provided in each report for clarity.
- vi. The **quarterly progress reports** shall include similar details to the monthly reports for the last month of the quarter, and summarizes the overall progress for the quarter and highlight the main issues and the action being proposed to address those issues.
- vii. **Social Safeguard and GESI Monitoring Reports.** The CSC will monitor social safeguard and GESI related matters during implementation of the project. The CSC should submit the reports biannually and annually.
- viii. **Project Completion Report.** The CSC will prepare a comprehensive final completion report of the construction contract packages before the completion of the defect liability period of all civil works packages. The reports shall incorporate summaries of the methods of construction, the construction supervision performed, reference to as-built drawings of the construction, problems encountered and solutions undertaken thereon and recommendations for future projects of similar nature to be undertaken in Nepal. The report will also summarize the progress of the PBM works carried out at the time of the report. The CSC shall include a chapter on the self-appraisal summarizing the following details:

- Details of the consultant's personnel including substitution made during the assignment;
- Details of variation orders issued;
- Details of extension of time granted to the Contractor;
- Details of Quality Assurance System;
- Quality observed at the site by the CSC;
- Details of claims;
- Special events or accidents encountered by CSC during the service period;
- Overview on environment, GESI action plan, and social safeguard and community participation framework requirements implemented. Highlight the decommissioning measures taken and any residual impacts; and
- Recommendation for improvement.

7. Consultant's Inputs

- 7.1 The implementation of the RCIP is organized in terms of 11 construction packages. The period of construction is envisaged to be 24 months plus the DLP of 12 months and 2 years of the PBM for each package.

- 7.2 The CSC Contract is expected to be carried out by using 24 person-months of international key experts, 909 person-months of national key experts and 1888 person-months of national non-key personnel. The Client expects proposals to be based on person-months estimated by the Client as specified in the request for proposal (RFP). Only key experts will be evaluated during the proposal evaluation stage, but the consultant is required to submit the CVs of non-key personnel meeting the qualification requirements in the RFP for the Client's approval before concluding the CSC Contract. The timing of mobilization of individual experts would be subject to agreement with the Client. Composition and duration for Supervision Services for the Supervision Team will be as per the suggestions given in **Table 3**.

Table 3: Required Experts and Personnel

Sl. No.	Particulars	Nos.		Months		Estimated person-months
		Const.	PBM	Const. ¹	PBM ²	
A. Key Experts (International)						
1	Team Leader (TL) cum Senior Rural Road Specialist	1	0	18	0	18
2	Contract Management Specialist	1	0	6	0	6
Total Key Experts (International)						24
B. Key Experts (National)						
3	Deputy Team Leader (DTL)	1	1	30	30	60
4	Resident Engineer (RE)	3	0	30	0	90
5	Engineering Geologist	1	0	6	0	6
6	Assistant Resident Engineer (ARE)	11	4	30	30	450
7	Material Engineer	9	1	18	24	186
8	Social Development and Gender Specialist	4	0	12	0	48
9	Environment Specialist	4	0	12	0	48
10	Road Safety Specialist	1	0	12	0	12
11	Financial Management Specialist	1	0	9	0	9
Total Key Experts (National)						909
Total Key Experts (International and National)						933
C. Non-key Personnel (National)						
11	Quantity Surveyor	9	4	30	30	390
12	Field Sub Engineer	21	4	30	30	750
13	Survey Sub Engineer	7	0	24	0	168
14	Laboratory Technician	12	0	30	0	360
15	CADD Technician	2	0	20	0	40
16	Social Mobilizer (Community)	4	0	12	0	48
17	Bio-engineering Technician	11	0	12	0	132
Total for Non-Key Personnel						1,888
Total for Key Experts and Non-Key Personnel						2,821

Const. = construction; PBM = performance-based maintenance.

¹ The construction period for the purpose of above mentioned table includes the initial preparatory activities of consultants prior to the actual commencement of construction works, and also some part of DLP.

² The PBM period for the purpose of above mentioned table includes some part of DLP, followed by 2 years of PBM.

- 7.3 The site supervision team would be mobilized on the date of actual commencement of works by the contractors or as decided by the Employer. However, the team leader and other key experts /non-key experts associated with pre-construction activities, i.e. review of the DPRs, would need to be mobilized about 2 months in advance of the contractors' mobilization. During DLP, the DTL along with other staffs as in Table 2 will be required to continue.
- 7.4 After awarding of the contracts, the Client expects all the proposed key personnel to be available during the implementation of the contracts as per the agreed staffing schedule. The Client will not consider substitutions during contract implementation except under unavoidable circumstances. In case of replacements on medical grounds, the consultant will ensure that there is a reasonable overlap between the staff to be replaced and replacement wherever feasible/possible.
- 7.5 The CVs of the following key experts will be evaluated in accordance with the sub-criteria stated in the Data Sheet. The selection criteria are set down in Appendix 1.
- (i) Team Leader cum Senior Rural Road Engineer
 - (ii) Contract Management Specialist
 - (iii) Deputy Team Leader
 - (iv) Resident Engineers
 - (v) Engineering Geologist
 - (vi) Assistant Resident Engineers
 - (vii) Material Engineers
 - (viii) Social Development and Gender Specialists
 - (ix) Environment Specialists
 - (x) Road Safety Specialist
 - (xi) Financial Management Specialist
- 7.6 The CVs of the following staff shall be provided on or before contract negotiations and the qualification and experience shall be as mentioned in paragraph 8.
- (i) Quantity Surveyors
 - (ii) Field Sub Engineers
 - (iii) Survey Sub Engineers
 - (iv) Laboratory Technicians
 - (v) Computer Aided Design and Drafting (CADD) Technicians
 - (vi) Social Mobilizer (Community)
 - (vii) Bio-engineering Technician
- 7.7 The CSC will be expected to establish following offices:
- For Construction Phase
- (i) One main office located at Kathmandu which will also have office for Resident Engineer for Central Eastern cluster and Field office for Package 7;
 - (ii) Three Cluster/Provincial offices for the Resident Engineers located at Cluster level (tentatively at Jhapa for Eastern Cluster [also for field office for Package 1], Kurintar for Central Western Cluster [also for field office for Package 8] and Rukum for Western Cluster [also for field office for Package 11]);
 - (iii) Seven field offices near each of 7 project field office. Tentative places for field offices are at Ilam, Panchthar, Morang, Sunsari, Kavre (Panchkhal), Kusma of Parbat and Mijhing of Rolpa.

For Performance-Based Maintenance Work

- (i) One office located at Kathmandu will be continued for PBM period;
- (ii) Three Cluster/Provincial offices for the Assistant Resident Engineers located at Cluster level (tentatively at Jhapa for Eastern Cluster, Kurintar for Central Western Cluster and Rukum for Western Cluster will be continued.

The Client/Client's representative may visit these Cluster/field offices during their site visits to monitor the progress of the works. For quality tests required during the construction, the CSC team shall use free of cost all equipment installed in the site laboratories to be set up by the Contractors.

- 7.8 The CSC shall provide 13 vehicles and 37 motorbikes in total suitable for the assignment at different offices and at project field offices.
- 7.9 The position-based tasks specified for each of the positions mentioned in the Table 3 above are indicated in the Table 4 below. The consultants should note that the position-based tasks and responsibilities in Table 4 are only indicative and that the consultant needs to propose its own working arrangements as a team-based on the overall requirements in the terms of reference (ToRs).

Table 4: The Position-based Tasks/Responsibility (Indicative Only)

Sl. No.	Position	Tasks/Responsibilities
I	Key International Experts	
1.	Team Leader/Senior Rural Road Specialist	<ul style="list-style-type: none"> • Overall management of the CSC team and act as the representative of Project Manager as defined in civil works contracts. The tasks typically include, but not limited to, the following: • Assist the Client in contract administration and management of the Project and civil works contracts • Interpret the technical specifications and contract documents relevant to the project. • Obtain related approvals from concerned authorities for any redesign of road realignment, modifications • Ensure receipt of requisite insurances as per contract requirement • Review documentations and advance actions for handing over of site and advise on issuing notice to set the commencement date • Ensure contractors effect and implement Quality Assurance System. • Verify and submit for approval to the Contractor's detailed work program, suggest modifications if any and ensure contractors' compliance with the Program • Issue approval to the contractors' superintending personnel with modifications if any • Scrutinize and submit for approval contractors' construction methods statements • Issue finalized or revised "Good for Construction drawings" and additional detailed drawings required for the execution of the work

Sl. No.	Position	Tasks/Responsibilities
		<ul style="list-style-type: none"> • Issue to contractors amended alignment plan and profile drawings based on review of tender drawings and updated topographic surveys • Approve Contractor's working drawings based on setting out details • Approve setting out data for the Works finalized as a result of ground verification and survey • Monitor supervision of all works and ensure proper supervision as per contract requirements • Monitor closely and regularly the progress of work and advise the contractors about corrective measures • Monitor status of contractors' equipment, plant, machinery installations, housing and medical facilities • Direct and/or advise contractors to avoid and/or reduce the risk in case of any emergency • Advise contractors in all matters covering safety and care of work, environmental aspects and labour welfare • Verify and recommend, if in order, the Contractor's requests for advance and interim payment certificate • Assist Client in arranging relocation of services. • Maintain a permanent record of all payments made to the contractors • Prepare monthly reports • Prepare financial statements regularly and assist Client to submit the annual financial statements within 3 months after the end of each fiscal year for audits. Assist Client during the audit process • Approve "as built" drawings. • Inspect the works on completion of each milestone before accepting the work and report to the PCU • Inspect Works at appropriate intervals during Defects Liability Period and advise the PCU and PIUs • Ensure that contractors implement and maintain the environmental monitoring in compliance with the environmental management plans as a part of the civil works contracts • Assist Client in conducting training and workshops. Office manager will assist Team Leader for conducting trainings and workshops.
2.	Contract Management Specialist	<ul style="list-style-type: none"> • Assist the Client and team leader in Contract administration and management of the civil works contracts

Sl. No.	Position	Tasks/Responsibilities
		<ul style="list-style-type: none"> • Assist in interpretation of the Contract/Agreement Clauses and their implementation especially in instances of disputes. • Interpret Technical Specifications and Contract Documents • Review and ensure conformity of contractors' securities in approved formats • Ensure requisite insurances furnished by the Contractor being Contract compliant • Assist the PCU and PIUs in dispute resolution activities, if necessary, during the pendency of the contracts
II	Key National Experts	
3.	Deputy Team Leader	<ul style="list-style-type: none"> • Assist Team Leader in overall management of the CSC team during presence of team leader in this assignment and in absence of team leader the tasks typically include, but not limited to, the following. • Assist the project manager in contract administration and management of the Project and civil works contracts • Interpret the technical specifications and contract documents relevant to the project. • Obtain related approvals from concerned authorities for any redesign of road realignment, modifications. • Ensure receipt of requisite insurances as per contract requirement. • Review documentations and advance actions for handing over of site and advise on issuing notice to set the commencement date. • Ensure contractors effect and implement Quality Assurance System. • Verify and submit for approval to the Contractor's detailed work program, suggest modifications if any and ensure contractors' compliance with the Program • Issue approval to the contractors' superintendence personnel with modifications if any. • Scrutinize and submit for approval contractors' construction methods statements. • Issue finalized or revised "Good for Construction drawings" and additional detailed drawings required for the execution of the work. • Issue to contractors amended alignment plan and profile drawings based on review of tender drawings and updated topographic surveys. • Approve Contractor's working drawings based on setting out details. • Approve setting out data for the Works finalized as a result of ground verification and survey.

Sl. No.	Position	Tasks/Responsibilities
		<ul style="list-style-type: none"> • Monitor supervision of all works and ensure proper supervision as per contract requirement. • Monitor closely and regularly the progress of work and advise the contractors about corrective measures. • Monitor status of contractors' equipment, plant, machinery installations, housing and medical facilities. • Direct and/or advise contractors to avoid and/or reduce the risk in case of any emergency. • Advise contractors in all matters covering safety and care of work, environmental aspects and labour welfare. • Verify and recommend, if in order, the Contractor's requests for advance and interim payment certificate. • Assist Client in arranging relocation of services. • Maintain a permanent record of all payments made to the contractors. • Prepare monthly reports • Prepare financial statements regularly and assist Client to submit the annual financial statement within 3 months after the end of each fiscal year for audits. Assist Client during the audit process • Approve "as built" drawings • Inspect the works upon completion of each milestone before accepting the work and report to the PCU • Inspect Works at appropriate intervals during Defects Liability Period and Performance Based Maintenance (PBM) period and advise the PCU and PIUs • Ensure that contractors implement and maintain the environmental monitoring in compliance with the environmental management plans as a part of the civil works contracts • Assist Client in conducting training and workshops. Office manager will assist Deputy Team Leader for conducting trainings and workshops.
4.	Resident Engineer(RE)	<ul style="list-style-type: none"> • Assist in management and contract administration of the assigned project road package • Scrutinize and/or review contractors' superintendence, personnel and report to TL, on modifications, if any • Interact with Client's representative at region/cluster • Scrutinize, check and verify setting out data • Carry out supervision of all works as per approved methods statements

Sl. No.	Position	Tasks/Responsibilities
		<ul style="list-style-type: none"> • Examine Contractor's preparation and the completed position of work as per "request for inspection" and promptly advise the contractors • Monitor closely and regularly the progress of work and report to the team leader/Client's representative at region/cluster • Carry out regular inspection of Contractor's equipment, plant, machinery, installations, housing and medical facilities • Direct contractors to carry out works, as may be necessary to avoid or to reduce the task in case of any emergency • Supervise the contractors in all matters concerning the safety of works, labour welfare, workmen and environmental aspects • Witness sampling and testing being carried out by staff of the Contractor and undertake additional audit tests to ensure quality • Monitor and review the test results/ certificates for all construction material and/or resources of materials and report to the team leader • Examine the requests for advances and monthly statements of Contractor's and examine interim payment certificates. • Assist the Client in arranging all correspondence, meetings and preparation of details related to the assigned project road package implementation • Maintain a permanent record of all measurements for the works /quantities to be paid and of all payment dates • Prepare monthly reports • Review "as-built" drawings prepared by the Contractor and maintain record of tests of all data and records • Maintain a permanent record of all tests carried out for monitoring the quality of works • Maintain a day to day diary recording all events relevant to the work
5.	Engineering Geologist	<ul style="list-style-type: none"> • Oversee the construction in geologist's point of view • Visit critical geologically vulnerable locations and recommend appropriate engineering mitigation measures • Verify the slope stability of critical locations and recommend appropriate mitigation measures. • Assist client for special studies/ geo technical survey of geologically sensitive areas.
6.	Assistant Resident Engineer (ARE)	<ul style="list-style-type: none"> • Interact with Client's representative at the site. • Scrutinize, check and verify setting out data • Carry out supervision of all works as per approved methods statements

Sl. No.	Position	Tasks/Responsibilities
		<ul style="list-style-type: none"> • Examine Contractor's preparation and the completed position of work as per "request for inspection" and promptly advise the contractors • Monitor closely and regularly the progress of work and report to the RE and the Client's representative • Carry out regular inspection of contractors' equipment, plant, machinery, installations, housing and medical facilities • Direct contractors to carry out works, as may be necessary to avoid or to reduce the task in case of any emergency • Day to day supervision of contractors' work at the site • Co-ordinate with the field sub engineer and survey sub engineer for construction related issues
7.	Material Engineer	<ul style="list-style-type: none"> • Assist the RE and the AREs to finalize sampling methods and criteria and acceptance criteria for quality control and assurance. • Examine contractors' preparation and completed portion of work as per "Request for Inspection" and advise contractors promptly. • Monitor closely and regularly the progress on materials procurement and quality and report to the RE /ARE. • Carry out an inspection of contractors' lab equipment and report to RE/ARE. • Ensure and witness sampling and testing being carried out by the staff of the Contractor's and undertake additional tasks as necessary to ensure the quality of works. • Monitor and review the test results/ certificates for all construction material and/or resources of materials and report to the RE/ARE. • Monitor and review the mix designs proposed by the Contractor. • Scrutinize test results/certification of all construction materials and/or sources of materials and undertake additional tests if necessary and report to RE /ARE. • Scrutinize mix design proposed by the Contractor. • Assist team leader/resident engineer to ensure Contractor's Quality Control Assurance System. • Assist for Approval of Borrow Areas and quarries
8.	Social Development and Gender Specialist	<ul style="list-style-type: none"> • Support Client in matters relating to land donation and ownership transfer • Monitor the implementation of community participation framework • Provide guidance to community participation framework implementation • Provide expert advice in all matters relating to land donation

Sl. No.	Position	Tasks/Responsibilities
		<ul style="list-style-type: none"> • Implementation of GESI Action Plan • Conduct HIV/AIDS and human trafficking awareness campaign • Identify current economic and social management issues • Mobilize and monitor community participation in the project • Organize and facilitate multi-stakeholder participatory processes • Develop communication channels with the stakeholders and reporting • Perform the role of the external monitor and prepare the monitoring reports every 6 months during the construction for each project road
9.	Environment Specialist	<ul style="list-style-type: none"> • With the contractor's environmental focal person, prepare road- and package-specific EMPs based on the approved generic EMPs • Liaise with the local level governments and other pertinent government units to secure construction related environmental permits and clearances • Scrutinize contractors' construction method statement for compliance to environmental aspects, • Supervise the Contract in all matters concerning environmental aspects • Monitor and report compliance with the EMP on and monthly, quarterly, and annual basis • Assist the PIU in undertaking environmental safeguards • Prepare and monitor the EMP as per requirement of ADB • Facilitate addressing of grievances related to environment safeguards following the grievance redress mechanism • Prepare semi-annual environmental monitoring report for review and approval by the Client
10.	Road Safety Specialist	<ul style="list-style-type: none"> • Review the road safety provisions in civil works contract and modify where necessary • Supervise/oversee/assist the supervision team and contractors in implementation of safety provisions • Conduct road safety audit during and after the construction • Review and design public awareness campaign on road safety • Assist the PIU in conducting the awareness program to the public • Develop plan and manual to conduct awareness in coordination with the Client • Comply with Client's Traffic Safety Manuals during construction supervision

Sl. No.	Position	Tasks/Responsibilities
11.	Financial Management Specialist	<ul style="list-style-type: none"> • Study the project documents, ADB's policies, Government of Nepal financial policy and current practices, and draw outlines of the manual which will be submitted to the project for approval • Describe various reporting requirements and design various monitoring forms that will be used by the project in collecting financial information • Describe financial reporting and disbursement arrangements of the project • Describe internal control system and monitoring system with clear written standards and procedures, clear responsibilities including levels of authority; clear control over assets; cash and bank accounts; easily available access to supporting documentation; and timely and accurate financial reporting • Describe the internal audit and audit procedures and work plan to comply with the covenant of six months' submission time period • Describe various reporting forms that will be used by the cost centers and at central level by the RCIP • Describe the roles and functions of each cost center and of accounts staff in the RCIP in relation to establishing a good financial management system in the project • Present the manual in a simple language to enable all district level staff to understand the procedure • Train the staff and stakeholders of the RCIP on the financial management system. The manual will be used as the training tool to train the accounts staff who will be involved in the execution of the project • Design and suggest simplified and more informative financial reporting formats to be used by the project districts for the purpose of preparing the statement of expenditures (SOE) and withdrawal application • Assist the PCU in collecting and compiling financial statements and review them for finalizing the expenditures to be claimed for reimbursement • Assist the PCU to maintain data base record of project reimbursement status • Assist to organize meeting on a trimester basis for reviewing the project's financial progress • Recommend simplified government's budget disbursement system, develop absorbing capacity of the districts and suggest a prompt and easy financial reporting system • Assist the PCU and the PIUs to maintain financial discipline • Any other jobs assigned by the PCU related to the financial management

Sl. No.	Position	Tasks/Responsibilities
III	Non-Key National Personnel	
12.	Quantity Surveyor	<ul style="list-style-type: none"> • Measure quantities of work, record measurements and verify BoQ items / work quantities executed in the Contractor's monthly statement • Verify and examine interim payment applications received from Contractors • Maintain a permanent record of all measurement for the work quantities
13.	Field Sub Engineer	<ul style="list-style-type: none"> • Assist the RE and ARE on all matters at site relating to road works. • Inspect contractor's Requests for Information (RFI) and report to the ARE
14.	Survey Sub Engineer	<ul style="list-style-type: none"> • Scrutinize topographic survey data, if any, in the contract drawings and associate and scrutinize the Contractor's updated topographic survey data. • Monitor survey and setting out operations and verify data and details • Carry out detailed checking and verification of setting out data
15.	CADD Technicians	Assist the REs and the AREs on all matters relating to computer-aided designs productions
16.	Laboratory Technician	Assist the AREs and the material engineers on all matters relating to construction material testing
17.	Social Mobilizer (Community)	<ul style="list-style-type: none"> • Assist the social development and gender specialist in the implementation of GESI, HIV/AIDS, Human Trafficking Awareness Activities in accordance to GESI action plan • Prepare mitigation plans at project influence areas • Prepare and report project monitoring framework
18.	Bio-engineering Technician	<ul style="list-style-type: none"> • Support the implementation of bio- engineering activities, prepare implementation schedule • Provide orientation/ on-the-job trainings to the contractor's team. Support for additional site identification for bio-engineering applications • Undertake additional tasks as required by the team leader

8. Qualifications and Experience Requirements

8.1 Qualifications and experience requirements for experts are as below. Non-key personnel will not be evaluated but the CVs of experts meeting the below requirements should be submitted and approved by the Client before concluding the consulting services contract

Team Leader/Senior Rural Road Specialist (International Position)

(Project Related Experience in the last 20 years will only be considered)

a) Qualifications	Minimum: Bachelor's degree in Civil Engineering Preferable: Post graduate degree in Highway Engineering/Geotechnical Engineering/Construction Management. Membership in professional institutions
b) Total Professional Experience	20 years minimum, 15 years in Road Works
c) Project-related Experience	Minimum five years as team leader/resident project manager/project manager in supervision or contract administration of highway or rural road construction contracts (at least 2 contracts each costing over US \$20 million administered under FIDIC or similar contract conditions), preferably managing multiple contracts. Experience of rural road construction supervision in hilly/mountainous and plain areas will be preferred. Very good command of spoken and written English
d) Overseas/Country Experience	Preferably with substantial experience in developing countries

Contract Management Specialist (International Position)

(Project Related Experience in the last 15 years will only be considered)

a) Qualifications	Minimum: Bachelor's degree in Civil Engineering or other relevant fields Preferable: Post graduate degree in Civil Engineering or other relevant fields. Membership in professional institutions
b) Total Professional Experience	15 years minimum
c) Project-related Experience	Minimum six years as Contracts Specialist in contract administration of highway or road construction contracts (at least 2 contracts each costing over US \$20 million administered under FIDIC contract or similar conditions of contract) Very good command of spoken and written English
d) Overseas/Country Experience	Preferably with substantial experience in developing countries

Deputy Team Leader (National Position)

(Project Related Experience of the last 20 years will only be considered)

a) Qualifications	Minimum: Bachelor's degree in Civil Engineering Preferable: Post graduate degree in Highway Engineering/Geotechnical Engineering/Construction Management. Membership in professional institutions
b) Total Professional Experience	20 years minimum
c) Project-related Experience	Minimum ten years as Deputy/Team Leader/Resident Project Manager/Project Manager in supervision or contract administration of highway or road construction contracts (at least 2 contracts each costing over NRs 500 million), preferably managing multiple contracts. Experience of rural road construction supervision in hilly/mountainous and plain areas will be preferred.

	Very good command of spoken and written English
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Resident Engineer (National Position)

(Project Related Experience in the last 15 years will only be considered)

a) Qualification	Minimum: Bachelor's degree in Civil Engineering Post graduate degree in Civil Engineering or related fields and Membership in professional institutions are preferred
b) Total Professional Experience	15 years minimum
c) Project-related Experience	Minimum five years as Resident Engineer/Highway Engineer or equivalent position in supervision or contract administration of highway or road contracts (at least 1 contract costing over NRs 500 million) Experience of rural road/road construction in hilly and plain areas will be preferred Very good command of spoken and written English
d) Experience in working with international organizations/agencies	Preferable

Engineering Geologist (National Position)

(Project Related Experience in the last 10 years will only be considered)

a) Qualification	Minimum: Master's degree in Geology Post graduate degree in Engineering geology or related fields and Membership in professional institutions are preferred
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum five years as Geologist or equivalent position in supervision or contract administration of linear infrastructure contracts
d) Experience in working with international organizations/agencies	Preferable

Assistant Resident Engineer (National Position)

(Project Related Experience in the last 10 years will only be considered)

a) Qualification	Minimum: Bachelor's degree in Civil Engineering Post graduate degree in Civil Engineering or related fields and Membership in professional institutions are preferred
b) Total Professional Experience	10 years minimum

c) Project-related Experience	Minimum five years as Assistant Resident Engineer or equivalent position in supervision or contract administration of highway or road contracts (at least 1 contract costing over NRs 250 million) Very good command of spoken and written English
d) Experience in working with international organizations/agencies	Preferable

Materials Engineer (National Position)

(Project Related Experience in the last 10 years will only be considered)

a) Qualification	Minimum: Bachelor's degree in Civil Engineering. Post graduate degree in Civil Engineering or related fields and Membership in professional institutions is preferred.
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum six years as Pavement or Materials Engineering or equivalent position with experience of various testing procedures, designs of various mixes like GSB, WBM, WMM, Bituminous mixes, Concrete Mixes, etc. (at least 2 highway/bridge projects) Very good command of spoken and written English
d) Experience in working with international organizations/agencies	Preferable

Social Development and Gender Specialist (National Position)

(Project Related Experience in the last 10 years will only be considered)

a) Qualification	Minimum: Master's degree in Sociology, or other relevant fields Postgraduate degree in relevant social science is preferred.
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum 5 years as a resettlement specialist or equivalent position dealing with implementation/supervision of resettlement and rehabilitation activities in linear project or road construction projects, including at least 2 projects, funded by multilateral funding agencies Minimum 2 years in Gender, HIV/AIDS, Human Trafficking Field The candidate should be conversant with the social safeguards policy and gender policy of ADB and possess hands-on experience as per the requirements of ADB. Very good command of spoken and written English
d) Experience in working with international	Required

organizations/ agencies	
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Environmental Specialist (National Position)

(Project Related Experience in the last 10 years will only be considered)

a) Qualification	Minimum: Master's degree in Environmental Engineering, Environmental Science, Civil Engineering or other related fields Postgraduate degree in Environmental Engineering and/or membership in professional institutions is preferred.
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum 5 years as an environment specialist, environment Engineer or equivalent position in large highway or road construction projects, including at least two projects, funded by multilateral or bilateral funding agencies Required to be conversant with the environmental safeguards policy of ADB/World Bank and hands-on experience in preparation and execution of environmental management plans as per the requirements of ADB/World Bank Very good command of spoken and written English
d) Experience in working with international organizations/agencies	Required

Road Safety Specialist (National Position)

(Project Related Experience in the last 8 years will only be considered)

a) Qualification	Minimum: Bachelor's degree in Civil Engineering or other related fields Post graduate degree in Transport Engineering/ Highway Engineering/ Traffic Engineering or related fields is preferred.
b) Total Professional Experience	8 years minimum
c) Project-related Experience	Minimum 3 years experience in Road Projects as Road Safety Specialist Very good command of spoken and written English
d) Experience in working with international organizations/agencies	Preferable

Financial Management Specialist (National Position)

(Project Related Experience in the last 10 years will only be considered)

a) Qualification	Minimum: At least a bachelor's or equivalent degrees in relevant fields
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	Post graduate degree in management or related fields is preferred
b) Total Professional Experience	10 years minimum
c) Project-related Experience	<ul style="list-style-type: none"> • Experienced and well versed in Government of Nepal financial procedures, disbursement and financial management procedures • Familiar with legal, administrative and financial current rules and regulations of the Government of Nepal and donor funded projects • Experienced in preparing financial monitoring format and monitoring and evaluation plan • Experienced in report writing with good communication skills in English as well as in Nepali • Familiar with the computer programs particularly in financial and accounting package • Experienced in preparing Project Account • Very good command of spoken and written English
d) Experience in working with international organizations/ agencies	Preferable

Quantity Surveyors (National Non-Key Position)

(Project Related Experience in the last 8 years will only be considered)

a) Qualification	Minimum: Diploma in Civil Engineering. Preferable: Bachelor's degree in Civil Engineering or related fields and/or membership of professional institutions
b) Total Professional Experience	8 years minimum
c) Project-related Experience	Minimum five years as quantity surveyor or equivalent position in at least 2 projects of similar nature
d) Experience in working with international organizations/ agencies	Preferable

Field Sub Engineer (National Non-Key Position)

(Project Related Experience in the last 8 years will only be considered)

a) Qualification	Minimum: Diploma in Civil Engineering Bachelor's degree in Civil Engineering or its related fields and/or membership of professional institutions is preferred
b) Total Professional Experience	8 years minimum

c) Project-related Experience	Minimum five years as a site sub engineer or equivalent position on highway/road projects of similar nature, including at least 2 projects of similar nature
d) Experience in working with international organizations/agencies	Preferable

Survey Sub Engineer (National Non-Key Position)

(Project Related Experience in the last 5 years will only be considered)

a) Qualification	Minimum: Diploma in Civil Engineering Bachelor's degree in civil Engineering or related fields is preferred.
b) Total Professional Experience	5 years minimum
c) Project-related Experience	Minimum three years in construction/supervision of road projects
d) Experience in working with international organizations/agencies	Preferable

Lab Technician (National Non-Key Position)

(Project Related Experience in the last 5 years will only be considered)

a) Qualification	Minimum: Diploma in Civil Engineering or other relevant fields
b) Total Professional Experience	5 years minimum
c) Project-related Experience	Minimum three years in testing related construction materials.
d) Experience in working with international organizations/agencies	Preferable

CADD Technician (National Non-Key Position)

(Experience in the last 5 years will only be considered)

a) Qualification	Minimum: Diploma in Civil Engineering/Architecture, Computer Science, Computer Engineering, or other relevant fields
b) Total Professional Experience	5 years minimum
c) Project-related Experience	Minimum 3 years in computer-aided design of highway/road projects
d) Experience in working with international organizations/agencies	Preferable

Social Mobilizer (Community) (National Non-Key Position)

(Project Related Experience in the last 5 years will only be considered)

a) Qualification	Minimum: Diploma in social science/ sociology or relevant fields
b) Total Professional Experience	5 years minimum
c) Project-related Experience	Minimum 2 years in road projects
d) Experience in working with international organizations/ agencies	Preferable

Bio-engineering Technician (National Non-Key Position)

(Project Related Experience in the last 5 years will only be considered)

a) Qualification	Minimum: Diploma in relevant fields Related trainings on bio engineering aspect is preferred.
b) Total Professional Experience	5 years minimum
c) Project-related Experience	Minimum 2 years in road projects
d) Experience in working with international organizations/ agencies	Preferable

Counterpart facilities to be provided by the Client:

All the available reports and data, design drawings, etc. relevant to the project will be provided by the Client.

Period of Engagement:

The consultant's responsibilities shall continue to provide the consulting services until the completion of the works. The tentative duration of the services is 60 months.

Agreement:

The consultant will be required to enter into time-based contract for consultant's services with the RCIP, PCU/DOLIDAR. An agreement shall be signed by both parties before the commencement of services.

Taxation:

The consultant is fully responsible for all taxes imposed by the relevant laws of the government. The VAT should be shown separately and billed as separate item by the consultant and the client will make the payment accordingly.

Appendix 1: Support Staff

S.No	Description	Unit	Qty.	Remarks
A	Administrative Support Staff			
1	Office Manager (TL office)	Month	60	1 officer manager for 60 months
2	Office Manager (RE office)	Month	90	3 office manager for 30 Months
2	Computer Operator	Month	150	4 C.O. for cons+ 1 for (DLP+PBM)
3	Office Secretary/Assistants	Month	210	1 office secretary in 7 package office for 30 months
4	Runner / Peon / Helpers	Month	570	2 nos. for TL office for 30 months, 1 for TL office for next 30 months, 2 nos. for 3 Cluster offices for 30 months, 1 nos. for 3 Cluster offices for next 30 months, 1 no. for 7 package offices for 30 months

Attachment C: Outline Terms of Reference for Project Management Consultants (Individual)

I. Background

1. The Government of Nepal has applied for a loan from ADB to implement the Rural Connectivity Improvement Project (RCIP), to improve rural roads in Nepal. The project is set to improve 27 roads in 16 districts across the country.

II. Broad Implementation Arrangements

2. The Department of Local Infrastructure Development and Agricultural Roads (DOLIDAR) will be the executing agency on behalf of the Ministry of Federal Affairs and Local Development (MOFALD) under the government. DOLIDAR presently has a project coordination unit (PCU) designated as the implementing agency and headed by a project director (PD). The PCU performs the duties as those of a project management unit (PMU) during the course of the RCIP. The PCU will be responsible overall for the Project Implementation Units (PIUs) in the Districts. The PIUs will be responsible for the administration of their respective civil works packages. The PCU will be assisted by individual national consultants in the areas of (i) Procurement, (ii) Quality Control, (iii) Environmental Safeguards, (iv) Social Safeguards, and (v) Road Safety and Maintenance.

III. National Consultants Assisting the PCU

3. Procurement Consultant

- (i) Assist in procurement of goods for the PCU based on e-procurement;
- (ii) Assist the PD in preparing contract packages for bidding for civil works;
- (iii) Assist in evaluation of technical and financial bids for the evaluation committee constituted by DOLIDAR;
- (iv) Ensure that the detailed project reports (DPRs) are complete in all respects before being handed over to the construction supervision consultant (CSC);
- (v) Assist in interpretation of the Contract/Agreement Clauses and their implementation especially in instances of disputes;
- (vi) Interpretation of the Technical Specifications and Contract Documents
- (vii) Assist the PIUs in dispute resolution activities, if necessary, during the pendency of the contract; and
- (viii) Assist in finalization of variation orders which have financial implications.

4. Quality Control Consultant

- (i) Assist the PCU by carrying out independent testing on roads as directed by the PD, which may be critical, or verifying variances in results received from PIUs and the CSC.
- (ii) Monitor the efficiency of the PIUs in advising promptly Contractor's preparation and completed portion of work as per "Request for Inspection" to the CSC.
- (iii) Monitor on a daily basis the progress on materials procurement and quality so that at no time the project gets delayed on account of non-availability of the quality and quantity of the materials. Assist the PIUs through PD for ensuring all procedural bottlenecks are avoided through constant liaison with the higher authorities

- concerned.
- (iv) Carry out periodic inspection of Contractor's lab equipment and report to PD.
- (v) Do random checks for sampling and testing by contractors being supervised by PIUs and decide for undertaking additional tasks as necessary to ensure quality of works with the approval of PD.
- (vi) Monitor and review the test results/ certificates from each PIU and compare with the certificates provided by the CSC.
- (vii) Keep a record of the final mix designs approved by the CSC and advise the PD if there are any issues.
- (viii) Obtain from PIUs and keep a record of test results/certification of all construction materials and/or sources of materials.

5. **Social Safeguard Consultant**

- (ix) Carry out field verification and check compliance with CPF provisions during implementation;
- (x) Prepare due diligence reports on all the RCIP roads;
- (xi) Monitor and evaluate implementation of the community participation process prescribed;
- (xii) in CPF and recommend improvements to the participatory process to ensure broader participation of rural population in subproject formulation;
- (xiii) Assist the PD in matters relating to the transfer of land for land registrations of the donated land;
- (xiv) Monitor the implementation of providing relief to the vulnerable project affected people;
- (xv) Monitor implementation of gender equality and social inclusion action plan;
- (xvi) Identify current economic and social management issues;
- (xvii) Oversee and assist in mobilizing community participation in the Project at various stages of the Project;
- (xviii) Organize and facilitate multi-stakeholder participatory processes;
- (xix) Ensure submission and review of periodic reports on social safeguards submitted by the CSC;
- (xx) Assist DOLIDAR in complying with disclosure of periodic social safeguard monitoring reports;
- (xxi) Perform the role of an external monitor and prepare the reports every quarter during the construction of each project road;
- (xxii) Identify affected households who will participate in livelihood skills training program;
- (xxiii) Conduct needs assessment survey for the affected households; and
- (xxiv) Based on the needs assessment findings, identify and select livelihood skills training center to conduct skills training program to the affected households.

6. **Environment Safeguard Consultant**

- (i) Ensure compliance with all environment related statutory requirements by DOLIDAR and the contractors;
- (ii) Review and finalize Road Specific environmental management plans (EMPs) prepared by the CSC;
- (iii) Carry out field verification and review environmental compliances by the contractor during project implementation;
- (iv) Review and finalize periodic environmental monitoring reports submitted by the

- CSC;
- (v) Assist DOLIDAR in complying with disclosure of periodic environmental monitoring reports; and
 - (vi) Ensure grievance redress mechanism as envisaged in the EMP is in place, and finalize monitoring reports for disclosure.

7. Road Maintenance cum Road Safety Consultant

(i) Road Maintenance

- (a) Conduct road maintenance inspections on a sample basis during construction, the Defects Liability Period (DLP), and the maintenance period and thereafter to cover all the roads under RCIP and ensure inspection is made at least once during implementation
- (b) Prepare Maintenance Inspection Reports for each road inspected
- (c) Prepare Annual Maintenance Audit Reports for the inspected roads
- (d) Assist PIUs to prepare comprehensive inventory of all RCIP roads on a yearly basis in the districts.

(ii) Road Safety

- (e) Conduct Road Safety Inspections (RSI) jointly with PIUs on the respective RCIP roads under construction and prepare concise RSI reports listing road safety issues and proposed measures to mitigate/eliminate road safety issues, especially for vulnerable road users.
- (f) Timely report to PIUs on road safety issues identified during construction and follow up on road safety issues/lapses as appropriate
- (g) Conduct independent analysis of severe road accidents, if any, occurring on the RCIP roads under construction and recommend specific road safety countermeasures for review
- (h) Conduct RSIs on RCIP roads within three months after completion of civil works, and prepare RSI reports listing road safety issues and proposed measures to mitigate/eliminate road safety issues
- (i) Prepare Quarterly Road Safety Monitoring reports on the roads inspected

8. Qualifications and Experience Requirements

Procurement Consultant

a) Qualifications	Minimum: Bachelor's degree in civil engineering or other relevant fields.
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum 5 years in procurement of civil works in roads sector and procurement of goods and at least 2-year experience in ADB procurement procedures and guidelines. E-procurement experience will be preferable.
d) Experience in working with international organizations/agencies	Preferable.

e) Knowledge of English	Should have fair knowledge in conversing and writing reports in English language
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Quality Control Consultant

a) Qualification	Minimum: Bachelor's degree in civil engineering Post graduate degree in civil engineering preferred.
b) Total Professional Experience	15 years minimum
c) Project-related Experience	Minimum 10 years' experience in Quality Control in roads sector or equivalent position with experience in various testing procedures, designs of various mixes like GSB, WMM, Bituminous mixes, Concrete Mixes, etc.
d) Experience in working with international organizations/agencies	Preferable
e) Knowledge of English	Should have fair knowledge in conversing in English language and writing reports in English language

Social Safeguard Consultant

a) Qualification	Postgraduate degree in relevant social science
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum 5 years as social safeguards consultant or equivalent position dealing with preparation/implementation/supervision of road construction projects
d) Experience in working with international organizations/agencies	Should be conversant on the social safeguards policy of ADB and possess hands-on experience as per the requirements of ADB.
e) Knowledge of English	Should have fair knowledge in conversing in English language and writing reports in English language

Environmental Safeguard Consultant

a) Qualification	Postgraduate degree in environmental engineering.
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum 5 years as an environment specialist, environment engineer or equivalent position in road construction projects.

d) Experience in working with international organizations/ agencies	Essential to be conversant on the environmental safeguards policy of ADB and have hands-on experience in preparation and execution of environmental management plans as per the ADB requirements
e) Knowledge of English	Should have fair knowledge in conversing in English language and writing reports in English language

Road Maintenance cum Road Safety Consultant

a) Qualification	Minimum: Bachelor's degree in civil engineering
b) Total Professional Experience	10 years minimum
c) Project-related Experience	Minimum 5 years as Road Maintenance Engineer or equivalent position in supervision of road construction projects with at least 1-year experience in road safety. Experience in rural road construction in hilly and plain areas will be preferred.
d) Experience in working with international organizations/ agencies	Preferable
e) Knowledge of English	Should have fair knowledge in conversing in English language and writing reports in English language

11. Person-Months

Sl. No.	Particulars	Nos.		Months		Estimated Person-Months
		Constr.	Maint.	Constr.	Maint.	
1	Procurement Consultant	1	0	9	0	9
2	Quality Control Consultant	1	1	24	9	33
3	Social Safeguards Consultant	1	0	18	0	18
4	Environment Consultant	1	0	12	0	12
5	Road Maintenance & Road Safety Consultant	1	1	18	9	27
Total Consultants in PCU (National)						99

Attachment D: Outline Terms of Reference for Detailed Project Reports Consultants

1. The Ministry of Federal Affairs and Local Development (MOFALD), Government of Nepal through Department of Local Infrastructure Development and Agricultural Roads (DOLIDAR) intends to construct selected rural roads under RCIP 2.

A. Objectives

2. The broad objective is to prepare a quality detailed project report (DPR) as per the Sample Template available with DOLIDAR for ease and fast-track implementation of the civil works. For this purpose, the main tasks would be:

- Carry out detailed survey and investigation of roads
- Carry out detailed engineering design for the identified rural roads
- Carry out detailed survey for bridges, causeways, Box culverts, etc.
- Carry out detailed engineering design for bridges and causeways
- Propose improvements of geometrics of road, road safety measures with Road Safety Audit
- Comply with the social and environmental safeguard guidelines of ADB

B. Scope of Consultancy Services

3. The Consultant will frame strategy and detailed engineering designs for the road and prepare cost estimates as per prevalent standards. The scope of services shall thus cover the following major tasks but shall not be limited to the following:

- While commencing with the preparation of the DPR, the consultants and PIU will hold a consultation with the local community to sort out issues of land availability for widening etc., wherever necessary (including forest land), moderate any adverse social and environmental impact and elicit necessary community participation in the program. For this purpose the PIU will organize an informal 'Transect Survey' as follows;
 - The Transect Survey shall be undertaken by the Consultants along with the PIU, accompanied by the project beneficiaries and affected people on the road, after having been given adequate advance publicity. The local Forest official and land revenue representative may also be associated.
 - During the survey, issues related to land requirements for the road and their impact on landowners, etc. will be discussed with members of the local community present, particularly the affected persons.
 - Environmental impact on the physical, biological, and socio-economic environment shall be identified for assessment and mitigation guided by the Environmental Checklist and the Initial Environmental Examination (IEE) report prepared and disclosed by DOLIDAR.
 - During the survey, due opportunity shall be given to interested persons to put forward their views.
 - At the end of the survey, proceedings will be recorded incorporating the issues that arose during the walk and the action taken / proposed to be taken to resolve the issues. The proceedings will be summarized in a written document to be signed by the local office bearers. A copy of this document shall be attached to the final DPR, and due consideration will be given by the consultant to these issues in preparing the DPR.
 - Consultant will also conduct community consultations and prepare reports in prescribed CPF formats.

4. The consultant will ensure the following in preparing the Detailed Project reports:
- (i) The Rural Roads to be constructed must meet the technical specifications and geometric design standards prevalent in Nepal for the Hill Roads as well as Roads in the "Terai" areas to include but not limited to: Nepal Rural Roads Standards (2005); Quality Control Handbook for Rural Roads Construction and Maintenance (2014); Work Norms for Agricultural and Rural Roads (1998); Technical Specification for Agricultural and Rural Roads (1998), and the Environment and Social Management Framework, DOLIDAR (2013).
 - (ii) The choice of design and surface for the road would be determined, inter alia, by factors like traffic density, soil type and rainfall, following the technical specifications laid down in Nepal.
 - (iii) Where the road passes through a Habitation, the road in the built-up area and for 50 meters on either side may be appropriately designed, preferably as a Cement Concrete Road with side drains. The side drains will be designed as per site requirement and availability of land. As far as possible covered side drains and cross drainage will be provided, so that improper drainage may not damage the road or the dwellings alongside.
 - (iv) The Rural Roads must have proper embankment / drainage with adequate number of Cross Drainage (CD) works, including cause-ways provisions. Consultant should examine adequacy and soundness of these CDs and suggest widening, strengthening, rehabilitation as well as construction of new ones after thorough investigation and consultations with the community.
 - (v) The Consultant will also:
 - Conduct existing pavement condition survey and road inventory
 - Study and assess adequacy of drainage system
 - Prepare inventory and conduct detailed condition surveys for bridges and other cross drainage structures
 - Conduct traffic study analysis & forecast for next 10 years and conduct at least 3 days traffic count to form part of the DPR
 - Conduct community consultation and prepare report as per CPF formats
 - Identify source, location, availability and suitability of construction materials. Conduct a detailed soil and material survey for the purpose of pavement design. (Attach quarry charts etc.)
 - Conduct topographic survey at detailed engineering sections for collecting all information for designing the works
 - Conduct soil and pavement investigations at detailed engineering sections. Conduct one test for CBR where change of strata is observed. Test results should be attached to the DPR.
 - Carry out detailed engineering design for the bridge structures and causeways along the project corridor. Conduct sub-soil investigations pertaining to the structures.
 - Prepare cost estimate for proposed works based on schedule of rates. For items not covered by schedule the same be accompanied by the analysis.
 - Based on detailed survey and investigation, prepare detailed engineering drawings including working drawings
 - Suggest water-conserving structures on CDs/causeways wherever feasible (and give their detailed design)
 - Consultants will have to collect details for the land coming in the road way width (ROW), and prepare land plan accordingly including Road Safety measures on the basis of Road Safety Audit.

C. Specifications

5. The specifications for the various items of works should be as per the "Specifications for Rural Road" applicable in Nepal.

D. Proposed DPR Consultants and their Teams

6. A number of consulting firms will be engaged preferably each covering a maximum of 4 Packages under the jurisdiction of one or two PIUs. The consultant shall be required to form a team for this assignment. The consultant's team shall be manned with adequate number of experts having relevant experience in similar assignments. A list of key personnel to be fielded by the consultant is given below.

1. Team Leader
2. Pavement Engineer cum Road Safety Expert
3. Material Engineer
4. Environmental Expert
5. Social Expert

7. Adequate number of surveyors and supporting staff will be provided by the Consulting firm to complete the job in prescribed time limits set by DOLIDAR.

E. Composition of Team and General Qualifications of Key Personnel

1. Team Leader (TL)

1	Educational Qualification	Graduate in Civil Engineering from a recognized university/institution
2	Experience	
	a) Total professional Experience	Minimum 15 years
	b) Experience in Highway projects	Minimum 10 years in planning, project preparation and design of Road projects and minimum of 5 years as a Team Leader.
	c) Experience in similar capacity	Rural Roads planning and designing preferably for externally aided projects such as WB / ADB / USAID, etc.

8. The Team Leader (TL) shall be responsible for all technical presentations concerning the various facets of the survey investigation and preparation of DPR; maintain close communication with PIU and shall be the Consultants Authorized Representative; and interact with PCU and concerned PIU on behalf of the Consultants appointed for the services. TL shall be full-time on the job.

2. Pavement Engineer (PE) cum Road Safety Expert

1	Education Qualification Minimum	Graduate in Civil Engineering
2	Experience	
	a) Total professional Experience	Minimum 10 years
	b) Experience in Highway projects	Minimum 7 years of experience in pavement design/construction and at least 1 year experience in road safety.
	c) Experience in Similar capacity	Rural Roads planning and designing preferably for externally aided projects such as WB, ADB, USAID etc.

3. Material Engineer (ME)

1	Education Qualification Minimum	Graduate in Civil Engineering
2	Essential Experience	
	a) Total professional Experience	Min. 10 years
	b) Experience in Similar type of work in infrastructure projects	Minimum 5 years on similar projects on design and/or construction
	c) Experience in Similar capacity	Material Engineer on road projects roads preferably externally aided projects such WB, ADB, USAID etc.

4. Environment Expert

1	Education Qualification Minimum	Graduate Engineer with specialization in Environmental Engineering / MSc in Environmental Science
2	Essential Experience	
	a) Total professional Experience	Minimum 5 years
	b) Experience in Similar capacity	Environmental specialist in at least one road project preferably externally aided projects such as WB, ADB, USAID etc.

5. Social Expert

1	Education Qualification Minimum	Post Graduate in Social Science
2	Essential Experience	
	a) Total professional Experience	Minimum 5 years
	b) Experience in Similar capacity	Social Development Specialist in at least one road project preferably

	externally aided projects such as WB, ADB, USAID etc.
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E. Person-Months for each Team of DPR Consultants (Firm)

Sl. No.	Particulars	Estimated Person-Months/DPR Consulting Firm
1	Team Leader, DPR	3
2	Pavement and Road Safety Expert	2
3	Material Engineer	1
4	Environment Expert	2
5	Social Expert	2
Total		10

Note: Presuming that in due course there will be 7 states and each will have a PIU to undertake the implementation, the total person-months would therefore be 70.

Attachment E: Outline Terms of Reference for Transaction Technical Assistance

A. Objective

1. The main objective of the consulting services is to support the government of Nepal (GON) through the Ministry of Federal Affairs and Local Development (MOFALD) in improving sector management performance by implementing institutional development initiatives. The focus of the TA will be to (i) redefine and restructure DOLIDAR to a state-of-the-art rural road agency, and (ii) implement new business procedures and provide training to DOLIDAR, provincial and district officials to enable DOLIDAR to restructure and adopt a new institutional and management structure. New business procedures will cover (i) procurement and contracting processes, (ii) planning processes, (iii) quality assurance systems, and (iv) engineering (pavement design, road maintenance, and road safety).

B. Scope of Services

2. The consultants will undertake the services in close consultation with the Director General and Deputy Director General (DDG), DOLIDAR. They will conduct training and workshops as required. Sector-wide consultations will be conducted to disseminate the concepts of the sector development initiative.

3. For a long-term framework, splitting the functions of road development policy and programming from project implementation is often effective, while the government would determine the extent to which DOLIDAR could be given an autonomous status for executing the project, e.g., project preparation, design, bidding, contract awards, and management. This will ensure efficient decision making for project implementation and help build up expertise in outsourcing of technical work and understanding FIDIC.

4. ¹

5. The consultant will be expected to undertake the following tasks:

- (i) Recommend an appropriate institutional structure for managing the overall rural road network
- (ii) Recommend appropriate management structures for managing each layer of the rural road network
- (iii) Recommend and implement new business procedures, and provide training to DOLIDAR staff to enable restructuring and adoption of a new institutional and management structure

1. Institutional Framework

6. The main task of the consultants is to seek agreement from various levels of rural road functionaries involved on how roads are to be administered. They will be expected to (i) examine the realigning of the rural road network, functioning and administration with the likely decentralization of the Nepal Government structure into Provincial system; (ii) identify the various levels responsible for the rural roads and their jurisdiction; (iii) identify functions and powers at

¹ Federation Internationale Des Ingenieurs-Conseils

the central level² vis-à-vis Provincial rural roads set-up; and (iv) examine the good practices being followed in other countries³ and feasibility of the lessons learned being adopted for effective rural roads management.

7. **Implementation Arrangements.** As per the implementation arrangements agreed for the RCIP, there will be 5 provincially based PIUs to provide close technical support and supervision on (i) planning, preparation, implementation, and quality management of physical works, and (ii) compliance with ADB's safeguard requirements in 16 project districts. Each PIU will oversee a cluster of districts within their geographical unit at the provincial level to provide close field-based support to assist and oversee project implementation. This structure is in line with the new government federal system. Each PIU will be headed by a senior divisional engineer and he will be supported by full time staffs. There will also be 8 District Technical Offices (DTOs) acting as field offices and will lead the implementation of individual civil works packages. Each DTO will designate engineers from its full time permanent staff, presently under the control of the DOLIDAR, while these offices remain in existence; and once the provincial set-up is in place, the permanent engineers in the PIUs will continue to work in the PIUs for the RCIP.

2. Management Structures

8. The institutional analysis should determine how each part of the rural road network is to be managed. The task is to recommend appropriate organization and management structures for DOLIDAR. The intention is to do most road works under contract and should thus be primarily staffed to plan and manage the road network, and to hire and supervise consultants and contractors to carry out any required civil works. ***The management structure must ensure smooth transition from the present system based on Districts to that of States in due course so that the RCIP in no way be affected.***

9. The consultant will be expected to undertake the following tasks:

- (i) Recommend an appropriate organization structure for DOLIDAR. Recommend the management structure, e.g., chief executive officer (CEO) and line managers.
- (ii) Define the middle-management structure. Arrangements should articulate the regional structure of the proposed organization. Proposals should indicate the middle management structure, and how it relates to the CEO.
- (iii) Propose suitable financial reporting and accounting arrangements. Proposals should include recommended formats for simple accounts to help DOLIDAR maintain effective financial control; including identification of costs by activity and project; and preparation of a consolidated income statement, partial balance sheet, and cash flow statement. Advise on the most appropriate way of reflecting shortfalls in regular road maintenance and erosion of capital in the accounts.
- (iv) Propose (a) arrangements for establishing a performance-based budgeting system for planning, implementing, and monitoring road maintenance; and (b) an appropriate auditing system, including internal audit and control procedures, with independent external audit arrangements.
- (v) Recommend how DOLIDAR should deal with planning and management of rural road network.

² Department of Local Infrastructure Development and Agricultural Roads

³ The rural roads in India are administered by the Ministry of Rural Development (MoRD) through National Rural Roads Agency (NRRDA) as the EA and State Rural Road Agency (SRRDA) at the State level as the IA.

3. Business Procedures

10. Adherence to old codes and procedures sometimes cause delays in preparing and implementing projects. Decision making is not sufficiently decentralized and operating decisions are delayed due to too many layers of interventions. There is a need to streamline business procedures and introduce internationally recognized systems and practices for procurement, quality management, planning, contract and project management, and financial management.

11. The consultants are to help DOLIDAR and other layers of its jurisdiction, once identified and agreed by the MOFALD, to become modern rural road management agencies. This requires introducing new business procedures for new institutional and management structures, covering (i) procurement and contracting processes, (ii) planning processes, (iii) quality assurance systems, (iv) engineering (pavement design, maintenance methods, and road safety), and (v) human resource management.

a. Project and Contract Management and Procurement Processes

12. The consultants will undertake the following:

- (i) Enhance computerized project management tools, train engineers, and implement standardized reporting systems in project and contract management.
- (ii) Conduct training of PIUs and contractors on e-procurement
- (iii) Refine standard bid documents and request for proposals using international best practices.
- (iv) Assess several modalities to maintain rural roads including some of the best tried practices,⁴ and assist DOLIDAR develop and test several contracting modalities to maintain rural roads.

b. Planning Processes

13. The consultants will undertake the following:

- (i) Develop norms for rural road development and maintenance, and implement these in planning and design.
- (ii) Establish planning practices and train engineers at the PIU and other levels based on international best practices.

c. Quality Assurance

14. The consultants will undertake the following:

- (i) Establish a quality assurance strategy and arrangement, including quality management manual, procedures, and reporting system, taking into account the rural road network.
- (ii) Train the staff to use the manual. Assist DOLIDAR operationalize the manual and reporting system.
- (iii) Help DOLIDAR identify, prepare specifications, and procure testing equipment and

⁴ In India for the Rural Roads, the contract for the construction includes 5 years maintenance period and the maintenance costs are fixed depending on each road on the basis of incremental costs each year with maximum maintenance cost in the 5th year and minimum in the 1st. year after construction.

facilities for quality management system.

d. Engineering Practices

15. The consultants will establish manuals to include inspection reports for maintenance, annual maintenance audit report, do's and don'ts for maintenance of pavements especially pertaining to shoulders and drainage. They will introduce internationally proven systems for road safety and prepare a manual to include road safety audit as applicable to the mountainous and "Terai" terrains where the rural roads are proposed under the RCIP.

e. Legal Expert

16. In view of the present implementation arrangements (refer para. 6 above) and the future decentralization to provincial governments, for the smooth continuation of the RCIP, the legal expert will undertake the following:

- (i) Through policy dialogues, develop a legal mechanism like a Memorandum of Agreement (MOA) or Understanding (MOU) between the DOLIDAR and the Provincial Government ensuring the preservation of the DOLIDAR-DTO/PIU structure to sustain the implementation of the project.
- (ii) The MOA/U basically provides the guiding principles between the DOLIDAR and the Provincial Government to perform their constitutional mandates by further defining their roles and responsibilities in implementing rural road development.
- (iii) There is a need to explore if a coordinating council/unit was tasked with implementing the federalization, and involve them in the dialogue to moderate the potential biases of the states and include them in the agreement/understanding.

17. The consultants will provide ADB with progress reports on the institutional strengthening action plan, including achievements, problems, and policy recommendations. They will prepare specific reports in accordance with the terms of reference. Upon completion of their services, the consultants will prepare a draft final report covering all tasks and a final report 30 days after the tripartite review meeting with DOLIDAR, ADB, and the consultants.

18. The consultants, in consultation with DOLIDAR, will prepare and conduct a training program in the areas specified in their terms of reference, including selection criteria for candidates, training objectives, and cost estimates.

C. Staffing in Person-Months

No.	Position/Source	Person – Months (International)	Person – Months (National)
1	Team Leader Cum Rural Roads Network Management Expert (International)	10	
2	Contract and Project Management Specialist (International)	4	
3	Rural Roads Planning Specialist (National)		6
4	Quality Assurance Specialist (National)		6
5	Road Maintenance and Pavement Specialist (National)		8

No.	Position/Source	Person – Months (International)	Person – Months (National)
6	Road Safety Specialist (International)	2	
7	Legal Expert (National)		4
	Total Person – Months	16	24

**Attachment F: GESI Action Plan Reporting Template
(Quarter/Year)**

Project Title:
Country:
Project No:
Type of Project: Loan
Approval and Timeline:
Gender Category: EGM
Mission Leader:
Project Impact:
Project Outcome:

GENDER EQUALITY AND SOCIAL INCLUSION ACTION PLAN PROGRESS STATUS

Activity/Measures, Indicators/Targets and Responsibility(Timing)	Progress to Date (This should include information on period of actual implementation, sex-disaggregated qualitative and quantitative updates (e.g. number of participating women, women beneficiaries of services, etc.)	Issues and Challenges (Please include reasons why as activity was not fully implemented, of if target fall short, or reasons for delay, etc.)
Component/Output 1:		
Activity: Indicator/Target: Responsibility:		
Component/Output 2:		
Activity: Indicator/Target: Responsibility:		
Component/Output 3:		
Activity: Indicator/Target: Responsibility:		