

III. Appendices

APPENDIX A: TERMS OF REFERENCE

**Detailed Project Report Consultant (DPRC) Under
Rural Connectivity Improvement Project – Additional Financing
(Package No - CS-04/RCIP/PMU/DPRC)**

A. Background

1. During the past decades, rural infrastructure in Bangladesh significantly improved. Despite progress, rural connectivity in Bangladesh remains weak, impeding the physical and economic access. Only 40% rural population has access to all-weather roads, and these roads make up less than 30% of the total length of rural roads in the country. Lack of timely maintenance caused faster deterioration in roads with huge rehabilitation backlog. The maintenance budgets, covering only 35% of needs, are inadequate. The government has proposed to increase the percentage of rural roads classified as good from 43% in 2016 to 80% in 2020.² The Local Government Engineering Department (LGED) has launched a road maintenance policy in 2013 to overhaul the rural road maintenance program.

2. The Rural Connectivity Improvement Project (RCIP) and its additional financing (RCIP-AF) support the LGED's maintenance program for the rural roads in districts vulnerable to climate variability and change. The expanded climate-resilient infrastructure in the adjacent rural areas will provide year-round connectivity between agricultural production areas and markets and to other parts of the country. RCIP and RCIP-AF will improve the maintenance of the rural roads to climate-resilient standards with a focus on results. The impact is connectivity among rural communities, productive agricultural areas, and socioeconomic centers in Bangladesh improved. The outcome is transport efficiency and related employment generated in target areas increased. The key outputs include (i) Rural road conditions between selected rural communities, productive agricultural areas, and socioeconomic centers improved; (ii) Capacity of rural infrastructure agency and road users in project areas enhanced; and (iii) Rural road master planning enhanced. RCIP-AF will also support the preparation of the detailed project report (DPR) for a possible follow-on project (2nd Rural Connectivity Improvement Project – RCIP-II) to be financed by the Asian Development Bank (ADB) and that will scale-up RCIP outputs.

B. Objective of the Assignment

3. The main objective of the DPRC is to support LGED to prepare the project. Project preparation include (i) preparation of the feasibility study and detailed project reports of rural road infrastructure works; (ii) preparation of the project planning, reporting and financial management; (iii) preparation of the economic and financial analysis in accordance with ADB's guidelines, and (iv) preparation of the loan documents for ADB Board consideration including all necessary technical, economic, financial, procurement and safeguard due diligence reports as required by the Government of Bangladesh and ADB.

² Good roads comprise both all-weather (paved) and gravel roads

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C. Overall Scope of Services

4. The overall scope of services of the assignment shall include but not be limited to:
- (i) Climate risks and vulnerability assessment of project areas; assessment of climate change scenarios in 35 districts;
 - (ii) Results-Based Lending Program preparation and assessment. Assess the suitability of results-based lending (RBL) modality focusing on achieving key output level results to meet the LGED's maintenance program for rural roads. Disbursement-linked indicators (DLIs) and program actions will contribute to realizing the program objectives through interrelated results areas;
 - (iii) Feasibility studies covering around 2500km of (About 450 no. of rural roads) rural roads in 27 districts; They are Sirajganj, Pabna, Khulna, Bagerhat, Satkhira, Perojpure, Baguna, Patuakhali, Bhola, Jalokathi, Barisal, Dhaka, Munsiganj, Manikganj, Narayanganj, Narshindi, Tangail, Mymensingh, Jamalpur, Sherpur, Netrokona, Kishoreganj, Hobiganj, Moulavibazar, Sylhet, Sunamganj
 - (iv) Conducting Engineering Survey including road condition survey, traffic survey, social survey, environmental survey, topographic survey, soil and material survey, hydrological survey and existing structure and protective works survey, Preparing detailed climate-resilient engineering designs and estimate in collaboration with assessment and inclusion of road safety features, bidding documents and bill of quantities (BOQ);
 - (v) Assessment of the selection and eligibility criteria; development of technical, economic, social, and environmental criteria for screening and selecting schemes to be upgraded under the project;
 - (vi) Construction and maintenance cost estimates for sub-project selected for upgrading;
 - (vii) Cost estimates for climate proofing infrastructure proposed for improvement;
 - (viii) Sector analysis, design and monitoring framework including baseline data;
 - (ix) Economic and financial analysis; financial management assessment, cost estimates and financing plan;
 - (x) Terms of reference for consulting services for the upcoming investment project;
 - (xi) Gender assessment and action plan; social and safeguards assessment (environment, involuntary resettlement, and indigenous peoples);
 - (xii) Comprehensive project proposal in a format suitable for ADB loan processing.
 - (xiii) Implementation arrangements and project administration manual (PAM);
 - (xiv) Capacity and awareness workshops/training for stakeholders on climate change adaptation;
 - (xv) Lessons from implementation and recommendations for scaling-up and replication in other areas in Bangladesh and possibly other countries as well; and
 - (xvi) Preparation of draft DPP according to government format.

D. Output and Reporting Requirements

5. The consultant team will submit the following reports to LGED:

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Table1: Reporting Requirements

Sl. No.	Report	Frequency	Due Period	No. of Copies	In CD or Flash Disk
01	Inception Report	One Time	Within 30 days of mobilization	5	2
02	Quarterly Reports	Every three months	10 th of month following the reporting quarter	5	2
03	Midterm Review Report	One time	After 10 Months.	5	2
04	Annual Reports	Every year	1 month after completion of 1 st year	5	2
05	Scheme wise – Draft Detailed Project Reports (DPR)	One Time	2 month prior to end of the assignment	2	-
06	Scheme wise – Detail Project Report (DPR) of all Project Roads	One Time	At the end of the assignment.	2	2
07	Draft Project Completion Report	One time	At the end of the assignment	5	2
08	Final Project Completion Report	One Time	1 month after end of the assignment.	7	2
09	Technical Reports (feasibility study and detailed designs, bidding documents, BOQ, Cost Estimate)	One Time	1 month prior to end of the assignment	5	2
10	Draft report and recommendation of the President (RRP) and all related linked documents (LDs) in ADB format, including all social and environmental safeguard documents	One Time	1 month prior to end of the assignment	5	2
11	Operational and instructional manuals and special reports	As Required	During the assignment	5	2

- (i) Inception Report within 30 days of mobilization. The report will provide details for project implementation including specific detail for the initial 12 months.
- (ii) Quarterly Reports summarizing briefly accomplishments over the previous three months including details of physical and financial progress, capacity building and training, and consultants' activities, any issues and resolution of these, and a work plan for the following three months.
- (iii) Mid-term Review Reports based on Quarterly Reports, summarizing all activities to date, any issues and methods for resolution of these, and planning to achieve future implementation targets.
- (iv) Annual Report which will consolidate the Mid-term Review Reports and focus on issues during implementation and include a program for completion of the Project.

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- (v) Project Completion Report at the end of the assignment.
 - (vi) Technical reports including feasibility study and detailed designs, bidding documents, BOQ;
 - (vii) Draft report and recommendation of the President (RRP) and all related linked documents (LDs) in ADB format, including all social and environmental safeguard documents.
 - (viii) Operational and instructional manuals and special reports as may be reasonably required by LGED.

6. The consultants' outputs will include contributions to the project's milestones, relating to their expertise. All consultant specialist staff is required to coordinate and integrate their activities as necessary. Each individual international and national consultant specialist staff will deliver, to the Team Leader, an inception report, regular progress reports, and a final report on the completion of his/her inputs to project preparation, in accordance with his/her terms of reference. The Team Leader will determine the timing of each consultant specialist staff's outputs at the outset of their involvement with the project, and deliver their reports, with comments on quality, to LGED.

7. The consultant is responsible for their own health and safety in relation to the consulting services assignment and shall comply with the country specific requirements and regulations in relation to COVID-19.

- i. Review the Site-Specific Health and Safety Management Plan (SSHSMP) for the Project that is prepared and submitted by the Contractor. Then, make recommendation to the Employer in relation to the approval of the SSHSMP. Communicate the approved SSHSMP to all consultants and contractors throughout all project stages. Should any unforeseen events occur, review the updated SSHSMP and make recommendation to the Employer in relation to the approval of the SSHSMP.
- ii. In addition to the obligation to maintain safety on site, the SC will be required to undertake formal monthly safety audits throughout all stages of the Project
- iii. Prepare the Project Execution Plan, which inter alia, includes how management of SSHSMP is to be addressed throughout all stages of the Project."

E. Institutional Arrangements

8. A pool of international and national consultants will be engaged through the consulting firms. The team leader and the key consultants will work directly with the project management unit (PMU) in Dhaka, headed by the Project Director (PD) of the project. The international team leader will be based at Project Consultants' Office in Dhaka. The other divisional consultant team such as Environmental Engineers, Civil Engineers, Estimators, Surveyors etc. will be based at Consultants' Office in Divisions.



F. Staffing inputs

9. The consulting services will require the experts shown in Table 2 on an intermittent basis over 20 months.

Table 2: Required Consulting Services

Consultancy Package		No. of Staff	Person-month
Detailed Project Report Consultant (DPRC)			
A. International Consultants:			
1.	Rural Infrastructure Specialist (Team Leader)	1	20
2.	Climate Change Specialist	1	8
3.	Result Based Lending (RBL) specialist	1	3
4.	Project Economist	1	8
5.	Senior Rural Infrastructure Engineer	1	10
Subtotal A:		5	49
B. National Consultants:			
6.	Senior Rural Infrastructure Engineer (Deputy Team Leader)	1	20
7.	Climate Change Specialist	1	8
8.	Result Based Lending (RBL) specialist	1	6
9.	Project Economist	1	8
10.	Deputy Rural Infrastructure Engineer	2	20
11.	Environmental Specialist	1	8
12.	Social Safeguard Specialist	1	8
13.	Poverty Reduction Specialist	1	8
14.	Social Development and Gender Specialist	1	8
15.	Financial Management Specialist	1	8
16.	Procurement Specialist	1	8
Subtotal B:		12	110
Total [Key Experts]		17	159
C. Non-Key Staff			
01.	Road Safety Expert	1	8
02.	Hydrologist	1	8
03.	Environmental Engineer	3	45
04.	Civil Engineer	15	150
05.	GIS Officer	2	20
06.	Social Safeguard Officer	1	8
07.	Poverty Reduction Officer	1	8
08.	Social Development and Gender Officer	1	8
09.	Surveyor	20	200
10.	Estimator	20	200
11.	CADD Operator	2	24
Subtotal C:		67	679
D. Support Staff			
01.	Secretary / Manager	1	20

02.	Computer Operator	2	40
03.	Accountant	1	20
04.	Office support staff	10	200
	Subtotal D:	14	280
	Grand Total [Key Expert + Non-key + Support Staff]	98	1118

G. Qualification, Experience Requirements and Job Responsibility of Key Personnel

10. The services will require 5 international consultants for 49 person-months and 12 national consultants for 110 person-months, all with substantial experience relevant to climate change and rural infrastructure development in Bangladesh, with some provision of 67 non-key and 14 support staffs for 679 person-months and 280 person-months respectively. It is noted that CV of only the Key-Experts will be evaluated. However, the CV of non-key experts shall be submitted along with the CV of the key experts during proposal submission.

Table3: Qualification and Experience Requirements

Sl. No.	Position	Qualification
International Experts		
01	Rural Infrastructure Specialist/Team Leader	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in Civil Engineering or equivalent with post graduate degree in civil engineering/ transportation/ highway/ pavement from a recognized university. • Minimum 5 years' experience as a TL/PM in road construction and maintenance project • At least 20 years international work experience including in developing countries in planning and designing rural infrastructure projects • Work experience in south Asia region will be an advantage
02	Climate Change Specialists	<ul style="list-style-type: none"> • Minimum Bachelor's degree in Civil Engineering/ Environmental Engineering/ Environmental Science with post graduate degree in climate sciences/ environmental sciences/ earth sciences/ natural resource economics or equivalent. • Minimum 15 years' work experience in climate assessment and designing climate-resilient infrastructure projects • At least 18 year Professional Experience • Experience in multiple countries is preferable
03	Result Based Lending	<ul style="list-style-type: none"> • Minimum Bachelor's degree in economics

Sl. No.	Position	Qualification
	(RBL) specialist	<p>with post graduate degree in economics/Transport Economics or equivalent.</p> <ul style="list-style-type: none"> • Minimum 15 years' work experience in project design and planning with a post graduate degree in economics or related areas. • Experience in multiple countries is preferable
04	Project Economists	<ul style="list-style-type: none"> • Minimum Bachelor's degree in economics with post graduate degree in economics/Transport Economics/Statistics or equivalent. • 15 years' work experience in agriculture and rural infrastructure projects • At least 18 year Professional Experience • Experience in multiple countries is preferable
05	Senior Rural Infrastructure Engineer	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in civil/highway engineering or equivalent • Minimum 15 years extensive experience in the design and implementation of rural road projects • At least 18 year Professional Experience • Experience in multiple countries is preferable
National Experts		
01	Senior Rural Infrastructure Engineer/ Deputy Team Leader	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in civil/highway engineering or equivalent. • At least 15 years extensive experience in the design and implementation of rural road projects including 5 years in a senior advisory role or managerial level on transport sector project(s). • Experience in rural road Planning and designing preferably for Multilateral Development Bank (MDB) or equivalent financed projects
02	Climate Change Specialists	<ul style="list-style-type: none"> • Minimum Bachelor's degree in Civil Engineering/ Environmental Engineering/ Environmental Science with post graduate degree in climate sciences/ environmental sciences/ earth sciences/ natural resource economics or equivalent. • Minimum 15 years' work experience in climate assessment and designing climate-resilient infrastructure projects

Sl. No.	Position	Qualification
		<ul style="list-style-type: none"> • At least 18 year Professional Experience • Experiences in MDB or equivalent financed projects are preferred.
03	Result Based Lending (RBL) specialist	<ul style="list-style-type: none"> • Minimum Bachelor's degree in economics with post graduate degree in economics/Transport Economics or equivalent. • At least 15 years' work experience in project design and planning with a post graduate degree in economics or related areas. • Experiences in MDB or equivalent financed projects are preferred.
04	Project Economists	<ul style="list-style-type: none"> • Minimum Bachelor's degree in economics with post graduate degree in economics/Transport Economics/Statistics or equivalent. • Minimum 15 years' work experience in agriculture and rural infrastructure projects • At least 18 year Professional Experience • Experiences in MDB or equivalent financed projects are preferred.
05	Deputy Rural Infrastructure Engineer (2Nos)	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in civil/highway engineering or equivalent. • Minimum 10 years extensive experience in the design and implementation of rural road projects • At least 12 year Professional Experience • Experience in MDB or equivalent financed projects is preferred
06	Environmental Specialist	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in Civil Engineering/ Environmental Engineering/ Environmental Science with post graduate degree in Environmental Engineering/Environmental Science • Minimum 10 years' work experience on environmental issues, assessing, reviewing, and designing climate resilient roads in development projects • At least 12 year Professional Experience • Experience in MDB or equivalent financed projects is preferred
07	Social Safeguard Specialist	<ul style="list-style-type: none"> • Minimum Bachelor Degree on Social Science with post graduate degree in social science, sociology, gender, anthropology

Sl. No.	Position	Qualification
		<ul style="list-style-type: none"> • Minimum 10 years' work experience in community development or awareness projects, social safeguards, resettlement matters, or safeguard issues • At least 18 year Professional Experience • Experience in MDB or equivalent financed projects is preferred
08	Poverty Reduction Specialist	<ul style="list-style-type: none"> • Minimum Bachelor's degree in economics with post graduate degree in Economics, Development Economics, Social Sciences (Sociology, Anthropology, etc.). A Doctoral Degree in the aforementioned disciplines will be an added advantage • Minimum 10 years work experience on poverty issues in development projects • At least 18 year Professional Experience • Must have Experience in MDB or equivalent financed projects is preferred
09	Social Development and Gender Specialist	<ul style="list-style-type: none"> • Minimum Bachelor Degree on Social Science with post graduate degree in social science, sociology, gender. • Minimum 10 years work experience on gender mainstreaming and community development issues in development projects • At least 12 year Professional Experience • Experience in MDB or equivalent financed projects is preferred
10	Financial Management Specialist	<ul style="list-style-type: none"> • Minimum Bachelor Degree in Finance with CA/CPA/ Master's degree in financial management or business administration or equivalent degree. • At least 10 years' work experience on financial management assessment • Experience in MDB or equivalent financed projects is preferred
11	Procurement Specialist	<ul style="list-style-type: none"> • Minimum Bachelor in Civil Engineering with post graduate degree in procurement/Supply Chain/MCIPS • At least 10 years work experience in procurement • Experience in MDB or equivalent financed projects is preferred
Non-Key Experts		
01	Road Safety Expert	<ul style="list-style-type: none"> • Minimum Bachelor Degree in Civil

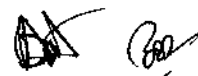
Sl. No.	Position	Qualification
		<p>Engineering with post graduate degree in transportation/road safety</p> <ul style="list-style-type: none"> • Minimum 5 years of experience in pavement design/construction and at least 1 year experience in road safety. • At least 10 year Professional Experience • Experience in MDB or equivalent financed projects is preferred
02	Hydrologist	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in civil/ water resource engineering/ hydrology with post graduate degree in civil/ water resources engineering/hydrology or equivalent. • Minimum 5 years extensive experience in the design and implementation of rural road projects • At least 10 year Professional Experience • Experience in MDB or equivalent financed projects is preferred
03	Environmental Engineer (3Nos)	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in Civil Engineering/ Environmental Engineering/ Environmental Science or equivalent. • Minimum 2 years' work experience on environmental issues in development projects • At least 5 year Professional Experience • Experience in MDB or equivalent financed projects is preferred
04	Civil Engineer (15Nos)	<ul style="list-style-type: none"> • Minimum Bachelor Degree in Civil Engineering or equivalent • Minimum 1 year experience in Road project. • At least 2 year professional experience
05	GIS Officer (2Nos)	<ul style="list-style-type: none"> • Minimum Bachelor Degree in Geography, URP or equivalent • Minimum 1 year experience in GIS • At least 2 years' professional experience
06	Social Safeguard Officer	<ul style="list-style-type: none"> • Minimum Bachelor Degree on Social Science with post graduate degree in social science, sociology, gender, anthropology or equivalent • Minimum 1 year work experience in community development or awareness projects, social safeguards, resettlement matters, or safeguard issues • At least 2 year Professional Experience
07	Poverty Reduction Officer	<ul style="list-style-type: none"> • Minimum Bachelor Degree on Social Science

Sl. No.	Position	Qualification
		<p>with post graduate degree in social science, sociology, gender, anthropology or equivalent</p> <ul style="list-style-type: none"> • Minimum 1 year work experience in community development or awareness projects, social safeguards, resettlement matters, or safeguard issues • At least 2 year Professional Experience
08	Social Development and Gender Officer	<ul style="list-style-type: none"> • Minimum Bachelor Degree on Social Science with post graduate degree in social science, sociology, gender, anthropology or equivalent • Minimum 1 year work experience in community development or awareness projects, social safeguards, resettlement matters, or safeguard issues • At least 2 year Professional Experience
09	Surveyor (20Nos)	<ul style="list-style-type: none"> • Minimum Diploma in Civil Engineering/Survey or equivalent • Minimum 1 year experience in Road project • At least 2 year professional experience
10	Estimator (20Nos)	<ul style="list-style-type: none"> • Minimum Diploma in Civil Engineering or equivalent • Minimum 1 year experience in Road project • At least 2 year professional experience
11	CADD Operator (2Nos)	<ul style="list-style-type: none"> • Minimum Diploma in Civil Engineering or equivalent • Minimum 1 year experience in Road project • At least 2 years' professional experience

11. **Rural Infrastructure Specialist/Team Leader (international, 20 person-months).** Rural Infrastructure Specialist/Team Leader shall have at least 20 years international work experience including in developing countries in planning and designing rural infrastructure projects with a post graduate degree in civil engineering or related areas.

- (i) The team leader will manage the team and prepare a comprehensive project proposal in consultation with the stakeholders including the Ministry of Finance, Ministry of Local Government, Rural Development and Cooperatives, LGED and local communities in a format suitable for ADB loan processing.
- (ii) The team leader will be responsible to prepare the project proposal including detailed climate-resilient engineering designs, bidding documents and bill of quantities; climate risks and vulnerability assessment of project areas; sector analysis, RRP and LDs, design and monitoring framework including baseline data; economic and financial analysis; financial management assessment, cost estimates and financing plan; terms of reference for consulting services; gender assessment and action plan; social

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and safeguard assessment (environment, involuntary resettlement, and indigenous peoples); implementation arrangements; and DPR for the ensuing project.

(iii) Team leader will also be responsible for production of inception, midterm, and draft and final reports.

12. Climate Change Specialists (international, 8 person-months; national, 8 person-months). Climate Change Specialists will be responsible for

- (i) Conducting climate change impact, vulnerability and adaptation assessments;
- (ii) Identifying all potential adaptation solutions, including soft and hard measures; and
- (iii) Incorporating selected adaptation priorities into the project design, including institutional arrangements and budget.

13. Result Based Lending (RBL) Specialists (international, 3 person-months; national, 6 person-months). RBL specialists will be responsible for RBL program preparation and assessment. The specific responsibilities include

- (i) preparation for program technical assessment which covers program soundness, expenditure and financing framework, disbursement-linked indicators;
- (ii) program system assessments including the monitoring and evaluation (M&E) systems, the fiduciary systems, the environmental and social systems, and other institutional and system aspects, as relevant and appropriate to the program; and
- (iii) Preparing program implementation document (PID).

14. Project Economists (international, 8 person-months; national, 8 person-months). The economists will

- (i) prepare the project's detailed budget and investment plan based on the detailed design cost;
- (ii) analyze policy distortions and recommend appropriate policy adjustments; and
- (iii) Undertake a detailed economic and financial analysis of the project in accordance with ADB's Guidelines on the economic analysis of projects.

15. Senior Rural Infrastructure Engineers/Deputy Team Leader (international, 10 person-months; national 20 person-months). The national Senior Rural Infrastructure Engineer will also be the deputy team leader. The engineers will

- (i) assist the team leader in feasibility study, preparing detailed climate-resilient engineering designs, bidding documents and BOQ;
- (ii) assess the selection and eligibility criteria;
- (iii) develop technical, economic, social, and environmental criteria for screening and selecting schemes to be upgraded under the project;
- (iv) verify construction and maintenance cost estimates for sub-project selected for upgrading; and
- (v) Check and finalize cost estimates for climate proofing infrastructure proposed for improvement.

16. Deputy Rural Infrastructure Engineer (national, 20 person-months). Deputy Rural Infrastructure Engineer will assist the Senior Rural Infrastructure Engineers

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- (i) in feasibility study, preparing detailed climate-resilient engineering designs, bidding documents and BOQ;
 - (ii) assessing the selection and eligibility criteria;
 - (iii) developing technical, economic, social, and environmental criteria for screening and selecting schemes to be upgraded under the project;
 - (iv) verifying construction and maintenance cost estimates for sub-project selected for upgrading; and
 - (v) Checking and finalizing cost estimates for climate proofing infrastructure proposed for improvement.

17. **Hydrologist (national, 8 person-months).** The hydrologist will

- (i) recommend options for improving design criteria of the rural infrastructures (roads, embankments, bridges, culverts, etc.) based hydrological analysis considering climate change scenario;
- (ii) review lessons learned from previous rural infrastructure projects of LGED from hydrological analysis perspective; and
- (iii) Provide support to the design engineers to come up with an improved climate resilient rural infrastructure design.

18. **Environmental Specialist (national, 8 person-months).** The consultant will prepare safeguard documents including the project's likely positive and negative environmental impacts and risks, identifying the safeguard principles applicable to project and preparing a matrix how the environmental safeguards are triggered by the project. Detailed tasks include

- (i) the preparation of a diagnostic assessment of applicable and relevant laws, regulations, rules, and procedures for managing and mitigating the likely impacts of the project (focusing on the ADB's Safeguard Policy Statement, 2009 as updated time to time, principles);
- (ii) assessment on the country's implementation practice, capacity, and commitment to plan, implement, monitor, and report on the safeguard measures for the project;
- (iii) gap assessment and preparation of safeguard related project actions to address the identified weaknesses, including consideration on the need for capacity strengthening measures (such as through consultant or technical assistance support); and
- (iv) Identification of measures for monitoring environmental safeguard systems performance.

19. **Social Safeguard Specialist (national, 8 person-months).** The consultant will prepare safeguard documents including the project's likely positive and negative involuntary resettlement, and indigenous people's impacts and risks, identifying the safeguard principles applicable and preparing a matrix how the involuntary resettlement, and indigenous peoples safeguards are triggered by the project. Detailed tasks include

- (i) the preparation of a diagnostic assessment of applicable and relevant laws, regulations, rules, and procedures for managing and mitigating the likely impacts of the project (focusing on the ADB's Safeguard Policy Statement, 2009 as updated time to time, policy principles);
- (ii) assessment on the country's implementation practice, capacity, and commitment to plan, implement, monitor, and report on the safeguard measures for the project;





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- (iii) gap assessment and preparation of safeguard related project actions to address the identified weaknesses, including consideration on the need for capacity strengthening measures (such as through consultant or technical assistance support); and
 - (iv) Identification of measures for monitoring social safeguard systems performance.
20. **Poverty Reduction Specialist (national, 8 person-months).** The poverty reduction specialist will
- (i) collect socioeconomic data as required;
 - (ii) analyze the socioeconomic data required for benchmark information on poverty and its distribution and for poverty impact ratio analyses;
 - (iii) develop poverty and social selection criteria; and
 - (iv) Develop a results-based monitoring and evaluation system.
21. **Social Development and Gender Specialist (national, 8 person-months).** The gender specialist will
- (i) gather gender related data and information and develop and suggest mechanisms whereby degree of women's effective participation can be improved in management, as users and as beneficiaries;
 - (ii) recommend steps to incorporate gender criteria into the project monitoring system;
 - (iii) prepare a budget for gender and development activities; and
 - (iv) Prepare gender related actions.
22. **Financial Management Specialist (national, 8 person-months).** The financial management specialist will
- (i) assess the government's expenditure framework for the project including the government annual budget, the medium-term expenditure framework covering the effectiveness, efficiency and economy, and adequacy of the expenditure framework for the project;
 - (ii) assess the adequacy and sustainability of the financing plan for the project;
 - (iii) conduct the fiduciary related financial management system assessment covering the accountability and transparency of the financial management system; and
 - (iv) Prepare the risk mitigation measures and actions.
23. **Procurement Specialist (national, 8 person-months).** The specialist will
- (i) advise and assist in the preparing suitable bid documents for the different types of project works packages,
 - (ii) prepare standard bid documents templates for the different types of contract packages to be used in the project,
 - (iii) assist team leader and the PMU in preparing procurement plans including annual procurement plans for goods and works and suggest methods to be used,
 - (iv) assess ongoing procurement reforms including e-procurement in the country, and feedback from the donor funded projects on the systemic issues, and
 - (v) Suggest how the procurement can be further strengthened through this project.
24. **Road Safety Expert (national, 8 person-months).** The specialist will

- (i) Take stock of the prevailing situation and trends by studying accident data and reviewing reports;
- (ii) review the Traffic Safety Plan and the accident statistics of the project area (district/upazila) and carry out detailed road traffic safety inspection to be able to select and design work to meet up the project objectives;
- (iii) assist the Senior Rural Infrastructure Engineers (National and International)/ deputy Rural Infrastructure Engineers in his/her works and carry out the detailed design and cost estimates for the road safety component;
- (iv) conduct road safety audit/inspection on sample roads (at least one from each district and document the issues and the counter measures (engineering and non-engineering);
- (v) identify one project district with maximum accident rate and conduct road safety training in that district vigorously, and assess the impact of the proposed activities in reduced accident incidents

25. Environmental Engineer (national, 45 person-months). The consultant will assist Environment expert to prepare safeguard documents including the project's likely positive and negative environmental impacts and risks, identifying the safeguard principles applicable to project and preparing a matrix how the environmental safeguards are triggered by the project. Detailed tasks include

- (i) Assist in the preparation of a diagnostic assessment of applicable and relevant laws, regulations, rules, and procedures for managing and mitigating the likely impacts of the project (focusing on the ADB's Safeguard Policy Statement, 2009 principles);
- (ii) Assist in assessment on the country's implementation practice, capacity, and commitment to plan, implement, monitor, and report on the safeguard measures for the project;
- (iii) Assist in gap assessment and preparation of safeguard related project actions to address the identified weaknesses, including consideration on the need for capacity strengthening measures (such as through consultant or technical assistance support); and
- (iv) Assist in identification of measures for monitoring environmental safeguard systems performance
- (v) Assist in preparation of scheme wise Detail Project Reports (DPR)
- (vi) Any other task given by the Team Leader/Deputy Team Leader

26. Civil Engineer (national, 150 person-months). Detailed tasks are

- (i) Overall Monitoring of the Survey and Estimate for all the project road with all the required data ;
- (ii) Assist in preparation of the Detail Project report
- (iii) Any other task given by the Team Leader/Deputy Team Leader

27. GIS Officer (national, 20 person-months). Detailed tasks are

- (i) Create GIS based road map with required data;
- (ii) Assist in preparation of the Detail Project report

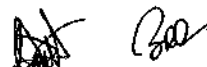
28. Social Safeguard Officer (national, 8 person-months). Detailed tasks are

- (i) Collect social safeguard data; and
- (ii) Assist Social Safeguard Specialist in preparation of the detail Project report.

29. Poverty Reduction Officer (national, 8 person-months). Detailed tasks are

- (i) Collect poverty reduction data; and





- (ii) Assist Poverty Reduction Specialist in preparation of the detail Project report.
30. **Social Development and Gender Officer (national, 8 person-months).** Detailed tasks are
- (i) Collect social development and gender data; and
- (ii) Assist Social Development and Gender Specialist in preparation of the detail Project report
31. **Surveyor (national, 200 person-months).** Detailed tasks are
- (i) Survey all the project road with all the required data;
- (ii) Assist in preparation of the Detail Project report.
32. **Estimator (national, 200 person-months).** Detailed tasks are
- (i) Prepare Estimate of all the project roads;
- (ii) Assist in preparation of the Detail Project report.
33. **CAD Operator (national, 24 person-months).** Detailed tasks are
- (i) Prepare design of all the project roads;
- (ii) Assist in preparation of the Detail Project report

H. Payment Schedule

34. The payment schedule of the assignment is as follows (each payment shall be made after successful submission the report and duly accepted by the client):

Sl. No.	Deliverables	Payment of contracted amount (%)	Payment Condition
1.	Advance for mobilization	5	It will be set off/adjusted from the next 5 consecutive payments
2.	Final Inception Report	15	Upon acceptance of the Report by the Client
3.	Final Mid-Term Report	15	
4.	Final Annual Report	10	
5.	Draft Technical Reports with draft DPR	20	
6.	Final Technical Reports with all Final DPR	20	
7.	Project Completion Report	20	

I. Counterpart Support

35. All officials under the PMU will be the key government counterpart officials. Aside from the PMU staff, existing staff of LGED at Headquarter, Divisions, Regions, Districts and Upazilas levels will also work as counterpart staff.

36. Both the counterpart government officials at PMU and regular LGED set-up will provide all kinds of assistance to the consultant team in rendering their services.

37. It was discussed in detail that the Consultant will hire a suitable office space near LGED HQ on rent at Dhaka. They will also hire office spaces in 6 (six) divisions near LGED premises on rent. LGED will provide office rent, project data and reports available to the consultant.

38. Office furniture, hardware and software, lighting, electricity including consumption bills, air conditioning, communication and other consumables not included in estimates will be at the cost of the consultant.

39. Any non-consumable items and equipment shall be procured by the Consultant specified in the contract with prior approval of the specification by the PE. These non-consumable items and equipment shall be handed over to LGED after completion of the contract.