



Government of the People's Republic of Bangladesh

Local Government Engineering Department (LGED)

Program Operation Manual

(Version 1)

Operation for Supporting Rural Bridges (SupRB)

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PREFACE

The International Development Association (IDA) of the World Bank Group has been providing financial assistance to the Government of Bangladesh (GoB) for the Operation for Supporting Rural Bridges (SupRB). The operation is being implemented by the Local Government Engineering Department (LGED) under the Local Government Division (LGD) of the Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C). The operation has been using a combination of two financing instruments of the World Bank: Program for Results (PforR) and Investment Project Financing (IPF).

The development objective of the Program proposed to be: *to provide safe, reliable and climate resilient bridges on Bangladesh's rural roads network*. The operation has two parts – Bridge Construction and Maintenance (the Program), and Institutional Strengthening and Capacity Building (the Project).

The Financing Agreement (FA) of the operation requires the Local Government Engineering Department (LGED) to develop a Program Operation Manual (POM) to guide the implementation of SupRB.

The POM is aligned with the FA and the Project Appraisal Document (PAD). In case of any discrepancy among these documents the following hierarchical order will prevail: FA followed by PAD followed by POM. The POM is a live document and can be revised, if such a necessity arises. However, concurrence will be required from the World Bank for such revisions.

ABBREVIATIONS & ACRONYMS

CS	- Condition State
DLI	- Disbursement Linked Indicator
e-CM	- Electronic Contract Management
e-GP	- Electronic Government Procurement
ESMF	- Environmental and Social Management Framework
ESSA	- Environmental and Social Systems Assessment
GoB	- Government of Bangladesh
GRS	- Grievance Redress System
ILO	- International Labour Organization
IMED	- Implementation Monitoring and Evaluation Division
IPF	- Investment Project Financing
IR	- Intermediate Indicator
LGED	- Local Government Engineering Department
NGO	- Nongovernmental Organization
OHS	- Occupational Health and Safety
PAP	- Program Action Plan
PDO	- Program Development Objective
PforR	- Program-for-Results
OM	- Operation Manual
RTIP II	- Second Rural Transport Improvement Project
RSDMS	- Road and Structure Database Management System
RuBIMS	- Rural Bridge Information and Management System
SEA	- Sexual Exploitation and Abuse
SGBV	- Sexual and Gender-based Violence
SupRB	- Operation for Supporting Rural Bridges
UNR	- Union Road
UZR	- <i>Upazila</i> Road

A. Program Operation Manual

1. Operation for Supporting Rural Bridges (SupRB)

SupRB(also referred as the “operation”) consists of two parts:

Part 1: The Program- Focuses on Bridge Construction and maintenance interventions and will be financed through the World Bank’s PforR instrument.

Part 2: The Project - Focuses on the institutional strengthening and capacity building activities including technical assistance for supporting implementation of the Program and will be financed by the World Bank IPF instrument.

2. Program Operation Manual (POM)

“Program Operation Manual” means the manual of the implementing agency (LGED) for the implementation of SupRB, prepared and issued pursuant to Section I.C of Schedule 2 to the Financing Agreement (FA), as may be amended from time to time with the prior written concurrence of the World Bank. The FA and [PAD](#) set out the summary of the [SupRB](#) concept, policies to be followed, activities that are required to be undertaken, and operational procedures. The [POM](#), mainly, further elaborates on the operational procedures of SupRB. The development of the POM is one of the [Program Action Plan \(PAP\) activities](#), as elaborated in the [PAD](#).

3. Main users of POM

Officials of LGED, apart from [different government entities](#) that play noteworthy/complementary roles in the implementation of the POM are the main users of the P OM. [Different LGED offices play distinct roles](#) in the implementation of the operation.

B. SupRBFundamentals

1. Project Development Objective (PDO) of SupRB

The [PDO](#) is to *improve and preserve rural bridges to support connectivity, climate resiliency, and strengthen institutional management*. The operation’s [Results Framework](#) contains [four PDO indicators](#) and [nine Intermediate Results Indicators](#), which will serve to measure the PDO’s achievements. The operation has also prepared detailed [indicator description](#).

2. Program interventions

The Program supports [six key rural bridge interventions](#) under its PforR component:

- i. [Minor Maintenance](#),
- ii. [Major Maintenance](#),
- iii. [Rehabilitation](#),
- iv. [Capacity Expansion](#),
- v. [Replacement](#); and
- vi. [New Construction of rural bridges](#).

The Project (IPF component) supports several [institutional strengthening and capacity building activities](#).

3. Program excluded activities

There are several [excluded activities](#) under the PforR part of the operation.

C. Disbursement Linked Indicator Fundamentals

1. DLI (Disbursement Linked Indicator)

As the name suggests Disbursement Linked Indicators or [DLIs](#) are indicators against which the International Development Association (IDA) disburses funding under the operation. Before disbursement, the [DLIs](#) will be verified by the [Implementation Monitoring and Evaluation Division \(IMED\)](#) with the help of technical agents.

2. Types of DLIs under the PforR component

- [Physical and process DLIs](#);
- [Scalable and non-scalable](#)

3. Number of DLIs and DLI Verification Protocol

- [Eight DLIs](#)
- [Verification protocol](#).

The first five DLIs (fully scalable) are linked to civil works of UZR & UNR bridges and the rest three DLIs are process DLIs (DLI-6 and DLI-8 will be ‘all-or-nothing’. DLI-7 will be partially scalable).

4. PAP (Program Action Plan)

[PAP](#) activities are designed to facilitate improvement of Program performance in several areas. The areas are: (a) technical; (b) system cum business process improvement; (c) agency capacity and performance; and (d) other risk mitigation. There are [12 actions](#) in PAP under this operation.

D. Selection, Prioritization & Implementation of Bridges for different interventions

1. Purposes of Maintenance Catalogues

Maintenance [Catalogue](#) mainly defines the scope of work under all interventions which is linked with condition state found during field inspections. The key purposes of this catalogues are:

1. Scheme preparation
2. Result verification for DLIs achievements

2. Maintenance catalogues need to be followed during scheme preparation

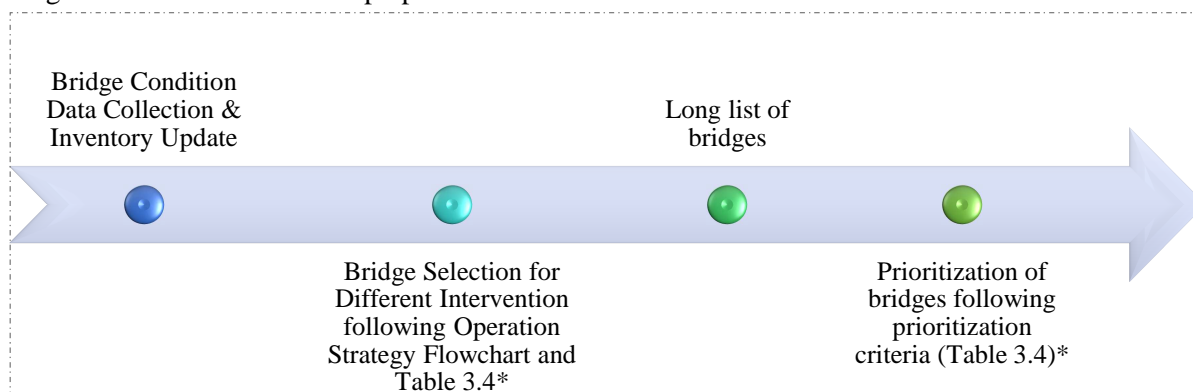
[Maintenance catalogues](#) are required to be followed during the DLI verification process, as stated in the [verification protocol](#). The verification entity will check the works performed against catalogue requirements.

3. Scopes of institutional strengthening and capacity building under this operation

The IPF component aims to complement LGED’s effort in institutional strengthening and capacity building plus to support Program implementation activities that are crucial for the achievement of Program DLIs, PAP and cross cutting issues. IPF [scopes](#) included many activities.

4. Procedure of bridge selection & prioritization by different interventions

Bridge selection and prioritization for SupRB will be done following Operational Strategy [flowchart](#) & Program scope selection & prioritization [criteria](#). These two tasks will be accomplished through a web based software - [RuBIMS](#). The guiding principles followed in RuBIMS are shown in the diagram below. However, for 1st year program, agreed [criteria](#) should be followed to select & prioritize the bridges as RuBIMS was under preparation.



*For 1st year program Table 3.5 will be followed.

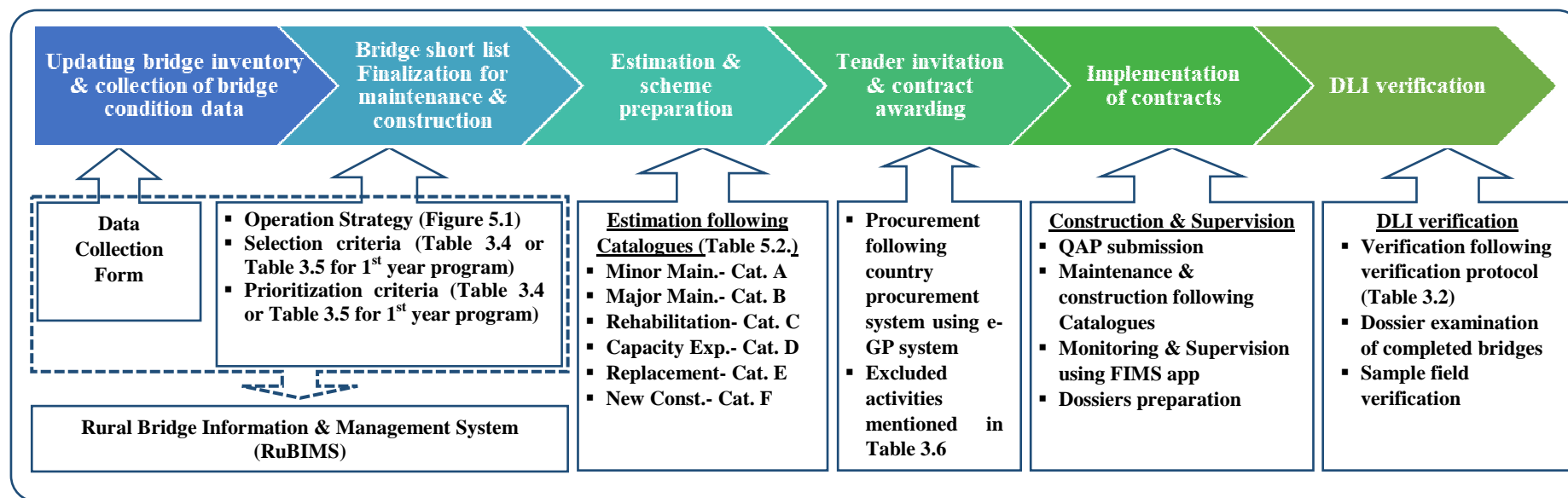
5. Results Monitoring and Evaluation

A web-based **RuBIMS** will be the main instrument for result monitoring. The system will be able to generate information for monitoring all the Program’s development indicators except one: Results Area 4 (institutional capacity and other).

6. Field Inspection and Progress Monitoring System

The Program will use another tool (Field Inspection and Monitoring System or **FIMS**) for field inspection and monitoring progress of the Program’s work contracts.

Figure 1. Implementation Strategy of SupRB Program



7. Accomplishment of bridge condition assessment and data collection

RuBIMS has a smartphone cum tablet-based application that facilitates collection of bridge data of each superstructure, substructure and non-structure elements. Each element will be marked based on the *Condition State*, 1 to 5 [denotes](#) Good, Fair, Poor, Severe and Unknown condition respectively.

E. Implementation Arrangements

1. Implementing agency/ies of this program

The proposed Program will be implemented by the Local Government Engineering Department ([LGED](#)) under the Local Government Division of the Ministry of Local Government, Rural Development, and Cooperatives.

2. Implementation arrangement structure of the implementing agency for SupRB

The operation will be led by the additional chief engineer (maintenance, asset management and road safety) at LGED headquarters. Sixty-one district executive engineer offices will be mainly responsible for the field-level implementation, including the procurement of contracts ([Diagram](#)). These offices will be supported by 466 upazila engineer offices.

F. DLI Verification Process

1. Verification entity for SupRB program

The [IMED](#) will work as verification entity. IMED led verification process will be supported by an independent agent(s) for technical backstopping.

2. Process of DLI verification

For Verification purpose, LGED will submit dossiers (or relevant information) elaborating the achievement of results, will be verified by IMED. Apart from desk reviews, field verifications will also be conducted in defined cases. A *DLI verification process toolkit* has been developed that provides the detailed verification process.

G. Procurement and Financial Management System

1. Procurement system under the Program

The procurement under the Program will follow the prevailing country procurement [legislation](#) and [rules](#) subject to some [exclusions](#). All National Competitive Tenders under the Program will be processed through the national e-GP system.

2. Financial management under the Program

The normal government budgeting process will determine the Program's fund allocations and expenditures. Program funds will be directly disbursed to the Government's treasury upon achievement and verification of results. The CGA will be responsible for maintaining the program accounts and reporting through iBAS/iBAS++ systems. All entities using Program funds will be subjected to statutory audits and the LGED will be responsible for maintaining expenditure accounts and ensuring timely expenditure reporting.

3. Program expenditure codes/items

The Program will include a total of eight expenditure items. They are: 3211107 (hiring charges), 3211123 (rental of other assets- vehicle), 3231201 (domestic training), 3231101 (foreign training), 3257101 (consultancy-firm), 3257104 (survey), 3258111 (repair and maintenance – bridges) and 4111303 (bridges – replacement and new construction).

4. For Procurement and Financial management for Project (IPF component)

The World Bank's '[Procurement Regulations for Borrowers under Investment Project Financing](#)', dated July 1, 2016 (Revised November 2017) (Procurement Regulations), will be applied for all procurements under the institutional development and capacity building component. LGED's program coordination unit will be responsible for all procurements under the IPF component.

LGED developed Unified Financial Management System (uFMS) will be used for financial management of the Project.

5. Anti-Corruption issues under this program

The World Bank's [Guidelines on Preventing and Combating Fraud and Corruption in Program-for-Results financing](#), dated February 1, 2012, and revised July 10, 2015, will be applied to the Program. The Government will use its own country systems to take appropriate measures to prevent fraud and corruption connected with the program and to remedy or prevent its recurrence.

[Guidelines on Preventing and Combating Fraud and Corruption in Projects](#) Financed by IBRD Loans and IDA Credits and Grants of July 1, 2016 will be applicable for the Project part of the operation.

H. Safeguard System

1. Environment and Social Safeguard strategies for PforR and IPF

The LGED developed [Environmental and Social Management Framework \(ESMF\)](#) for managing environmental and social issues in bridge development and maintenance will be used for managing environmental and social risks under the Program.

The Project (IPF component) is classified as Environmental Category "B". World Bank's six safeguards policies are triggered for this component. The triggered policies are: OP/BP 4.01 (Environmental Assessment); OP/BP 4.04 (Natural Habitats), OP/BP 4.36 (Forests), OP/BP 4.11

(Physical Cultural Resources), OP/BP 4.10 (Indigenous People) and OP/BP 4.12 (Involuntary Resettlement).

2. Technical audit

An integrated technical audit of the Program will be carried out. The integrated technical audit will examine the adherence of the Program to the technical, procurement, and social and environmental standards and guidelines. The audit will be carried out on a sample of Program contracts. The LGED will employ a consulting firm for this purpose and audit reports will be shared with the World Bank.

1. Grievance Redressal

1. Grievance Redress System (GRS) under this Program

The LGED will implement the Government's October 2015 directives to adapt a comprehensive department-wide GRS. The GRS will provide opportunities for entry at multiple levels (Program, upazila, district, and central) using different entry methods (for example, Internet, paper complaints, verbal complaints).

2. Program GRS activities

The activities will include the adaptation of customized LGED GRS guidelines following Government guidelines, and the development of an LGED GRS portal for lodging LGED-specific grievances, the design of which will be similar to the one available at www.grs.gov.bd.

3. World Bank GRS for this operation

Communities and individuals who believe that they are adversely affected by a Bank supported PforR operation, may submit complaints to the existing program GRM or the WB's Grievance Redress Service. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service, please visit <http://www.worldbank.org/GRS>. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org

J. Reporting Arrangement

The LGED shall furnish to the World Bank each Program Report and Project Report not later than forty-five (45) days after the end of each quarter, covering the quarter.

K. Climate Resiliency

The Program endeavor to develop and implement rural bridge climate change adaptation strategies. The PDO also includes improving the climate resiliency of rural bridges. The Program will follow several [strategies](#) to help the LGED in rural bridge climate change adaptation.

L. Citizen Engagement

The citizen engagement measures in the Program are designed based on a number of [strategies](#) and several [actions](#) will be taken.

M. Gender Tagging

The Program will endeavor to fill this gender gap by employing women in high skilled positions. These high skilled jobs include roles such as engineers, technicians, consultants and other relevant positions in LGED. Apart from this, some other [strategies](#) and [actions](#) will be administered under this program.

N. GBV, Labor Influx, SEA and OHS

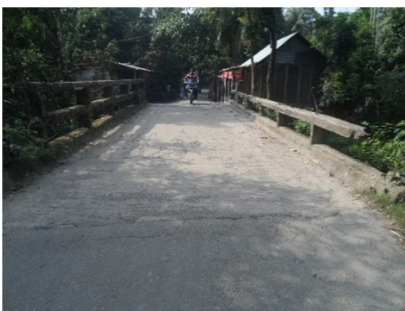

The Program will take [several measures](#) for tackling the labor influx, SEA, and OHS risks. Several [actions](#) will be implemented during Program implementation to ensure Occupational Health and Safety (OHS) issues. Also [a few actions](#) will be implemented to tackle the Gender Based Violence (GBV) risks. [Guideline for Prevention and Mitigation of GBV](#) and [Guidelines for OHS](#) for this operation has been developed.

Glossary: Definitions & Terms

1. **Condition State-** Condition stats are used to describe an existing bridge or culvert conditions compared with its condition if it were new. The ratings are based on the materials, physical condition of the deck, the superstructure and the substructures.
2. **Disbursement Linked Indicators (DLI)** – A central focus of preparation of PforRoperation is the design of Disbursement Linked Indicators (DLIs), each with a verification protocol. Disbursements in a PforR operation is made only when the DLIs are achieved and such achievements are verified.
3. **FIMS-** LGED has developed a tablet/smartphone-based field inspection and monitoring system (FIMS) application. As the name suggests, the application will help the LGED in field inspections and progress monitoring of ongoing contracts.
4. **IPF Instrument** – Investment Project Financing or IPF instrument finances a specific set of expenditure transactions. IPF implementation is solely based on Bank's rules and procedures and mainly input based financing.
5. **IR Indicator** - Intermediate-level Results indicators mainly designed to track progress toward achieving the development objectives of a project or program.
6. **Maintenance Catalogue**– Catalogue is a systematic depiction of scope of work under different interventions of the program. The scope of work is linked to the condition state of the different elements of bridges including substructures and superstructures.
7. **ProgramOperational Strategy-** A plan specifying how LGED will allocate resources to support maintenance and construction of rural bridge infrastructure.
8. **PforR financing Instrument** –PforR (Program for Result Financing), a World Bank financing instrument which disburses on the achievements of predefined Disbursement Linked Indicators (DLIs).
9. **Physical and Process DLI** – Physical DLIs are linked to physical intervention of the program. Process DLIs are linked to improve the process like technical, fiduciary and safeguard capacity to ensure the smoother implication of physical intervention.
10. **POM–Program** Operation manual (POM) is a structured document, developed by the implementing agency (LGED) to provide an integrated approach to set out detailed institutional, administrative, financial, technical and operational guidelines and procedures for the implementation of the Operation.
11. **Program Action Plan (PAP)** – Program Action plan or PAP is an integral element of PforR instrument. Generally key actions that are required for achieving DLIs (mainly strengthening institutions and improving systems) of operation are included in a PAP .
12. **Program Development Objectives (PDO)** – The PDO is the objective a project wants to achieve subsequent to providing specific inputs. The PDO is measured using indicators. Indicators need to be specific, measurable, achievable and attributable, relevant and time-bound
13. **Results Framework** –The framework that provides details of the indicators for achieving the results along with their values at different point of time.

14. ***RuBIMS*** – Rural Bridge Information and Management System (RuBIMS) is a comprehensive system for collection and maintenance of rural bridge data and for aiding informed rural bridge decision making.
15. ***Scalability of DLI*** - Scalable DLIs means disbursements against these DLIs can be made even if a portion of the target value is achieved. Whereas, non-scalable DLIs are those DLIs disbursements against those can only be made if they achieve certain predefined threshold values.
16. ***Structural Condition Assessment*** –Structural condition assessment includes identifying any design, construction or maintenance deficiencies as well as defects, deteriorations and damages of a physical structure, in the case of the Program bridges.

Annex 1. Definition& Illustrations of the Interventions

Sl No.	Intervention Name	Definition	Illustrations	
1	Minor Maintenance	Minor Maintenance mainly focuses to preserve the bridges for sustaining their long-term sustainability. The Program will support the minor maintenances (about 60,000 meters) on UZR and UNRs that are in relatively stable condition and having no structural deficiency. Minor maintenance focuses on the maintenance of non-structural elements of existing bridges following Bridge Maintenance Catalogue-A of LGED to enhance the serviceability, service life and adaptation to any climate change.		
2	Major Maintenance	Major Maintenance also focuses to preserve the bridges for sustaining their long-term sustainability. The Program will support major maintenances (about 25,000 meters) on UZR and UNRs that have minor/ major structural deficiencies of the structural elements of bridges which signify a progression of the deterioration process. These elements may need condition based preventive maintenance following Bridge Maintenance Catalogue-B of LGED to extend the service life and improve the climate resiliency of rural bridges		
3	Rehabilitation	Rehabilitation refers to those condition/s when some of the functionalities lost by bridges due to their prolonged non-maintenance or due to natural events (for example, floods, storm surges). Some of these bridges may be rendered structurally unsound and, therefore, unsafe for vehicle operations. The Program will support rehabilitation works (about 24,000 meters) on UZR and UNRs that have advanced stage of deterioration which may need preventive maintenance of other interventions following Bridge Maintenance Catalogue-C of LGED to restore these bridges to a condition to improve their service life substantially and climate resilient		

Sl No.	Intervention Name	Definition	Illustrations	
		adaptability of the bridges.		
4	Capacity Expansion	Capacity Expansion will take place for those of narrow bridges that have been hampering the smooth functioning of the UZR and UNR networks including the safe vehicle operations. The Program will support capacity expansion (about 5,000 meters) on UZR and UNRs that will need to expand the bridge deck width due to the increase in traffic and safety demands on existing routes. The capacity expansion of the existing bridges will be done following Bridge Maintenance Catalogue-D of LGED including the climate resilient features. Capacity expansion of bridges will enhance the rural network more operational.		
5	Replacement	Replacement is applicable for those bridges which surpassed their service lives or have been assessed to be unsafe for vehicle operations. The Program will support replacement of existing bridges on UZR and UNRs. Bridges which are no more functional or which have deteriorated to such an extent that they can no longer serve their intended purposes will be replaced with new bridges. The Replacement of the existing bridges will be done following Bridge Maintenance Catalogue-E of LGED with updated design & specification and resilience to climate change.		
6	New Construction	New Construction of bridges will be applicable for those are of short to medium span-new bridges, which are vital for improving rural connectivity but are not financed by LGED's existing projects. The Program will support new construction on existing gaps on UZR and UNRs. The New Construction of bridges on existing gaps will be done following Bridge Maintenance Catalogue-F of LGED with updated design & specification and resilience to climate change.		

Annex 2. Results Framework

Table 2.1.Results Framework Matrix

Results Areas Supported by PforR	PDO/ Outcome Indicators	Intermediate Results Indicators	DLI #	Unit of Measurement	Baseline (Year)	End Target (Year)
Results Area 1: Preservation of rural Bridges	PDO Indicator 1: <i>Upazila</i> or <i>union</i> road bridges that are in good and fair condition			Percentage	0% (2018)	25% (2023)
		IR Indicator 1.1: UZR and UNR bridges maintained (minor & major maintenance)	DLI-1 + DLI-2	Meter	0 meter (2018)	85,000 meters (2023)
		IR Indicator 1.2: UZR or UNR bridges rehabilitated	DLI-3	Meter	0 meter (2018)	24,000 meters (2023)
Results Area 2: Rural bridge climate resiliency	PDO Indicator 2: <i>Upazila</i> or <i>union</i> road new bridges built or replaced with climate resilient features in 19 coastal districts			Percentage	0% (2018)	5% (2023)
		IR Indicator 2.1: Rehabilitation, capacity expansion, replacement, and new construction works of bridges in 19 coastal districts with climate-resilient reinforced cement concrete structures	DLI-3 + DLI-4 + DLI-5	Percentage	0% (2018)	25% (2023)
		IR Indicator 2.2: Construction of climate-resilient new rural bridges in overall program areas	DLI-5	Meter	0 meter (2018)	2,000 meters (2023)
Results Area 3: Rural transport connectivity	PDO Indicator 3: Length of severed or constrained <i>Upazila</i> or <i>union</i> road links made fully operational			Kilometer	0 (2018)	5,000 km (2023)
		IR Indicator 3.1: UZR or UNR bridge capacity augmented	DLI-4	Meter	0 meter (2018)	5,000 meters (2023)
		IR Indicator 3.2: UZR or UNR bridges newly constructed or replaced	DLI-5	Meter	0 meter (2018)	20,000 meters (2023)
Results Area 4: Institutional capacity, gender and citizen engagement	PDO Indicator 4: Program bridges designed using in-house technical resources			Percentage	0 (2018)	75 (2023)
		IR Indicator 4.1: Senior positions (executive engineer and above) created or reassigned at headquarters	Not a DLI	Number	0 (2018)	10 (2023)
		IR Indicator 4.2: Employment of women under the Program in high skilled positions	Not a DLI	Percentage	0 (2018)	20 (2023)
		IR Indicator 4.3: Consultations on design of new bridges length of 50 meters and above	Not a DLI	Percentage	0 (2018)	50 (2023)

Table 2.2. Indicator Descriptions

Indicator Name	Description	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
PDO Indicator 1: <i>Upazila</i> or <i>union</i> road bridges that are in good and fair condition	UZR and UNR bridges that require only minor maintenance & major maintenance	(a) Midterm review and (b) within 4 months of closing date	RuBIMS	Data on bridge conditions will be collected and updated in RuBIMS.	LGED	n.a.	n.a.
IR Indicator 1.1: UZR and UNR bridges maintained (minor & major maintenance)	Completed meters of UZR and UNR bridges that have undergone minor & major maintenance	Annual updates	Program reports	The Program reports will provide information based on data from the field.	LGED	Verification entity	Yes
IR Indicator 1.2: UZR or UNR bridges rehabilitated	Completed meters of UZR and UNR bridges that have undergone rehabilitation	Annual updates	Program reports	The Program reports will provide information based on data from the field.	LGED	Verification entity	Yes
PDO Indicator 2: <i>Upazila</i> or <i>union</i> road new bridges built or replaced with climate-resilient features in 19 coastal districts	Completed meters of UZR and UNR new bridges with climate-resilient features in 19 coastal districts	(a) Midterm review and (b) within 4 months of closing date	Program reports	The Program reports will specify how many new bridges are built or replaced with climate-resilient features. This will be supplemented by field visits.	LGED	n.a.	n.a.
IR Indicator 2.1: Rehabilitation, capacity expansion, replacement, and new construction works of bridges in 19 coastal districts with climate-resilient reinforced cement concrete structures	Proportion of UZR and UNR bridges that have been rehabilitated, capacity expanded, replaced, or newly built with climate-resilient features in 19 coastal districts compared with the total number of bridges that underwent same interventions in 19 coastal districts	Annual	Program reports	The Program reports what proportion of new bridges are built, replaced, capacity expanded, or rehabilitated with climate-resilient features in 19 coastal districts. This will be supplemented by field visits.	LGED	n.a.	n.a.
IR Indicator 2.2: Construction of climate-resilient new rural bridges in overall program areas	Completed meters of new UZR and UNR bridges with climate-resilient features	Annual	Program reports	The Program reports will provide information based on data from the field.	LGED	n.a.	n.a.
PDO Indicator 3: Length of severed or constrained <i>upazila</i> or <i>union</i> road links made fully operational	Kilometers of UZR and UNRs made fully operational through capacity expansion, replacement, or new construction of bridges	(a) Midterm review and (b) within 4 months of closing date	GIS/ RuBIMS	Data will be collected from the field and will be verified using the GIS/ RuBIMS database. A road link will be assessed as fully operational if that link does	LGED	n.a.	n.a.

Indicator Name	Description	Frequency	Data Source	Methodology for data collection	Responsibility for Data Collection	DLIs	
						Responsibility for Data Verification	Scalability of Disbursement (Yes/No)
				not have any gaps			
IR Indicator 3.1: UZR or UNR bridge capacity augmented	Completed meters of UZR and UNR bridges that have undergone capacity expansion (widening)	Annual	Program progress reports	The Program reports will provide information based on data from the field.	LGED	Verification entity	Yes
IR Indicator 3.2: UZR or UNR bridges newly constructed or replaced	Completed meters of UZR and UNR bridges that are newly constructed or replaced	Annual	Program progress reports	The Program reports will provide information based on data from the field.	LGED	Verification entity	Yes
PDO Indicator 4: Program bridges designed using in-house technical resources	Percentage of Program bridges designed using in-house technical resources.	Annual	Program progress reports	The Program reports will provide information on this.	LGED	n.a.	n.a.
IR Indicator 4.1: Senior positions (executive engineer and above) created or reassigned at headquarters	Number of senior positions (executive engineer or above) created and staffed at headquarters to deal with rural bridges	Annual	Program progress reports	The Program progress reports will provide specific information on this. This would be verified against the Government's administrative orders.	LGED	n.a.	n.a.
	Positions filled by women as a proportion of total number of technicians, engineers, consultant and other relevant staff positions under the operation	Annual	Program progress reports	The Program reports will provide information on this including how many they are women. This would be verified against the Government's administrative orders.	LGED	n.a.	n.a.
IR Indicator 4.3: Consultations on design of new bridges length of 50 meters and above.	Site consultations with nearby residents on the design of bridges that have length of 50 meters and above.	Annual	Program progress reports	The Program progress reports will provide specific information on this.	LGED	n.a.	n.a.

Annex 3. Disbursement Linked Indicators, Disbursement Arrangements, and Verification Protocols

Table 3.1. DLI Matrix

	Total Financing Allocated to DLI (US\$)	As % of Total Financing Amount	DLI Baseline	Indicative Time Line for DLI achievement				
				Year or Period 1	Year or Period 2	Year or Period 3	Year or Period 4	Year or Period 5

	Total Financing Allocated to DLI (US\$)	As % of Total Financing Amount	DLI Baseline	Indicative Time Line for DLI achievement				
				Year or Period 1	Year or Period 2	Year or Period 3	Year or Period 4	Year or Period 5
DLI-1: Minor Maintenance [Target of 60,000 m]			0	10,000	20,000	25,000	5,000	—
<i>Allocated amount</i>	<i>42,000,000</i>	<i>10.7%</i>		<i>7,000,000</i>	<i>14,000,000</i>	<i>17,500,000</i>	<i>3,500,000</i>	—
DLI-2: Major Maintenance [Target of 25,000 m]			0	5,000	8,000	10,000	2,000	—
<i>Allocated amount</i>	<i>43,000,000</i>	<i>10.9%</i>		<i>8,600,000</i>	<i>13,760,000</i>	<i>17,200,000</i>	<i>3,440,000</i>	—
DLI-3: Rural bridge rehabilitation [Target of 24,000 m]			0	1,000	7,000	7,000	7,000	2,000
<i>Allocated amount</i>	<i>75,000,000</i>	<i>19.1%</i>		<i>3,125,000</i>	<i>21,875,000</i>	<i>21,875,000</i>	<i>21,875,000</i>	<i>6,250,000</i>
DLI-4: Rural bridge capacity expansion [Target of 5,000 m]			0	—	300	1,000	1,700	2,000
<i>Allocated amount</i>	<i>40,000,000</i>	<i>10.2%</i>		-	<i>2,400,000</i>	<i>8,000,000</i>	<i>13,600,000</i>	<i>16,000,000</i>
DLI-5: Rural bridge replacement or new bridge construction [Target of 20,000 m]			0	—	300	4,000	8,500	7,200
<i>Allocated amount</i>	<i>163,000,000</i>	<i>41.5%</i>	—	—	<i>2,445,000</i>	<i>32,600,000</i>	<i>69,275,000</i>	<i>58,680,000</i>
DLI-6: Implementation and updating of RuBIMS [Different targets in different years]			0	—	Collecting 20% UZR and UNR bridge and gap data across the country, populating RuBIMS using the collected data, and publishing the	Collecting additional 40% UZR and UNR bridge and gap data across the country, populating RuBIMS using the collected data, and publishing the	Collecting additional 40% UZR and UNR bridge and gap data across the country, populating RuBIMS using the collected data, and publishing the	Collecting updated UZR and UNR bridge and gap data in at least 50% of districts, updating RuBIMS information using the updated data, and publishing the

	Total Financing Allocated to DLI (US\$)	As % of Total Financing Amount	DLI Baseline	Indicative Time Line for DLI achievement				
				Year or Period 1	Year or Period 2	Year or Period 3	Year or Period 4	Year or Period 5
					bridge data on the LGED website	bridge data on the LGED website	bridge data on the LGED website	updated data on the LGED website
<i>Allocated amount</i>	<i>10,000,000</i>	<i>2.6%</i>		—	<i>2,500,000</i>	<i>2,500,000</i>	<i>2,500,000</i>	<i>2,500,000</i>
DLI-7: Contract and fiduciary system management DLI-7a. Percentage of national competitive tenders issued using e-contract management module of e-governance procurement			0	—	10 [500,000]	40 [1,500,000]	60 [1,000,000]	
DLI-7b. Percentage of work contracts completed within the original contractual timeline			30	—	35 [500,000]	50 [1,500,000]	60 [1,000,000]	70 [1,000,000]
DLI-7c. Effective and efficient Fiduciary System Management			No committee for audit observation resolution, ad hoc internal audit arrangements and, resolution of audit observations poor		Constitution of an Audit Observation Resolution Committee at the LGD which will meet at least twice within a financial year with an aim to resolve audit issues [1,000,000]	Successful completion of at least one internal audit assignment of the Program using risk-based internal auditing approach [1,000,000]	Resolution of at least 80% (in number) of audit observations	

	Total Financing Allocated to DLI (US\$)	As % of Total Financing Amount	DLI Baseline	Indicative Time Line for DLI achievement				
				Year or Period 1	Year or Period 2	Year or Period 3	Year or Period 4	Year or Period 5
							[1,000,000]	
Allocated amount	10,000,000	2.6%		-	2,000,000	4,000,000	3,000,000	1,000,000
DLI-8: Transparency and accountability DLI -8(a): Adaptation and operationalization of GRS			No workable GRS available	LGED adapts and approves GRS Guidelines in line with the Cabinet Division's GRS guidelines of 2015 [1,000,000]	LGED implements a department wide web-based GRS to track complaints on its department's activities; publicly publishes yearly summary reports detailing number of received complaints, complaint types and resolutions' status [1,000,000]	LGED publicly publishes yearly summary reports detailing number of received complaints, complaint types and resolutions' status[1,000,000]	LGED publicly publishes yearly summary reports detailing number of received complaints, complaint types and resolutions' status[1,000,000]	LGED publicly publishes yearly summary reports detailing number of received complaints, complaint types and resolutions' status[1,000,000]
DLI-8(b): Development and operationalization of smartphone-based field inspection application			Beta version of the smartphone-based application for field work inspection available	LGED finalizes design and approves a table-cum-smartphone-based application for field work inspection. [1,000,000]	LGED publicly publishes yearly summary reports detailing number of site visit made, summary finding of such visits and number of visits made by different levels of officials[1,000,000]	LGED publicly publishes yearly summary reports detailing number of site visit made, summary finding of such visits and number of visits made by different levels of officials[1,000,000]	LGED publicly publishes yearly summary reports detailing number of site visit made, summary finding of such visits and number of visits made by different levels of officials[1,000,000]	LGED publicly publishes yearly summary reports detailing number of site visit made, summary finding of such visits and number of visits made by different levels of officials[1,000,000]

	Total Financing Allocated to DLI (US\$)	As % of Total Financing Amount	DLI Baseline	Indicative Time Line for DLI achievement				
				Year or Period 1	Year or Period 2	Year or Period 3	Year or Period 4	Year or Period 5
					0]			
<i>Allocated amount (US\$)</i>	<i>10,000,000</i>	<i>2.6%</i>		<i>2,000,000</i>	<i>2,000,000</i>	<i>2,000,000</i>	<i>2,000,000</i>	<i>2,000,000</i>
<i>Total Financing Allocated (US\$)</i>	<i>393,000,000</i>	<i>100.0%</i>		<i>20,725,000</i>	<i>61,480,000</i>	<i>105,175,000</i>	<i>119,190,000</i>	<i>86,430,000</i>

Table 3.2. DLI Verification Protocol

#	DLI	Definition/Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/result Verification		
				Data Source/ Agency	Verification Entity	Procedures
DLI-1	DLI-1. Rural bridge minor maintenance	<p>Requirements</p> <ul style="list-style-type: none"> • Completion of one or more minor maintenance works as defined in Table 3.3 and physical verification of repair works for all elements listed in Catalogue - A (Table 5.2.) unless site conditions demand partial solutions as the only practicable option. • A bridge will be eligible to be counted toward the physical targets if it fulfills the following: <ul style="list-style-type: none"> (a) Located either on a UZR or a UNR according to the definition in the GoB's gazette notification dated October 29, 2017 or any subsequent notification(s) in this regard. (b) The bridge is identified for minor maintenance in the prioritized annual work plan generated through the RuBIMS. Before the finalization of RuBIMS the prioritization should be based on the criteria set forth in Table 3.4. ^[a] (c) The bridge appears in the annual work plan which is the basis for funding through the budget cycle. (d) Implementation of the work plan in line with a time bound procurement plan. (e) Only completed bridges will be counted toward the DLI. <p>Exclusions</p> <ul style="list-style-type: none"> • Bridges within exclusion conditions set out in the Financial Agreement of the Program. • In the case of Open Tendering Method, (a) bids are invited or rejected based on percentage above or below the estimated cost and (b) contracts awarded using a lottery system. • Bids awarded disregarding tenderers' qualification/experience requirements. 	Yes - to the nearest 1/10th meter length ¹ of a single completed bridge	Bridge Dossiers assembled by the LGED and visual inspection on a sample basis for verification	IMED of the Ministry of Planning with technical backstopping from some credible technical agent/agents.	<ul style="list-style-type: none"> • All Bridge Dossiers to undergo a thorough review to check their completeness/compliance before physical verification. • The verification entity will select a random sample of not less than 10% of completed bridges (by number) for physical verification. The sample results will apply to entire DLI-1 category works within the same disbursement request.

¹ The length is defined as the distance between two ends of the main bridge deck, which will exclude any approach slab and will not be greater than the distance between two abutment ends.

#	DLI	Definition/Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/result Verification		
				Data Source/ Agency	Verification Entity	Procedures
DLI-2	DLI-2. Rural bridge major maintenance	<p>Requirements</p> <ul style="list-style-type: none"> • Completion of one or more major maintenance works as defined in Table 3.3 and physical verification of state of good repair for all elements listed in Catalogue - B (Table 5.2.) unless site conditions demand partial solutions as the only practicable option. • A bridge will be eligible to be counted toward the physical targets if it fulfils the following: <ul style="list-style-type: none"> (a) Located either on a UZR or a UNR according to the GoB's gazette notification dated October 29, 2017 or any subsequent notification(s) in this regard. (b) The bridge is identified for major maintenance in the prioritized annual work plan generated through the RuBIMS. Before the finalization of RuBIMS, the prioritization should be based on the criteria set forth in Table 3.4.^[a] (c) The bridge appears in the work plan which is the basis for funding through the budget cycle. (d) Implementation of the work plan in line with a time bound procurement plan. (e) Environmental and social risks assessed and risk mitigation measures implemented as per ESMF provisions. (f) Implemented using the approved 'Quality Assurance Plan' and evidence exists in this regard. (g) Only completed bridges will be counted toward this DLI. <p>Exclusions</p> <ul style="list-style-type: none"> • Same as previous DLI in this table 	Yes - to nearest 1/10th meter length of a single completed bridge	Bridge Dossiers assembled by the LGED and visual inspection on sample basis for verification	Same as above	<ul style="list-style-type: none"> • All Bridge Dossiers to undergo a thorough review to check their completeness/compliance before physical verification. • The verification entity will select a random sample of not less than 20% of completed bridges (by number) for physical verification. The sample results will apply to the all the bridges submitted for DLI verification under this DLI category in a particular tranche.
DLI-3	DLI-3. Rural bridge rehabilitation	<p>Requirements</p> <ul style="list-style-type: none"> • Completion of one or more rehabilitation works as defined in Table 3.3 and physical verification of state of good repair for all elements listed in Catalogue - C (Table 5.2.) unless site conditions demand partial solutions as the only practicable option. 	Yes - to nearest 1/10th meter length of a single completed bridge	Bridge Dossiers assembled by the LGED and visual inspection on	Same as above	<ul style="list-style-type: none"> • All Bridge Dossiers to undergo a thorough review to check their completeness/compliance before physical verification.

#	DLI	Definition/Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/result Verification		
				Data Source/ Agency	Verification Entity	Procedures
		<ul style="list-style-type: none"> Maximum 10 percent of the DLI value as defined in Table 3.3 will be eligible for structures over 3 meters and up to 6 meters length. A flexibility of 20 percent will be given to cover bridges that do not follow this process to allow for unforeseen or emergency situations. Any modular bridges procured and stored in strategic locations to restore connectivity disrupted by natural extreme events (for example, floods) will be included within this limit. A bridge will be eligible to be counted toward the physical targets if it fulfils the following: <ol style="list-style-type: none"> Located either on a UZR or a UNR according to the GoB's gazette notification dated October 29, 2017 or any subsequent notification(s) in this regard. The bridge is identified for rehabilitation works in the prioritized annual work plans generated through RuBIMS. Before the finalization of RuBIMS the prioritization should be based on the criteria set forth in Table 3.4.^[a] The bridge appears in the work plan which is the basis for funding through the budget cycle. Implementation of the work plan in line with a time bound procurement plan. Environmental and social risks assessed and risk mitigation measures implemented as per ESMF provisions. Implemented using the approved 'Quality Assurance Plan' and evidence exists in this regard. The bridge is not within the exclusion conditions set out in the Financial Agreement of the Program Only completed bridge length and procured and strategically stored modular bridge length will be counted toward this DLI. <p>Exclusions</p> <ul style="list-style-type: none"> Same as previous DLI in this table 		sample basis for verification		<ul style="list-style-type: none"> The verification entity will select a random sample of not less than 25% of completed bridges (by number) for physical verification. The sample results will apply to all the bridges submitted for DLI verification under this DLI category in a particular tranche At least 50% verification of storage of modular bridges in strategic locations.
DLI-	DLI-4. Rural	Requirements	Yes - to	Bridge	Same as	• All Bridge Dossiers to

#	DLI	Definition/Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/result Verification		
				Data Source/ Agency	Verification Entity	Procedures
4	bridge capacity expansion	<ul style="list-style-type: none"> Completion of one or more capacity expansion works as defined in Table 3.3 and physical verification of state of good repair for all elements listed in Catalogue - D (Table 5.2.) Maximum 10 percent of the DLI value as defined in Table 3.3 will be eligible for structures over 3 meters and up to 6 meters length. A bridge will be eligible to be counted toward the physical targets if it has been through the following planning process: <ol style="list-style-type: none"> The bridge is identified for capacity expansion works in the prioritized annual work plans generated from RuBIMS. Before the finalization of RuBIMS the prioritization should be based on the criteria set forth in Table 3.4.^[a] The bridge appears in the work plan which is the basis for funding through the budget cycle. Implementation of the work plan in line with a time bound procurement plan. Environmental and social risks assessed and risk mitigation measures implemented as per ESMF provisions Implemented using the approved 'Quality Assurance Plan' and evidence exists in this regard. Achievement will be attained based on the cumulative number of meters of completed bridges made available in the country. <p>Exclusions</p> <ul style="list-style-type: none"> Same as previous DLI in this table 	nearest 1/10th meter length of a single completed bridge	Dossiers assembled by the LGED and visual inspection on sample basis for verification	above	<p>undergo a thorough review to check their completeness/compliance before physical verification.</p> <ul style="list-style-type: none"> The verification entity will select a random sample of not less than 25% of completed bridges (by number) for physical verification. The sample results will apply to all the bridges submitted for DLI verification under this DLI category in a particular tranche.
DLI-5	DLI-5: Rural bridge replacement or new construction	<p>Requirements</p> <ul style="list-style-type: none"> Completion of replacement or new construction works as defined in Table 3.3 and physical verification of state of good condition bridges listed in Catalog - E (replacement) and Catalog - F: (new construction) of Table 5.2.. Maximum 10 percent of the DLI value as defined in Table 3.3 will be eligible for structures with length over 3 meters and up to 6 meters. A bridge will be eligible to be counted toward the physical 	Yes - to nearest 1/10th meter length of a single completed bridge	Bridge Dossiers assembled by the LGED and visual inspection on sample basis for verification	Same as above	<ul style="list-style-type: none"> All Bridge Dossiers to undergo review for completeness/compliance before verification. Physical verification to be applied to 25% of works covered by disbursement request. The sample results will apply to all

#	DLI	Definition/Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/result Verification		
				Data Source/ Agency	Verification Entity	Procedures
		<p>targets if it has been through the following planning process:</p> <p>(a) The bridge is identified for replacement or new construction works in the prioritized annual work plans generated from RuBIMS. Before the finalization of RuBIMS the prioritization should be based on the criteria set forth in Table 3.4. ^[a]</p> <p>(b) The bridge appears in the work plan which is the basis for funding through the budget cycle.</p> <p>(c) Implementation of the work plan in line with a time bound procurement plan.</p> <p>(d) Environmental and social risks assessed and risk mitigation measures implemented as per ESMF provisions.</p> <p>(e) Approval and implementation of 'Quality Assurance Plan' following the item of works involved in replacement for individual bridge.</p> <ul style="list-style-type: none"> • Achievement will be attained based on the cumulative number of meters of completed bridges and will be counted toward this DLI. <p>Exclusions</p> <ul style="list-style-type: none"> • Same as previous DLI in this table 				the bridges submitted for DLI verification under this DLI category in a particular tranche.
DLI-6	Implementation and updating of RuBIMS	<ul style="list-style-type: none"> • Achievement of DLI as defined in Table 3.3 • This DLI will measure the progress of operationalization and updating of RuBIMS. • Completion of rural bridge data collection in mentioned number of districts. • Completion of uploading of data in RuBIMS and publication of the data on the LGED website. • Full implementation will be judged when the project director has provided evidence of such data collection and uploaded data on the website. 	No	RuBIMS/ LGED	Same as above	<ul style="list-style-type: none"> • The verification entity will conduct an audit of a portion of entries to check the completeness and correctness of the entered data. • The verification entity may also conduct field visits to physically check the correctness of the entries.
DLI-7	7a. Percentage of national	<ul style="list-style-type: none"> • Achievement of DLI as defined in Table 3.3 • This DLI will measure the overall progress of the use of e-CM 	Yes	Data source: e-GP system	Same as above	<ul style="list-style-type: none"> • Verification will be conducted using a desk-

#	DLI	Definition/Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/result Verification		
				Data Source/ Agency	Verification Entity	Procedures
	competitive tenders issued using e-contract management module of e-governance procurement	module of the e-GP for bridge contracts under the Program. <ul style="list-style-type: none"> Data will be collected every year by checking the use of e-CM module in contract management of the national competitive contracts awarded in that particular year compared to the total national competitive contracts awarded that particular year. 				based verification process taking data from the e-GP (e-CM) system.
	7b. Percentage of works contracts completed within the original contractual timeline	<ul style="list-style-type: none"> Achievement of DLI as defined in Table 3.3 This DLI will measure the overall performance of the LGED in the timely execution of bridge contracts in any one period of the Program. Data will be collected every year taking the contracts completed in that particular year and will compare the actual substantial contract completion time against the original contractual completion time. The target related to the proportion of contracts substantially completed within the original contractual completion time in any one period of the Program. Only the contracts completed within a given year/period will be considered in that year's target achievement calculation. 	Yes. However, over a baseline of 30% of bridgeworks contracts under the Program substantially completed within the original contract completion time.	Data source: e-GP system, Contract/ procurement files	Same as above	<ul style="list-style-type: none"> Verification will be conducted using a desk-based verification process and, where applicable, taking data from the e-GP (e-CM) system.
	7c. Effective and efficient Fiduciary Management	<ul style="list-style-type: none"> Achievement of DLI as defined in Table 3.3 This DLI will measure the effective and efficient management of key fiduciary issues. Data will be collected in from 2nd year onward. The DLI target the constitution of an Audit Observation Resolution Committee which will be considered to be formed if it is constituted through an administrative order and minutes of meetings are available. The DLI target regarding the successful completion of at least one internal audit assignment will be considered achieved if the audit was carried out using risk-based internal auditing standards and practices. 	No	Data source: LGED/ FAPAD	Same as above	<ul style="list-style-type: none"> Verification will be conducted using a desk-based verification process.

#	DLI	Definition/Description of Achievement	Scalability of Disbursements (Yes/No)	Protocol to Evaluate Achievement of the DLI and Data/result Verification		
				Data Source/ Agency	Verification Entity	Procedures
		<ul style="list-style-type: none"> The DLI target regarding the resolution of audit observations will be considered to be achieved if 80% of the Program's audit observations (since the inception of the Program) are discussed at the Audit Observation Resolution Committee and decisions taken for their resolution. 				
DLI-8	8a. Adaptation and operationalization of GRS	<ul style="list-style-type: none"> Achievement of DLI as defined in Table 3.3 This DLI will measure the transparency and accountability of the Program in the form of <ul style="list-style-type: none"> (a) Adaptation and operationalization of a GRS, related policies and guidelines, and publication of grievance resolution-related information Data will be collected every year. 	No	LGED	Same as above	<ul style="list-style-type: none"> Verification will be conducted using a desk-based verification process.
	8b. Development and operationalization of smartphone-based field inspection application	<ul style="list-style-type: none"> Achievement of DLI as defined in Table 3.3 This DLI will measure the transparency and accountability of the Program in the form of <ul style="list-style-type: none"> (a) Finalization and operationalization of a tablet- cum smartphone-based application for field work inspection, its use, and publication of field work inspection information Data will be collected every year. 	No	LGED	Same as above	<ul style="list-style-type: none"> Verification will be conducted using a desk-based verification process.

Note: a. The first-year program has been agreed based on 2017/18 condition surveys but prioritized manually following **Table 3.5. Table 3.5.** asRuBIMS was still under development. This will be an acceptable basis for determining agreed bridges.

World Bank Disbursement Table

Table 3.3. Disbursement Table

#	DLI	Bank Financing Allocated to the DLI (US\$)	Of which Financing Available for Prior Results	Deadline for DLI Achievement	Minimum DLI Value to Be Achieved to Trigger Disbursements of Bank Financing	Maximum DLI Value(s) Expected to Be Achieved for Bank Disbursements Purposes	Determination of Financing Amount to Be Disbursed against Achieved and Verified DLI Value(s) ^a
DLI-1	Minor Maintenance	42,000,000	0	Program closure date	n.a.	60,000 m	Disbursement = # of verified meters × US\$700
DLI-2	Major Maintenance	43,000,000	0	Program closure date	n.a.	25,000 m	Disbursement = # of verified meters × US\$1,720
DLI-3	Rehabilitation	75,000,000	0	Program closure date	n.a.	24,000 m	Disbursement = # of verified meters × US\$3,125
DLI-4	Capacity Expansion	40,000,000	0	Program closure date	n.a.	5,000 m	Disbursement = # of verified meters × US\$8,000
DLI-5	Replacement and New Construction	163,000,000	0	Program closure date	n.a.	20,000 m	Disbursement = # of verified meters × US\$8,150
DLI-6	Implementing and updating of Rural Bridge Information and Management System (RuBIMS)	10,000,000	0	Program closure date	n.a.	4 nos.	Disbursement = US\$2,500,000 upon each verified completion
DLI-7	Percentage of National Competitive Tenders' using e-Contract Management module of the Electronic Government Procurement (e-GP)	3,000,000	0	Program closure date	0 percentage	60 percentage	Disbursement = US\$3,000,000 × {(verified percentage – baseline percentage) / (maximum percentage – baseline percentage)} – last cumulative disbursement
	Percentage of works contracts completed with-in the original contractual timeline	4,000,000	0	Program closure date	30 percentage	70 percentage	Disbursement = US\$4,000,000 × {(verified percentage – baseline percentage) / (maximum percentage – baseline percentage)} – last cumulative disbursement
	Effective and efficient Fiduciary System Management	3,000,000	0	Program closure date	n.a.	3 nos.	Disbursement = US\$1,000,000 upon each verified completion

#	DLI	Bank Financing Allocated to the DLI (US\$)	Of which Financing Available for Prior Results	Deadline for DLI Achievement	Minimum DLI Value to Be Achieved to Trigger Disbursements of Bank Financing	Maximum DLI Value(s) Expected to Be Achieved for Bank Disbursements Purposes	Determination of Financing Amount to Be Disbursed against Achieved and Verified DLI Value(s) ^a
DLI-8	Adaptation and operationalization of GRS	5,000,000	0	Program closure date	n.a.	5 nos.	Disbursement = US\$1,000,000 upon each verified completion
	Development and operationalization of smartphone-based field inspection application	5,000,000	0	Program closure date	n.a.	5 nos.	Disbursement = US\$1,000,000 upon each verified completion

Note: a. Specify the formula determining the level of World Bank financing to be disbursed on the basis of level of progress in achieving the DLI, once the level of DLI achievement has been verified by the World Bank. Such formula may be of various types, including pass/fail, linear, or other types as may be agreed between the World Bank and the LGED.

Table 3.4. Program Scope Selection and Prioritization

Program Scope	Location Information	Inventory System	Selection Criteria ^a	Ranking Items	Prioritization Criteria	Catalogue	Technical References
Minor Maintenance	The GoB's gazette notification dated October 29, 2017 or any subsequent notification(s) in this regard	RSDMS	1. 61 districts (Excluding Bandarban, Khagrachhari& Rangamati) 2. UZR and UNRs 3. Program Operational Strategy following Figure 5.1. 4. Length <100 meters (capacity expansion and replacement)	<ul style="list-style-type: none"> • Bridge Structural Deficiency Score • Traffic Volume Score • Socio-Economic Score 	Total Score = Bridge Structural Deficiency (65%) + Traffic Volume (15%) + Socio-Economic (20%)	A	<ul style="list-style-type: none"> • LGED Road Design Manual • LGED Road and Bridge Design Standard • LGED Specifications for Road and Structure Works • LGED Rate Schedule (all latest versions)
Major Maintenance						B	
Rehabilitation						C	
Capacity Expansion						D	
Replacement						E	
New Construction	GoB's gazette notification dated October 29, 2017 or any subsequent notification(s) in this regard	RSDMS	1. 61 districts (Excluding Bandarban, Khagrachhari& Rangamati) 2. UZR and UNRs 3. Length <100 m 4. Program Operational Strategy 5. Physical progress <20% (for incomplete bridges)	<ul style="list-style-type: none"> • Road Connectivity Score • Socioeconomic Score 	Total Score = Road Connectivity (50%) + Socio-Economic (50%)	F	

Note: a. All selected bridges and structures must be without any significant and irreversible social and environmental consequences.

Table 3.5. Selection and Prioritization Criteria for SupRB First-year Program

Sl. No.	Program Scope	DLI	1st Year Program		Scope of Works
			Selection Criteria	Priority Ranking	
1	Minor Maintenance	DLI-1	1. Following ' Program Boundary ' 2. Type of Structure: <i>All types of bridges (excluding arch masonry, lightweight, iron, and wooden bridges)</i> 3. Length >3m 4. Carriage Width ≥ 3 m 5. Age of Structure >1 year 6. Following ' Program Operational Strategy (Figure 5.1.) '	Total Score = Road Connectivity Score (50%) + Socioeconomic Score (50%)	Catalogue-A
2	Major Maintenance	DLI-2	1. Following ' Program Boundary ' 2. Type of Structure: <i>All types of bridges (excluding arch masonry, lightweight, iron, and wooden bridges)</i> 3. Length >3m 4. Carriage Width ≥ 3 m 5. Age of Structure >5 years 6. Following ' Program Operational Strategy (Figure 5.1.) '	Total Score = Road Connectivity Score (50%) + Socioeconomic Score (50%)	Catalogue-B
3	Rehabilitation	DLI-3	1. Following ' Program Boundary ' 2. Type of Structure: <i>All types of bridges (excluding arch masonry, lightweight, iron, and wooden bridges)</i> 3. Length >3m 4. Carriage Width ≥ 3 m 5. Age of Structure >10 years 6. Following ' Program Operational Strategy (Figure 5.1.) '	Total Score = Road Connectivity Score (50%) + Socioeconomic Score (50%)	Catalogue-C
4	Capacity Expansion	DLI-4	1. Following ' Program Boundary ' 2. Type of Structure: <i>All types of bridges (excluding arch masonry, lightweight, iron, and wooden bridges)</i> 3. Length >3m<100 m 4. Carriage Width <3 m 5. Following ' Program Operational Strategy (Figure 5.1.) ' 6. Land Acquisition: <i>No acquisition</i>	Total Score = Road Connectivity Score (50%) + Socioeconomic Score (50%)	Catalogue-D
5	Replacement	DLI-5	1. Following ' Program Boundary ' 2. Type of Structure: <i>Arch masonry, lightweight, iron, and wooden bridges</i> 3. Length >6 m<100 m 4. Following ' Program Operational Strategy (Figure 5.1.) ' 5. Land Acquisition: <i>No acquisition</i>	Total Score = Road Connectivity Score (50%) + Socioeconomic Score (50%)	Catalogue-E
6	New Construction	DLI-5	1. Following ' Program Boundary ' 2. Length <100 m 3. Physical Progress <20% (for incomplete bridges) 4. Following ' Program Operational Strategy (Figure 5.1.) ' 5. Land Acquisition: <i>No acquisition</i>	Total Score = Road Connectivity Score (50%) + Socioeconomic Score (50%)	Catalogue-F

Table 3.6. Excluded activities mentioned in Section II of Financing Agreement

The LGED shall ensure that the Program excludes any activities which:
a. in the opinion of the IDA, are likely to have significant adverse impacts that are sensitive, diverse, or unprecedented on the environment and/or affected people
b. involve the procurement of: <ul style="list-style-type: none"> i. works, estimated to cost \$50,000,000 equivalent or more per contract ii. goods, estimated to cost \$30,000,000 equivalent or more per contract iii. non-consulting services, estimated to cost \$30,000,000 equivalent or more per contract or iv. consulting services, estimated to cost \$15,000,000 equivalent or more per contract
c. are financed by any other financier or by the IDA under any other loan, credit or grant
d. involve the capacity expansion (widening), replacement and new construction of bridges with a length of hundred (100) meters or above
e. involve any construction of bridges in environmental sensitive areas, such as Recipient-listed national parks and conservation areas
f. involve the procurement of works, goods, non-consulting services and consulting services under open tendering method, in which: <ul style="list-style-type: none"> i. bids are invited and/or rejected based on a percentage above or below the estimated cost; and/or ii. awards using lottery systems are allowed
g. involve the procurement of works, goods, non-consulting services and consulting services contracts in which awarded bids disregard tenderer's qualifications and/or experience requirements

Annex 4. Program Action Plan

Action Description	DLI or Other Links	Due Date	Responsible Party	Completion Measurement
Technical Actions				
1. Develop a POM that includes Program planning, implementation, and M&E aspects	Facilitation of overall Program operation	June 30, 2019	LGED	POM developed and adopted through an administrative order
2. Develop and formalize the following rural bridge guidelines: a. Bridge inspection and condition assessment guidelines b. Bridge maintenance guidelines	DLIs 1–5 and Program’s business processes	June 30, 2020	LGED	Guidelines available and administrative order(s) available formalizing them
3. Develop terms of reference for comprehensive technical audits (technical, fiduciary, and social and environmental), appoint a consulting company for conducting such audits for a sample of completed bridge contracts under the Program every year.	DLIs 1–5	Ongoing	LGED	Comprehensive technical audit reports are produced and formally issued.
4. Develop, formalize, and implement guidelines for the planning, design, and implementation of climate-resilient rural bridges.	DLIs 3–5 and climate resiliency of Program bridges	Development, formalization by June 30, 2020 and then ongoing implementation	LGED	a. Guidelines available and they are formalized through an administrative order b. Use of guidelines in the planning, design, and implementation of climate-resilient bridges
5. Develop norms and update the LGED schedule of rates per the technical recommendations of the U.K. Department of International Development (DFID) supported climate-resilient reinforced concrete structures study or any other related studies	DLIs 2–5 and climate resiliency of Program bridges	June 30, 2019	LGED	Updated Schedule of Rates formally approved by the LGED through appropriate administrative process.
Improvement of Systems cum Business Process				
6. Prepare and update (at least annually) a Procurement Strategy Document for the Program	Program’s efficiency	December 31, 2018	LGED	Strategy document endorsed by the LGED management
7. Develop and make operational an electronic procurement related complaint-register and complaint management system	Program’s transparency and fairness to all bidders	September 30, 2019	LGED	a. System available online b. The LGED submits summary reports on the number of complaints received and resolved in Program’s regular reporting
Improvement of Agency Capacity and Performance				

Action Description	DLI or Other Links	Due Date	Responsible Party	Completion Measurement
8. Strengthen the internal audit team with appropriate staffing and mandate.	DLI-7	September 30, 2019	LGED	Administrative order issued in this regard
9. Establish a separate Environmental and Social Management Unit with appropriate staff resources for managing environmental and social risks within an agreed time frame	Program's environmental and social risk management and sustainability	July 31, 2019	LGED	a. Administrative order of establishment of an Environmental and Social Management Unit available b. Staff appointed or staffed
Risk Mitigation				
10. Create separate economic codes for the following: (a) repair, maintenance, and rehabilitation of rural bridges (within Economic Codes 4900–4999) and (b) construction of rural bridges (within Economic Codes 7000–7099)	Program expenditure tracking	September 30, 2018	MoF/LGD/LGED	Codes created and used by the Program
11. Appoint an NGO for providing comprehensive support to the LGED in managing the Program's SEA risks.	SEA risk management	September 30, 2019	LGED	An NGO appointed and reports available from the firm or the NGO
12. Appoint a third-party (a consultancy firm or an NGO) for monitoring, reporting, and managing the Program's labor influx, OHS issues, and child labor engagement issues.	Program's labor influx, OHS, and child labor-related risk management	September 30, 2019	LGED	A consultancy firm or NGO appointed and reports available from the firm or NGO

Table 5.1. Element Condition State Definition Summary

Element Condition State (CS)	Condition Type	Definition
CS-1	Good	<p>A bridge element that has either no deterioration or with an insignificant deterioration. This means that there is no need of preventive maintenance of that particular element. The element might have been restored to its nearly original conditions earlier through interventions. The expected life of the restored element is not significantly lower than the original design life of the element.</p> <p>Structural elements show some minor deterioration, e.g. all primary structural elements are sound but may have minor section loss, cracking, spalling, or scour, etc.</p>
CS-2	Fair	<p>A bridge element that has minor deficiencies that signify a progression of the deterioration process. The element might need condition-based preventive maintenance. Although the element had been repaired in the past, without any interventions to repair it, the element's remaining life is significantly lower than its original design life.</p> <p>Loss of section, deterioration, spalling, or scour may have seriously affected primary structural components. Local failures are possible to repair. Fatigue cracks in steel or shear cracks in concrete may be present.</p>
CS-3	Poor	<p>The bridge element that is in its advanced stage of deterioration. However, it does not warrant any structural reviews. The element might need preventive maintenance of other interventions to restore it to a condition to improve its service life substantially.</p> <p>Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Bridge is closed to traffic but corrective action may put back in light service.</p>
CS-4	Severe	<p>The bridge element that has deteriorated to such an extent that a structural review is required to determine its strength and serviceability, or the element has deteriorated to such an extent that the element can no longer serve its intended purposes.</p> <p>Major deterioration or section loss present in critical structural components of obvious vertical or horizontal movement affecting structure stability. Out of service- beyond corrective action.</p>
CS-5	Unknown	<p>The element is not physically accessible to assess its conditions with significant level of confidence.</p>

Table 5.2. Bridge Maintenance Catalogue

Catalogue - A: Minor Maintenance					
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)					
Activities	Segments/ Component/ Elements	Element Condition State (CS)	Structure Condition		Description of Items
			Super Structure	Sub Structure	
Cleaning, Removal and Disposal	Carriageways, footpaths, verges, expansion joints, ducts, drainage spoutsofbridges	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> ▪ Clearing and grubbing by removal and disposal of all kinds of unwanted vegetation, bushes, debris, and so on. From carriageways, footpaths, verges, deck slabs, and so on. ▪ Clean out stones, debris, and vegetation from expansion joints, remove debris, dirt, vegetation, damage to bearing such as tearing, deterioration, flattening, other abnormal deformation, loose bearings and mortars, and so on from bearing or bearing plinth/base. ▪ Remove graffiti, vegetation, silt, and debris, including animal and fecal deposits from sub and super structures, clean out weep holes, and drainage pipes. ▪ Clean surfaces of all signs, remove all notices and advertisements from signs, and so on. ▪ Remove tree trunks and branches, especially around and between piers and abutments and clean out accumulation of debris and vegetation within 150 meters upstream or downstream of the structure. ▪ Clear the drainage culverts, desilt waterways, drains and drainage structures, and restore the original water course.
Earth work	Approaches	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> ▪ Refill settled/eroded embankments close to abutments, slopes of approaches, shoulders with suitable material, and so on. ▪ Refill earth masses below and around foundations with suitable material, and so on. ▪ Minor bed protection to minimize scour required to keep the foundations unexposed. ▪ Approach slope protection to prevent breaching of approach road.
Protective works	Approaches	Fair (CS2)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> ▪ Minor repair/replacement of cement concrete (CC) blocks, toe walls of approaches. ▪ Construct/repair/reconstruct protective works of approaches and so on.
Resealing and overlays	Approaches	Fair (CS2)/ Poor (CS3)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> ▪ Repair potholes, edge breaks, depressions, ruts, cracks, raveling/delamination, including approach settlement, remove unsound material and place hot mix asphalt for temporary repair, and so on. ▪ Seal cracks providing chips sealing or any other suitable treatment options and so on. ▪ Reseal/overlays of approaches (if necessary) and so on.
Repairing/ Replacement	Wearing course	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> ▪ Repair holes, ruts, cracks, unevenness, corrugation, shoving, and so on. ▪ Repair/replace wearing course ▪ Repair/replace of checker plates of steel deck of Bailey bridges, and so on.
	Expansion	Fair (CS2)/	Good	Good	<ul style="list-style-type: none"> ▪ Rake out and replace damaged or missing gap sealant of expansion joints.

Catalogue - A: Minor Maintenance					
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)					
Activities	Segments/ Component/ Elements	Element Condition State (CS)	Structure Condition		Description of Items
			Super Structure	Sub Structure	
	joint, drain pipes and outlets, abutment/ wing walls	Poor (CS3)/ Severe (CS4)	(CS1)	(CS1)	<ul style="list-style-type: none"> Repair/replace damaged or worn-out drainages systems, extend/replace drainage pipes, and so on. Re-pointing of loose mortar or re-facing of spalled screed of abutment/wing wall, and so on. Replace missing bolts and tighten loose bolts, re-weld top cover plates where broken or loose, replace gaskets, and so on.
Repairing/ Replacement/ Painting	Rail bar, rail post, wheel guard	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> Repair/replace damaged reinforced cement concrete/steel railing, wheel guard, footpaths, and so on. Paint reflectorized painting/coating on rail post, rail bar, wheel guard, and so on.
Painting	Steel members of truss and Bailey bridges	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> Paint steel members of truss and Bailey bridges (if necessary)
Road safety activities	Railing, rail posts, wheel guard, deck slab, and approaches	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)	Good (CS1)	<ul style="list-style-type: none"> Repair/replace/construct all damaged signs, reinforced cement concrete guide posts, and so on. Repaint all signs (reflectorized painting/coating) and so on.

Note: a. Replace - Only part of the component/element of the structure can be replaced.

Catalogue - B: Major Maintenance (Including Minor Maintenance)					
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)					
Activities	Segments/ Component/ Elements	Element Condition State (CS)	Structure Condition		Description of Items
			Super Structure	Sub- Structure	
Repairing/ Retrofitting	Pile, pile cap, pier, pier cap, and abutment wall (sub	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	Fair (CS2)	<ul style="list-style-type: none"> Repair/retrofit/replace^adamaged or serious settlement, deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of abutments, supports, pile, pile cap, pier cap/super structures, and so on.

Catalogue - B: Major Maintenance (Including Minor Maintenance)					
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)					
Activities	Segments/ Component/ Elements	Element Condition State (CS)	Structure Condition		Description of Items
			Super Structure	Sub- Structure	
	structure)				
Repairing/ Replacement	Bearing assembly	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	Fair (CS2)	<ul style="list-style-type: none"> Repair/replace elastomeric bearing pads, repair minor damaged to concrete bearing seats, loose bolts, and so on.
Repairing/ Retrofitting/ Replacement	Wing wall	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	Fair (CS2)	<ul style="list-style-type: none"> Repair/retrofit/replace ^a damaged or serious settlement, deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of wing walls, and so on.
	Girder and cross-girder	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Repair/retrofit/replace ^a damaged or serious settlement, deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of girder and cross girder, and so on.
	Steel members of truss and Bailey bridges	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Repair/retrofit/replace ^a damaged or differential settled, defective due to corrosion of steel members/decks or truss of bailey bridges, and so on.
	Deck and walkway	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Repair/retrofit/replace ^a damaged or deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of deck and walkway and so on.
Repairing/ Rehabilitation	Embankment slope protection	Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Construct/repair/reconstruct approach embankment and protective works (if necessary) of approaches and so on.
	Bridge approaches	Severe (CS4)	Good (CS1)/ Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Reconstruct/rehabilitation of settled/eroded approaches and so on.

Catalogue - B: Major Maintenance (Including Minor Maintenance)					
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)					
Activities	Segments/ Component/ Elements	Element Condition State (CS)	Structure Condition		Description of Items
			Super Structure	Sub- Structure	
Repairing/ Reconstruction/ New construction	River training works	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Repair/reconstruct river bank/slope protection works, construct suitable protective works of exposed piles due to erosion/scour and so on. Remove accumulated excessive inorganic/combustible materials within 150 meters upstream or downstream of the structure. Refill, with suitable materials, eroded subsoil close to the abutments or near the abutments or supports and so on.

Note: a. Replace - Only part of the component/element of the structure can be replaced.

Catalogue - C: Rehabilitation (Including Minor and Major Maintenances)					
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)					
Activities	Segments/ Component/ Elements	Element Condition State (CS)	Structure Condition		Description of Items
			Super Structure	Sub-Structure	
Repair/ Retrofitting	Pile, Pile Cap, Pier, pier cap, and abutment wall (for carriage width ≥ 5.5 m)	Poor (CS3)	Good (CS1)/ Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Retrofit/replace^a damaged or serious settlement, deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of abutments, supports, pile, pile cap, pier cap/super structures, and so on.
Repairing/ Retrofitting/ Replacement	Girder and cross- girder (for carriage width ≥ 5.5 m)	Poor (CS3)/ Severe (CS4)	Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Retrofit/replace^a damaged or serious settlement, deformed or visible reinforcement bars or spalling due to corrosion of reinforcement of girder and cross girder and so on.
Repairing/ Retrofitting/ Replacement	Deck and walkway (for carriage width ≥ 5.5 m)	Poor (CS3)/ Severe (CS4)	Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Retrofit/replace^a damaged or deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of deck and walkway and so on.
Repair/ Retrofitting	Cap, pier, pier cap, and abutment wall (for carriage width < 3 m)	Good (CS1)/ Fair (CS2)/ Poor (CS3)	Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Retrofit/replace^a damaged or serious settlement, deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of abutments, supports, pile, pile cap, pier cap/super structures, and so on.
Repairing/	Girder and cross-	Fair (CS2)/	Poor (CS3)/	Good (CS1)/	<ul style="list-style-type: none"> Retrofit/replace^a damaged or serious settlement, deformed or

Catalogue - C: Rehabilitation (Including Minor and Major Maintenances)					
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)					
Activities	Segments/ Component/ Elements	Element Condition State (CS)	Structure Condition		Description of Items
			Super Structure	Sub-Structure	
Retrofitting/ Replacement	girder (for carriage width <3 m)	Poor (CS3)/ Severe (CS4)	Severe (CS4)	Fair (CS2)	visible reinforcement bars or spalling due to corrosion of reinforcement of girder and cross girder and so on.
Repairing/ Retrofitting/ Replacement	Deck and walkway (for carriage width <3 m)	Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> ▪ Retrofit/replace ^a damaged or deformed or visible reinforcement bars or spalling concrete due to corrosion of reinforcement of deck and walkway and so on.
Major Scope		Activities		Description of Items	
Bailey bridge		Procurement and stacking of Bailey bridges or its parts at all the LGED regional offices.		<ul style="list-style-type: none"> ▪ To support any emergency situation for maintaining road connectivity such as <ul style="list-style-type: none"> ➤ Sudden collapse of any bridges or culverts; ➤ One or more elements of the bridge heavily and critically damaged that compromises the safety of the traffic using the bridge; and ➤ Bridge collapse due natural disaster and so on. 	

Note: Replace - Only part of the component/element of the structure can be replaced

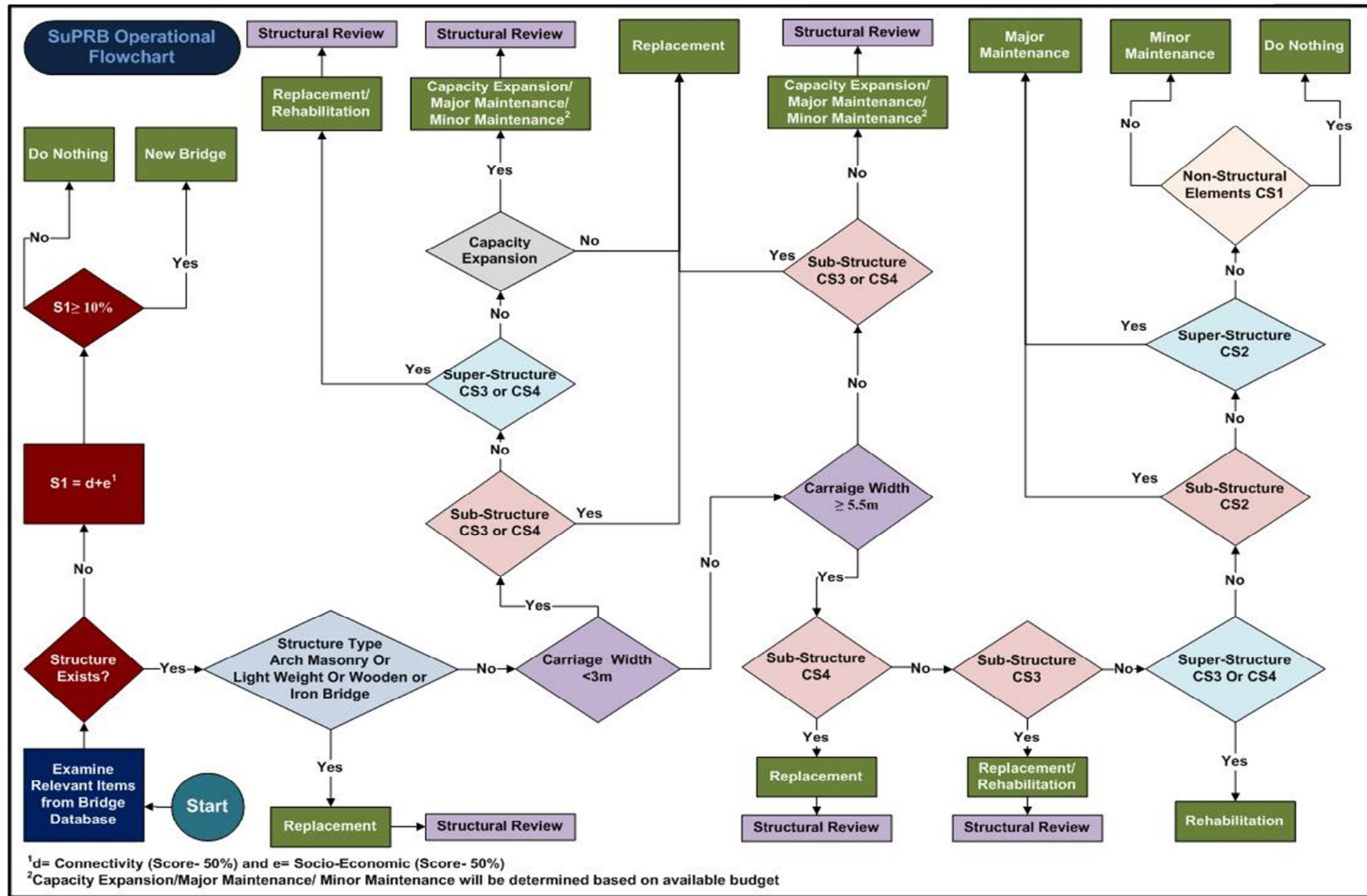
Catalogue - D: Capacity Expansion			
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)			
Activities	Existing Structure Condition		Description of Items
	Super Structure	Sub-Structure	
Capacity expansion of existing structure (if carriage width <5.5 meters and structural review suggests capacity expansion)	Good (CS1)/ Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> ▪ Attaining minimum minor maintenance of existing structure (if required) to comply with Catalogue-A ▪ Attaining minimum major maintenance of existing structure (if required) to comply with Catalogue-B ▪ Capacity expansion of both super and sub structure of existing structure or capacity expansion of only super structure
Capacity expansion of existing structure (if carriage width <5.5 meters and structural review suggests capacity expansion) by	Good (CS1)/ Fair (CS2)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> ▪ Attaining minimum minor maintenance of existing structure (if required) to comply with Catalogue-A ▪ Attaining minimum major maintenance of existing structure (if required) to comply with Catalogue-B

Catalogue - D: Capacity Expansion			
All Type of Bridges (Except Arch Masonry Bridges, Lightweight Bridges, Iron Bridges, and Wooden Bridges)			
Activities	Existing Structure Condition		Description of Items
	Super Structure	Sub-Structure	
including additional new bridge construction parallel to existing structure			<ul style="list-style-type: none"> Attaining minimum rehabilitation works of existing structure (if required) to comply with Catalogue-C New construction of bridge (Carriage width ≤ 3.6 m) without any significant and irreversible social and environmental consequences.

Catalog - E: Replacement			
All Type of Bridges			
Major Scope	Existing Structure Condition		Description of Items
	Super Structure	Sub-Structure	
Replacement of existing arch masonry, lightweight, iron bridges, and wooden bridges (if Structural review suggests replacement)	n.a.	n.a.	<ul style="list-style-type: none"> Replacement of existing structure with new bridge (Carriage width ≥ 5.5 m)
Replacement of existing bridge (if carriage width ≥ 5.5 meters and structural review suggests replacement)	Good (CS1)/ Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Severe (CS4)	<ul style="list-style-type: none"> Replacement of existing structure with new bridge (Carriage width ≥ 5.5 m)
Replacement of existing bridge (if carriage width ≥ 5.5 meters and structural review suggests no rehabilitation)	Good (CS1)/ Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Poor (CS3)	<ul style="list-style-type: none"> Replacement of existing structure with new bridge (Carriage width ≥ 5.5 m)
Replacement of existing bridge (if carriage width < 5.5 m)	Good (CS1)/ Fair (CS2)/ Poor (CS3)/ Severe (CS4)	Poor (CS3)/ Severe (CS4)	<ul style="list-style-type: none"> Replacement of existing structure with new bridge (Carriage width ≥ 5.5 m)
Replacement of existing bridge (if carriage width < 3 meters and structural review suggests no rehabilitation)	Poor (CS3)/ Severe (CS4)	Good (CS1)/ Fair (CS2)	<ul style="list-style-type: none"> Replacement of existing structure with new bridge (Carriage width ≥ 5.5 m)

Catalog - F: New Construction		
Major Scope	Description of Items	Criteria
New construction	➤ New construction of bridges (Carriage width ≥ 5.5 m)	<ul style="list-style-type: none"> ▪ Length <100 m ▪ Connectivity ▪ Socioeconomic ▪ Without any significant and irreversible social and environmental consequences
New construction	➤ New construction of bridges (Carriage width ≥ 5.5 m)	<ul style="list-style-type: none"> ▪ Length <100 m ▪ Adaptation to climate change ▪ Without any significant and irreversible social and environmental consequences
New construction	➤ Continuing construction of incomplete bridges (Carriage width ≥ 5.5 m)	<ul style="list-style-type: none"> ▪ Length <100 m ▪ Connectivity ▪ Socioeconomic ▪ Physical progress <20% ▪ Without any significant and irreversible social and environmental consequences

Figure 5.1. SupRB Operational Strategy Flowchart



Annex 6. Institutional Arrangements for Implementation

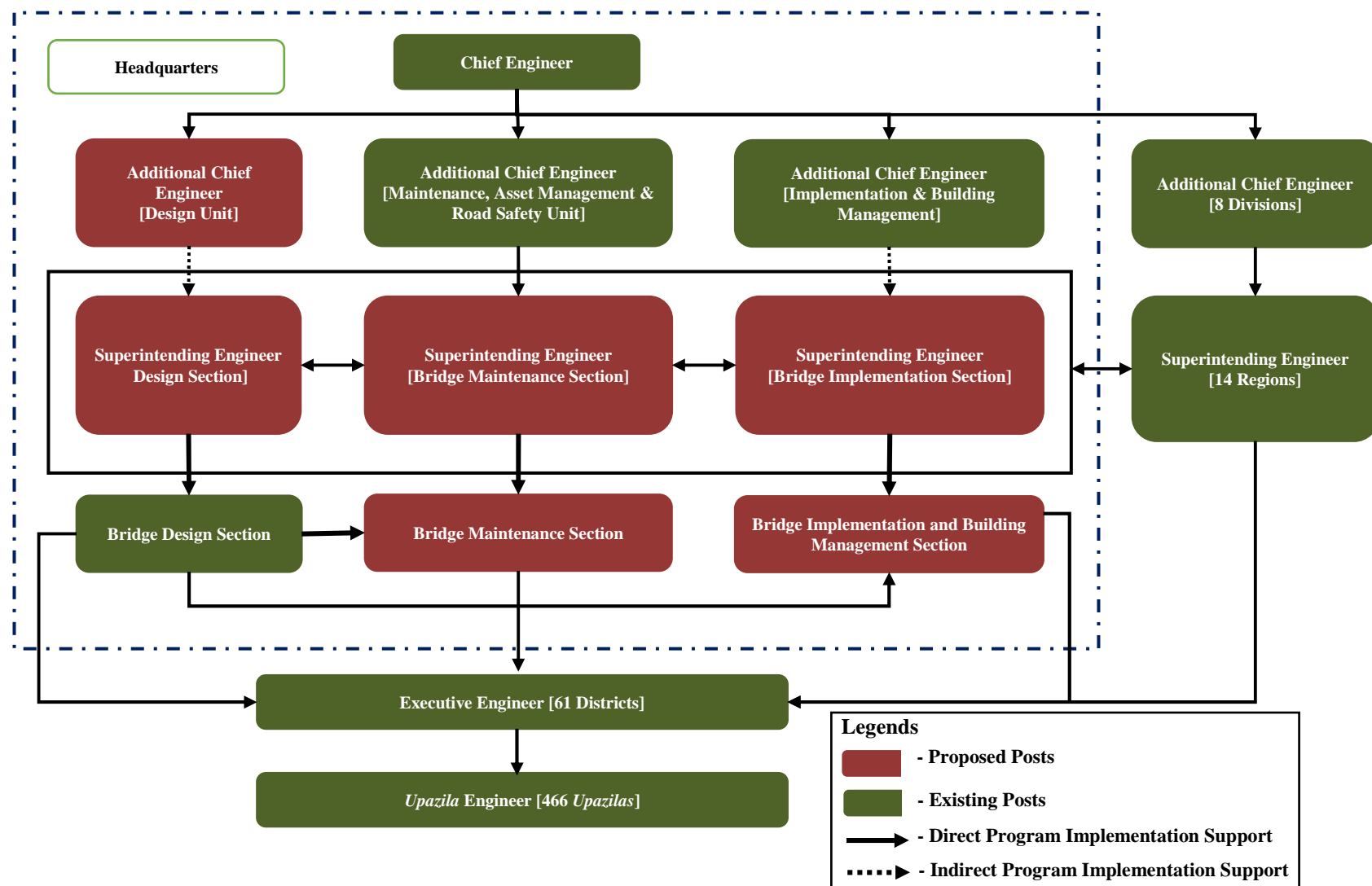


Table 6.1. Summary Roles Other Institutions Supporting the Program

Institution	Main Role
1. LGD, Ministry of Local Government Rural Development, and Cooperatives	• Operation oversight being the LGED's parent ministry
2. Planning Commission	• Operation appraisal and approval
3. IMED	• DLI verification
4. Central Procurement Technical Unit	• Oversight function of application of procurement legislations and management of e-GP portal
5. Ministry of Finance (MoF)	• Operation budget allocations and fund release
6. Economic Relations Division	• Liaison with the World Bank
7. Comptroller and Auditor General (C&AG)	• External audit of the operation, both PforR and IPF components
8. Anticorruption Commission	• Corruption prevention and investigation and prosecution

Note: e-GP = Electronic Government Procurement.

Table 6.2. Summary Functions of Different LGED Offices

LGED's Entity and Office Location	Main Functions
The chief engineer at headquarters	• Overall oversight and guidance
Additional chief engineer (maintenance, asset management, and road safety) at headquarters	• Project Director—overall operation management and coordination
Superintending engineer (Bridge Maintenance) at headquarters	<ul style="list-style-type: none"> • Assisting the Project Director in overall operation management and coordination • Overall responsibility of bridge major and minor maintenance, rehabilitation and capacity expansion works, new construction and replacement of the program • Coordinating Program activities with superintending engineer (Bridge Design) and superintending engineer (Bridge Implementation and building management)
Superintending engineer Design) at headquarters	• Overall responsibility of technical, design, quality monitoring, and RuBIMS aspects of the Program
Superintending engineer (Bridge Implementation & Building Management) at headquarters	• Overall responsibility of bridge management
Divisional additional chief engineers	• Program oversight at the division level
Regional superintending engineers	• Program oversight at the regional level
Executive engineers	• Overall responsibility of Program preparation, procurement, implementation, and monitoring and reporting at the district level
Upazila engineers	• Overall Program-related responsibility at the <i>upazila</i> level, including contract administration as project manager
Other units/sections at headquarters	(a) Procurement Unit (prepare and update the Procurement Strategy Document, provide e-CM

LGED's Entity and Office Location	Main Functions
	implementation support, monitor contract management-related DLI achievement); (b) Accounts Section (overall operation financial management support); (c) Audit Unit (audit support both internal and external); (d) Training Unit (training-related support); (e) PM&E support; (f) Quality Control Unit (Quality assurance support); (g) proposed Environment and Social Unit (overall social and environmental risk management support)

Annex 7. Institutional Strengthening & Capacity Building

Table 7.1. IPF Component Details

Activity No.	Activity	Activity Description
Support for Program Implementation		
1	Program coordination and monitoring	<ul style="list-style-type: none"> Assisting Program Coordinator to implement the Program Supporting estimation, tender document preparation and procurement of Program scopes Supporting for monitoring survey & field assessment of bridges Supporting for monitoring of all ongoing construction works of bridges Supporting for reviewing bills & technical documents of construction works of bridges Supporting for monitoring post condition assessment of bridges
2	Planning, design and other technical areas	<ul style="list-style-type: none"> Supporting bridge technical survey and sub-soil investigation Supporting hydrological analysis for bridges Supporting the typical and innovative structural design of bridges Supporting the preparation and as-built drawing for bridges Providing technical supports for condition assessment and structural audit of existing bridges Supporting maintenance, rehabilitation and retrofitting solutions to existing bridges
3	Bridge asset management including RuBIMS	<ul style="list-style-type: none"> Supporting condition assessment, selection and prioritization of bridges Supporting rural bridge asset management Supporting bridge asset management training Supporting for collecting UZR and UNR bridge and gap data across the country Supporting for updating bridge inventory in RuBIMS using collected data
4	ICT/GIS	<ul style="list-style-type: none"> Supporting the development and maintenance of e-governance infrastructure Supporting operation, maintenance and enhancement of different web applications for the Program
5	Comprehensive technical audits	<ul style="list-style-type: none"> Integrated technical audits (technical, fiduciary and safeguard) for bridge maintenance and construction under the Program
6	Procurement, financial management & audit	<ul style="list-style-type: none"> Supporting the procurement, financial management & internal audit sections of LGED for Program activities
7	Environmental and social risk mitigation, labor influx, SEA, OHS	<ul style="list-style-type: none"> Supporting for Involvement of Local organization/ NGOs for monitoring and training on labor influx, OHS facilities in Program Area
8	Goods, equipment and facilities	<ul style="list-style-type: none"> Providing necessary testing and measuring equipment for ensuring the quality of construction works Providing workstation, office furniture and other office facilities for Program operation.
9	DLI verification	<ul style="list-style-type: none"> Supporting IMED for DLI verification
Institutional Strengthening & Capacity Building		
1	Information and communication technology	<ul style="list-style-type: none"> Developing of implementation of Integrated Decision Support System (IDSS) for LGED Operation, Maintenance and enhance web applications

Activity No.	Activity	Activity Description
2	Bridge design and maintenance capacity building	<ul style="list-style-type: none"> ▪ Updating and development of bridge & road specifications, standards, guidelines & manuals ▪ Developing laboratory management software ▪ Preparing bridge health inspection manuals including training ▪ Preparing design manual on bridge type design standard, network arch bridges etc. Supporting BIWTA to review & update navigation clearance of rural bridges
3	Environmental and social capacity building	Updating ESMF for overall transport sector under LGED
4	Procurement and financial management capacity building	Preparation of a Procurement Strategy Document for the Program in agreement with the IDA
5	Transparency and accountability	<ul style="list-style-type: none"> ▪ Formulating LGED specific Grievance Redress System (GRS) Guidelines in line with the Cabinet Division's guidelines ▪ Adapting National GRS in LGED & web-based Grievance Redress Mechanism (GRM)
6	Communication, branding and outreach	<ul style="list-style-type: none"> ▪ Develop and information pac (visual and print) through showcasing LGED achievements for public dissemination including various days and event like national development fair Produce branding items that may be pen, coat pin, penholders, coffee mug, tie, photo frame, diary/note etc.
7	Others	Preparation of potential transport projects and related analytical studies

Table 7.2. Components supported by IPF

Support Elements	Program's integrity and governance	Program's sustainability	LGED-wide impact	DLI, PAP and adoption of modern technology
Program Implementation Support				
Program coordination and monitoring	√	√		√
Planning, design and other technical areas		√		√
Bridge asset management including RuBIMS	√	√	√	√
GIS	√	√	√	√
Comprehensive technical audits	√			√
Procurement, financial management & audit	√	√	√	√
Environmental and social risk mitigation, labor influx, SEA, OHS	√	√	√	√
Goods, equipment and facilities		√		√

Support Elements	Program's integrity and governance	Program's sustainability	LGED-wide impact	DLI, PAP and adoption of modern technology
DLI verification	√			√
Institutional Strengthening and Capacity Building				
Information and communication technology		√	√	√
Bridge design and maintenance capacity building. Strengthening Capacity of Internal Audit Unit of LGED		√	√	√
Environmental and social capacity building		√	√	√
Procurement and financial management capacity building	√	√	√	√
Transparency and accountability	√	√	√	√
Communication, branding and outreach	√		√	
Others				
Preparation of potential transport projects and related analytical studies	n.a.	n.a.	n.a.	n.a.

Table 8.1 Strategies for Climate Resiliency

Cross Cutting Issues	Strategies will be Adapted
Climate Resiliency	<p>Some specific climate change program impact includes: (a) disruption/discontinuation of the rural road networks due to sudden collapse of bridges caused by storm surge, flash flood; (b) a reduction of serviceability of bridges because of drainage congestions, shifting channel flows, embankment erosions, and reduction of navigational clearances; (c) a reduction of bridges' service lives due to increase in temperature, rainfall, sea level rise, and salinity, especially in coastal districts; and (d) an increase in Program costs from bridge construction and maintenance cost to offsetting climate change effects.</p> <p>The Program will support several activities to help the LGED in rural bridge climate change adaptation. They include: (a) developing planning, design, and implementation of climate change adaptation guidelines for rural bridges; (b) implementing recommendations from the U.K. Department of International Development-supported climate resilient reinforced concrete structures research or any other related studies; (c) improving the LGED's climate change adaptation and decision-making capacity for rural bridges through training and research; the research areas will also include how the GIS could be used in the preparation of climate hazard maps and pinpointing mitigating interventions; (d) procuring modular bridges (or prefabricated concrete bridges) and storing them at strategic locations for quick restoration of rural connectivity severed due to natural extreme events (for example, floods, storm surges); and (e) supporting rural bridge climate change adaptation research activities under the Climate Resilient Local Infrastructure Center.</p> <p>All Program activities will help in building resilience and adaptive capacity in the rural bridges subsector. These activities range from minor maintenance to major maintenance to new construction of bridges to institutional development. The activities, which help in building resilience and adaptive capacity, include: (a) improving planning, design, and technical specification parameters for rural bridges to make them climate resilient, especially in coastal districts; (b) improving or preserving rural connectivity through the maintenance, rehabilitation, and new construction of rural bridges, which will help improve network efficiency; (c) building capacity of government officials in identifying climate-related risks and implementation of rural bridge adaptive measures; and (d) improving informed rural bridge-related decision making through climate-related research on rural bridges.</p>

Annex 9. Citizen Engagement

Table 9.1 Strategies for Citizen Engagement

Cross Cutting Issues	Actions will be Adapted
Citizen Engagement	<p>Sensitization of the key stakeholders The Program will arrange a high-profile ‘launching ceremony’ at the Program inception for dissemination of the Program’s objectives and main features. The Program will invite key project stakeholders, including high-level politicians, senior government officials from key Program ministries, agencies, and institutions, including the Anticorruption Commission; representatives of the civil society organizations, press, and media; and local government representatives. A short video will be prepared that will summarize the Program objectives, potential interventions, and the planning and implementation process. A brief booklet (in Bangla) that will summarize the Program approach will be distributed.</p> <p>Proactive disclosure of Program information. The Program will create a dedicated portal in the existing website that will proactively disclose Program information. For instance, the portal will display latest information on rural bridges (for example, their spatial location, photos, and construction and maintenance history); annual bridge construction and maintenance plan; and detailed information on awarded contracts, including contract costs, contractor names, progress, and payments made. The website will have features for visitors to ask questions and the LGED will provide subsequent responses, if the visitor provides contact information. This will facilitate a two-way communication between the LGED and the public. The LGED will publish a Program annual summary report. The report will contain, among others, summary information on Program achievements against targets, condition status of rural bridges, cursory future plans, and grievances received versus resolved. A summary of the Program’s achievements will also be published in a reputed national newspaper.</p> <p>Signboard. Each worksite over a certain contract value (BDT 1.0 million; roughly US\$12,500) will erect a signboard within seven days of contractor’s mobilization. The objective of the signboard will be to promote transparency and accountability of the Program through disclosure of information and by providing contact details the official(s) to be contacted in case of any grievances. The signboard will contain summary information regarding the scheme, including the name of the project, name of the implementing organization, contract amount, contract completion date, name of the official, along with contact details for registering complaints, and restrictions regarding engagement of child laborers.</p> <p>Consultation on bridge design. The Program will conduct compulsory consultations on the design of new bridges over a span threshold: total span of 50 m and above. The design discussions will mainly consider the following issues: free board for facilitating movement of water transport, bridge location and approach roads, inclusion of footpaths in a bridge, and inclusion of gender-related requirements in the bridge design.</p> <p>Local disclosure of the Program information. The Program will disseminate upazila level Program plans and achievements using local newspaper(s) and community radio(s) once in a year. The upazila engineer’s office will lead this process. The Program will also organize a yearly question and answer session for executive engineers using local community FM radio.</p> <p>Grievance redress The LGED will implement the Government’s October 2015 directives to develop a comprehensive department wide GRS. The GRS will provide opportunities for entry at multiple levels (Program, upazila, district, and central) using different entry methods (for example, Internet, paper complaints, verbal complaints). The activities will involve the development of customized LGED GRS guidelines following Government guidelines, and the development of an LGED GRS portal for lodging LGED-specific grievances, the design of which will be similar to the one available at www.grs.gov.bd.</p> <p>Development and use of smartphone-based application. The Program will develop a simple smartphone-based application for public to report on any bridge issues. Anyone will be able to access and view such inputs using the Internet. Furthermore, these inputs will be overlaid on Google Earth online maps.</p>

Table 9.2 Action Plan for Citizen Engagement

#	Steps /Activities	Verifying Indicators	Verification Sources	Timeline
1	Sensitization of the key stakeholders by organizing a high-profile launching ceremony	Launching ceremony held	-	March 2019
2	Creation of a dedicated portal for proactive disclosure of program information	A dedicated portal is created	-	June 2019
3	Providing signboard in each worksite over a contract value of BDT 1.0 million	Signboard erected	Third party verification	Throughout the program
4	Conducting consultation on the design of new bridges over a span threshold: total span of 50 m and above	Consultation of design held	Third party verification	Throughout the program
5	Disseminating program information through local newspapers and community radio (if available) at the local level	Dissemination of program information	Third party verification	Throughout the program
6	Developing customized LGED GRS guidelines and portal following Government guidelines	Guidelines and portal developed	Third party verification	March 2020
7	Developing a smartphone-based application for public reporting on bridge issues	Smartphone-based application developed	-	June 2020

Annex 10. Gender Tagging

Table 10.1 Strategies for Gender Tagging

Cross Cutting Issues	Strategies will be Adapted
Gender Tagging	<p>a. The operation will endeavor to fill this gender gap by employing women in medium to high skilled positions. These skilled jobs include roles such as engineers, technicians, consultants and other relevant positions in LGED. Through this, the operation will try to break the glass ceiling that women face in employment in technical fields. This will also allow women to learn technical, management, and leadership skills on the job and will benefit them even after this Program is over. Educational institutions are producing more female engineers than are currently being employed by the LGED.</p> <p>b. Under the program, at least 20 percent of the staff employed in medium to high skilled roles will be women. This is a sizable target given that the current level of female employment in the LGED is only 3.5 percent. At the moment the baseline level of employment for women is zero as recruitment for the operation is yet to take place. Amongst other roles, the Program will employ women as supervising consultants for the bridges. This will not only accord these women leadership roles but also, given the vast geographic scope of the Program, it will lead to the creation of role models for girls and young women—showing them that women can play have a prominent place in the rural transportation sector. The Program will also create appropriate working conditions for women including taking measures for mitigating sexual exploitation and abuse related risks (see below Labor Influx, SEA, and OHS section for details).</p> <p>c. In addition, the operation plans to commission a study that will focus on improving gender aspects of the Program. The study will cover, amongst others, how to maximize the participation of women in the rural transport sector (for example, extending employment opportunities in skilled and unskilled jobs) and to review the current standard bridge designs to examine their suitability from a woman's, as well as physically challenged peoples', usability viewpoint. The study outputs will contain an action plan, which the Program will endeavor to implement. These outputs will also benefit future programs that relate to rural transportation in Bangladesh.</p> <p>d. The activities undertaken by the Program to fill gender gaps for women, as both the user and employee perspective, are well aligned with LGED's own Gender Equality Strategy. The LGED has developed a Gender Equality Strategy in 2014 taking National Women Development Policy as the basis. The objective of the strategy is to develop women and to create a women-friendly environment at all levels of the LGED activities. The strategy proposed the creation of a Gender and Development Forum, which would be the main executive body for the implementation of the strategy. The strategy elements included collecting gender disaggregated data, M&E, building women-friendly infrastructure, creating employment for women along with improved working conditions for women, providing appropriate training for women, and ensuring participation of women in all areas of development.</p>

Table 10.2 Action Plan for Gender Tagging

#	Steps /Activities	Verifying Indicators	Verification Sources	Timeline
1	Conducting compulsory consultation to ensure favorable location and design of new bridges having length ≥ 50 m	Consultation held on design	Third party certification	Throughout the program
2	Provision of footpaths in bridges having length ≥ 50 m for new construction /replacement	Footpath included	Third party certification	Throughout the program
3	20% women are employed in medium to high skilled roles (engineers, technicians, consultants and other relevant positions)	Number of women employed	Third party certification	Throughout the program

Annex 11. Measures to Tackle Labor Influx, SEA, and OHS

Activities	Risk Mitigation	Verifying Indicators	Verification Sources
Specialized training on SEA for Government officials involved in the Program implementation	SEA	Number of officials trained	Program reports
Contract provisions barring unlawful engagement of child laborers ^a and engaging child laborers for activities that are only allowed under the local law and ILO Convention	Unlawful use of child laborers	Provision made in the contract documents	Program's standard bidding documents
Signboards at worksites stating requirements for engaging child laborers	Same as above	Signboards erected at worksites above a certain threshold contract value	Third-party certification in its report
Introduction of workers codes of conduct for contracts above a certain contract financial threshold	SEA	Code of conduct introduced for contracts above a threshold value	Third-party certification in its report
Inclusion of OHS as a line item in the bill of quantities	OHS	OHS issues included in the bill of quantities	Third-party certification in its report
Engagement of an NGO for the following purposes: (a) organizing training at different levels on SEA; (b) organizing union-level Committee for Prevention of Violence against Women and <i>upazila</i> -level Women Development Forum; (c) providing support services to SEA victims; (d) providing support to the LGED Women Development Forum in preventing and mitigating the SEA risks	SEA	An NGO is engaged	Contract between the LGED and NGO
Engagement of a third party ^b for helping the LGED in monitoring and managing OHS, labor influx, and child labor engagement issues	SEA and OHS	Third party engaged	Contract between the LGED and a third party
Use of union-level committees and <i>upazila</i> -level Women Development Forum for reporting on SEA-related grievances and organizing the inclusion of these grievances in the grievance redressal system	SEA	Complaints, if any, registered in the grievance redressal system	Report of the NGO
Inclusion of labor influx risk mitigation conditions within the contracts	Labor influx	Conditions included in the contracts	Program reports and random verification
Development of a labor management plan for contracts over certain threshold	Labor influx	Labor management plan available for contracts over the set threshold	Third-party certification in its report

Notes:

a. Not according to the provisions outlined in the local law and ILO Convention on Worst Form of Child Labor.

b. The third party could be a consulting company or a reputed NGO with experience of working with OHS, labor influx issues, and so on

Annex 12. Guidelines for Prevention and Mitigation of GBV

1. Objectives

The objective of this report is to operationalize the Gender Based Violence (GBV)² action plan and guidelines for application to the Operation for Supporting Rural Bridges (SupRB), and core Codes of Conduct that will help prevent, report and address GBV in work sites and surrounding communities.

2. GBV Operationalization for LGED

2.1. GBV Action Plan

LGED will contract an NGO³, which will hold the primary responsibility for awareness raising, training and monitoring GBV risks and mitigation measures. Outlined below in Table 12.1 are the key steps for LGED to operationalize the GBV risk prevention and mitigation in the Program implementation.

Table 12.1: Activities to Tackle GBV

	Steps /Activities	Verifying Indicators	Verification Sources	Timeline
1	Identification of senior gender counterparts within LGED who will champion the GBV risk prevention strategy	Focal point identified	-	Jan-Feb 2019
2	The 'Special Conditions of Contract' should be updated incorporating the contractors ⁴ responsibility to sign the programs' Code of Conduct (CoC) for Site Manager detailing their responsibilities for implementing the Contractor's commitments and enforcing the responsibilities in the 'Code of Conduct for Individuals'	The contract document for bridges above 50m updated incorporating the CoC	Third-party certification in its report	July 2019
3	Specialized training for Government officials involved in the Program implementation	Number of officials trained	Program reports	Ongoing
4	Introduction of workers Codes of Conduct for contracts above a certain contract financial threshold (see or CoC for Contractor and Site Manager/ Individual)	CoC for contracts above a threshold value introduced	Third-party certification in its report	Before site work begins
5	Engagement of an NGO for the following purposes:(a) rapid assessment of existing GBV risks (b) capacity building of LGED on GBV; (c) mapping institutional	An NGO is engaged	Contract between the LGED and	Aug-Sept 2019

²GBV is an umbrella term for any harmful act that is perpetrated against a person's will and is based on socially ascribed (i.e. gender) differences between males and females. It includes acts that inflict physical, sexual or mental harm or suffering, threats of such actions, coercion and other deprivations of liberty.

³ While the final plan will be outlined by the NGO, the basic principles to be followed are: a) Survivor centered, b) adapted to the context, c) multi-sectoral, d) coordinated and e) wherever suitable, activating the existing public institutions (One Stop Crisis Center, Info Lady etc) for implementation rather than building parallel systems. Being survivor centered implies that for those survivors who do seek help, the plan of action should be driven by her preferences, as she is most familiar with her circumstances and level of comfort with the available array of decisions to be taken. Survivors' identity must be treated with the highest level of respect and confidentiality.

⁴ Contractor refers to any firm, contractor, organization or other institution that has been awarded a contract to conduct infrastructure development works for the program/project and has hired managers and/or employees to conduct this work. This also includes sub-contractors hired to undertake activities on behalf of the contractor.

arrangement;(c) supporting communication activities (d) providing support services to GBV survivors;		NGO	
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2.2. GBV Actors and Responsibilities

Below in Table 12.2 are outlined some of the main actors and responsibilities for the GBV risk prevention strategy. The final outline of the GBV action plan (including the finalized actors, responsibilities, institutional arrangement for implementation, the on-the ground partners, referral pathway and M&E framework) will be finalized by the NGO.

Table 12.2: Key Actors at Multiple Levels and Responsibilities

Level	Institution	Responsibilities
HQ	LGED Gender & Development Forum (GADF)	<ul style="list-style-type: none"> • Prepare action plan to prevent and mitigate GBV in coordination with NGO • Developing and maintaining GRS database for GBV related issues • Organizing half-yearly discussion on reports to evaluate situation & progress
	NGO GBV Coordinator	<ul style="list-style-type: none"> • Supporting LGED GADF in GBV case management capacity building • Management and implementation of GBV program at the field level
Upazila	Upazila-level Women Development Forum (WDF ⁵)	<ul style="list-style-type: none"> • Enhancing women's participation in development work (engaging women as volunteer, adviser, and labor in multi-developmental work in the locality, training/capacity development initiative) • Arranging logistics of awareness meetings • Monitoring efficient use of the gender UP budget • Facilitate access to legal aid for the women and children
Union	Union Level Committee	<ul style="list-style-type: none"> • Holding meetings at least once in a year. • Review violence against women in the union and at the bridge site in particular • Reporting on violence to upazila-level WDF as well as GRS • Taking necessary steps as per the existing rules and regulations • Monitoring preventive and mitigation activities for GBV
Site	NGO local representative (GBV Advocacy Counselor)	<ul style="list-style-type: none"> • Acting as first point of contact for survivor and taking him / her through the referral pathway • Raising community awareness against GBV • Preparing and submitting monthly reports to GBV program coordinator
	GBV Compliance Team (GCT)	<ul style="list-style-type: none"> • Coordination with union-level committee • Ensuring prevention and mitigation of GBV at site • Holding monthly meetings

⁵WDF is a platform in union and upazila level working for enabling the elected women representatives of Union Parishads to ensure women's rights as well as gender mainstreaming besides performing their constitutional mandates. Each UZP will have/form a WDF with the total female UP members and other of concerned UZP.

Annex 13. Guidelines for OHS

1. Objectives

The objective of this report is to operationalization of Occupational Health and Safety (OHS)⁶ guidelines at bridge construction sites, including addressing the labor accommodation, labor influx and child labor risks for SupRB, in order to maintain occupational health and safety on site.

2. OHS Operationalization for LGED

2.1. OHS Action Plan

The Program will maintain and construct rural bridges and will involve simultaneous execution of small- to medium-size contracts in rural areas, and it is expected that an overwhelming majority of contractors⁷ will be local and they will engage local laborers. This will mitigate many of the labor influx risks. However, for medium sized contracts, influx of labor, particularly skilled labor is expected. Against this backdrop LGED will contract a firm/ NGO⁸, which will hold the primary responsibility for awareness raising, training and monitoring OHS risks and mitigation measures and capacity building of LGED on OHS. Outlined below are the key steps for LGED to operationalize OHS management in the Program implementation.

Table 13.1: List of Activities for LGED for OHS

	Steps / Activities	Verifying Indicators	Verification Sources	Timeline
1	Identify senior counterparts / Safety Officer within LGED who will champion the OHS risk prevention strategy	Focal point identified	-	Jan-Feb 2020
2	Incorporate OHS in bidding documents	Bidding documents revised to reflect specific OHS costs in BoQ	Bidding documents	Jan-Feb 2019
3	Contract provisions barring unlawful engagement of child laborers and engaging child laborers for activities that are only allowed under the local law and ILO Convention	Provision made in the contract documents	Program's standard bidding documents	Jan-Feb 2019
4	Engagement of a firm/ NGO to a) build LGED capacity to handle OHS at construction sites, b) develop site safety and labor management plans and c) monitor & manage labor influx and child labor issues	A firm/ NGO is engaged	Contract between the LGED and firm/ NGO	Aug-Sept 2019
5	Specialized training for Government officials involved in the Program implementation	Number of officials trained	Program reports	Ongoing

⁶ Occupational Safety means the freedom from unacceptable risk of personal harm from, or in relation to, employment, i.e. the avoidance of accidents and incidents during the time of employment and working hours. Occupational Health means the physical and mental wellbeing of a person and the freedom from any illness caused from, or in relation to, working conditions during the time of employment and working hours.

⁷ Contractor refers to any firm, contractor, organization or other institution that has been awarded a contract to conduct infrastructure development works for the program/program/project and has hired managers and/or employees to conduct this work. This also includes sub-contractors hired to undertake activities on behalf of the contractor.

⁸ While the firm/ NGO will outline the final guidelines, the main purpose is to help develop safe work practices. The focus is a) to address the most common and accident prone hazards through prevention and mitigation, b) to minimize risks of high labor influx by tapping into the local labor force wherever possible, c) to prevent child and forced labor

2.2. OHS Actors and responsibilities

Below in Table 13.2 are outlined some of the main actors and responsibilities for OHS. The consultant will finalize the outline of the OHS action plan (including the key actors, responsibilities, institutional arrangement for implementation).

Table 13.2: Key Actors at Multiple Levels and Responsibilities

Level	Actor	Responsibilities
HQ	OHS Coordinator (firm/ NGO)	<ul style="list-style-type: none"> Preparing Site Safety plan, identifying the potential for accidents and emergency situations and address the associated risks Preparing Labor Management Plan (LMP)⁹ and encourage contractor to employ unskilled workers from the bridge vicinity as much as possible Developing and maintaining database for OHS related issues Organizing half-yearly discussion on reports to evaluate current situation & progress
	OHS Focal Point (LGED)	<ul style="list-style-type: none"> Review Site Safety plans, LMPs, inspection reports, make recommendations on contracts safety rules, emergency plans, training procedures and any other activities related to OHS Assisting implementation of OHS plan wherever necessary Undertake mandatory training wherever
Upazila	Upazila-level Committee (Members from firm/NGO + LGED)	<ul style="list-style-type: none"> Ensure firefighting and first aid facilities at the work site and identification and coordination with ambulance services and hospitals for quick evacuation at the events of worksite accidents; Ensure labor sheds are constructed near work sites so that the presence of migrant workers does not adversely affect the local community
Site	Local representative (firm/NGO)	<ul style="list-style-type: none"> Acting as first point of contact on all work site related issues Training workers on LMP and site safety plans Informing local law enforcers and encouraging them to participate in the training on LMP Preparing and submitting monthly reports to Union Level Committee Display important telephone contacts like local emergency services in billboards at the work site and labor shed Access and make use of GRM for any issues of labor influx management for misconduct
	Bridge Construction Quality Committee (Community)	<ul style="list-style-type: none"> For contracts higher than BDT 40 million (USD 250k), consider deploying a Community Coordinator (who is a member of the Local Bridge Construction Committee, and is adequately trained for addressing labor influx issues Coordination with union-level committee Empowering local community to monitor and be vigilant Ensuring prevention and mitigation of OHS at site through random checks

MAP

