

# Facility Administration Manual

Project Number: 48226  
MFF Number: 0104  
Loan Numbers: 3611 / xxxx  
September 2018

## India: Second Rural Connectivity Investment Program

## ABBREVIATIONS

ADB	–	Asian Development Bank
BER	–	bid evaluation report
CAG	–	Comptroller and Auditor General
CGRRDA	–	Chhattisgarh Rural Road Development Agency
CPF	–	community participation framework
DMF	–	design and monitoring framework
DPR	–	detailed project report
EARF	–	environmental assessment and review framework
EMP	–	environmental management plan
FAM	–	facility administration manual
FFA	–	framework financing agreement
FMA	–	financial management assessment
GAP	–	gender action plan
GOI	–	Government of India
IEE	–	initial environmental examination
ISC	–	institutional strengthening consultants
km	–	kilometer
MFF	–	multitranche financing facility
MORD	–	Ministry of Rural Development
MPPRDA	–	Madhya Pradesh Rural Road Development Authority
NCB	–	national competitive bidding
NRIDA	–	National Rural Infrastructure Development Agency
NRRDA	–	National Rural Roads Development Agency
OSRRA	–	Odisha State Rural Road Agency
OMMAS	–	online management, monitoring and accounting system
PIC	–	project implementation consultant
PIU	–	project implementation unit
PMGSY	–	Pradhan Mantri Gram Sadak Yojana
PPMS	–	project performance management system
PRI	–	panchayat raj institution
RCIP	–	Rural Connectivity Investment Program
RCTRC	–	Rural Connectivity Training and Research Center
RRNMU	–	Rural Road Network Management Unit
RSS	–	Rural Road Sector
SOE	–	statement of expenditure
SRRDA	–	state rural road development agency
TA	–	technical assistance
TSC	–	technical support consultant
WBSRDA	–	West Bengal State Rural Development Agency

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### **Facility Administration Manual Purpose and Process**

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

The Ministry of Rural Department through the National Rural Infrastructure Development Agency, the executing agencies at the national level, and the state governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal, through the respective project executing and implementing agencies, are wholly responsible for the implementation of ADB-financed projects, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the government and ADB. ADB staff is responsible for supporting implementation including compliance by the executing and implementing agencies of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At loan negotiations, the borrower and ADB shall agree to the FAM and ensure consistency with the framework financing agreement (FFA) and loan and project agreements. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the FAM and the loan and project agreements, the provisions of the loan and project agreements shall prevail.

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



## I. PROJECT DESCRIPTION

1. The Second Rural Connectivity Investment Program (the investment program) will improve rural connectivity in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal in India, facilitating safer and more efficient access to livelihood and socioeconomic opportunities for the rural communities.<sup>1</sup> With the assistance of the Asian Development Bank (ADB), the investment program will construct rural roads to all-weather standard for unconnected habitations and upgrade rural roads linking to the states' district centers for an aggregate length of 12,000 kilometers (km). For the investment in physical infrastructure to be effective and sustainable, the investment program will strengthen the institutional capacity of the implementing agencies in road safety and road maintenance.

2. The impact of the investment program will be mobility and accessibility in India improved. The outcome will be rural connectivity in the five investment program states improved.

3. The outputs of the investment program will be (i) rural roads in the investment program states improved, (ii) institutional capacity of the implementing agencies of the Prime Minister's Rural Road Program or Pradhan Mantri Gram Sadak Yojana (PMGSY) strengthened, and (iii) operation and maintenance of PMGSY roads sustained. In particular, the physical component includes the construction and upgrading of rural roads spanning 2,000 km in Assam, 2,000 km in Chhattisgarh, 4,000 km in Madhya Pradesh, 3,000 km in Odisha, and 1,000 km in West Bengal. The capacity strengthening component includes the training of PMGSY engineers and providing support to rural road network management units (RRNMU) and the rural connectivity training and research centers (RCTRC) in road safety and road maintenance in the investment program states.

4. Project 1 of the investment program will deliver the following outputs:

- (i) **Rural roads in the investment program states improved.** This includes (a) 3,145.67 km of rural roads constructed to all-weather standards under PMGSY-I (976.99 km in Assam; 1,571.28 km in Odisha; and 597.40 km in West Bengal); and (b) 3,108.59 km of rural roads upgraded under PMGSY-II (1,001.08 km in Chhattisgarh and 2,107.51 km in Madhya Pradesh).
- (ii) **Institutional capacity of the PMGSY implementing agencies strengthened.** The RCTRCs will conduct and manage the training programs for 2,000 PMGSY engineers, including the project implementation units (PIUs) and RRNMU staff, *panchayat raj institution* staff, consultants, and contractors in the investment program states.<sup>2</sup>
- (iii) **Operation and maintenance of the PMGSY roads sustained.** This includes technical support for the RRNMUs to roll out road safety audits and road maintenance.

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<sup>1</sup> ADB. 2014. [\*Technical Assistance to India for the Second Rural Connectivity Investment Program\*](#). Manila. ADB provided project preparatory technical assistance for the Second Rural Connectivity Investment Program.

<sup>2</sup> A *panchayat* is a body of directly elected people responsible for development activities in an area. There are three levels: *gram panchayat* at the village level, intermediate *panchayat* at the block level, and *zilla panchayat* at the district level. These are collectively called the *panchayat raj institution*. In some states, the institution is involved in rural road maintenance.

5. Project 2 of the investment program will deliver the following outputs:
- (i) **Rural roads in Madhya Pradesh improved.** This includes at least 2,800 km of rural roads upgraded under PMGSY-II in Madhya Pradesh.
  - (ii) **Institutional capacity of the PMGSY implementing agencies strengthened.** The RCTRCs will conduct and manage the training programs for 500 PMGSY engineers, including the project implementation units (PIUs) and RRNMU staff, *panchayat raj institution* staff, consultants, and contractors in the investment program states (footnote 2).
  - (iii) **Safety of PMGSY roads sustained.** This includes technical support for the RRNMUs to roll out road safety audits and road maintenance.



## II. IMPLEMENTATION PLANS

### A. Project Readiness Activities

**Table 1: Project Readiness Activities – Project 2**

Year/Month	MFF Tranche 2 Processing		Advance Actions	
2018	ADB	GOI	ADB	GOI
February				Procurement of civil works
April	Fact-finding mission			
July	Staff review meeting (17 July 2018)			
August	Loan negotiations			
September	Management approval			
October		Loan signing		
December	Loan effectiveness (__ December 2018)	Issuance of legal opinion		

ADB = Asian Development Bank, GOI = Government of India, MFF = multitranche financing facility.  
Source: Asian Development Bank estimates.

## B. Overall Project Implementation Plan

6. The project implementation charts record key implementation activities of the investment program, project 1 and project 2 on a quarterly basis. They will be updated annually and submitted to ADB with contract and disbursement projections for the following year.

**Figure 1: Implementation Plan for the Second Rural Connectivity Investment Program**

Activity		MFF Availability Period				2016		2017		2018		2019		2020		2021		2022		2023		2024		2025-2028														
						Advance Actions				Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7				Y1
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
A	Project Preparation																																					
1	Loan processing and approval by ADB																																					
2	Loan signing and effectiveness																																					
B	Road Infrastructure Development																																					
1	Subproject selection and preparation																																					
2	Procurement of civil works																																					
3	Construction																																					
4	Maintenance and defect liability period (5-years maintenance)																																					
C	Consulting Services																																					
1	Recruitment and Implementation of consulting services (PIC)																																					
2	Recruitment and Implementation of consulting services (TSC)																																					
3	Recruitment and Implementation of consulting services (ISC)																																					
4	Individual consultants for road safety																																					

ADB = Asian Development Bank, ISC = institutional strengthening consultant, MFF = multitranchise financing facility, PIC = project implementation consultant, TSC = technical support consultant, Y = year.

Source: Asian Development Bank.

Figure 2: Implementation Plan for Project 1

		2016				2017				2018				2019				2020				2021				2022				2023				2024				2025-2028				
		Advance				Actions				Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7				Y1	Y2	Y3	Y4	Y5
Activity		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4									
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ADB = Asian Development Bank, ISC = institutional strengthening consultant, MFF = multitranchise financing facility, PIC = project implementation consultant, TSC = technical support consultant, Y = year.

Source: Asian Development Bank

Figure 3: Implementation Plan for Project 2

Activity		MFF Availability Period		2017		2018		2019		2020		2021		2022		2023		2024		2025		2026-2029			
				Advance		Actions		Year 1		Year 2		Year 3		Year 4		Year 5		Year 6		Year 7		Y1	Y2	Y3	Y4
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
A	Project Preparation																								
1	Loan processing and approval by ADB																								
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4	Maintenance and defect liability period																								

ADB = Asian Development Bank, MFF = multitranchise financing facility, Y = year.

Source: Asian Development Bank.

### III. PROJECT MANAGEMENT ARRANGEMENTS

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

**Table 2: Project Implementation Organizations – Roles and Responsibilities**

Project Implementation Organizations	Management Roles and Responsibilities
Executing agency	<p><b>National level:</b> Ministry of Rural Development (MORD) through the National Rural Infrastructure Development Agency (NRIDA)<sup>a</sup></p> <p><b>State level:</b> Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal</p> <ul style="list-style-type: none"> <li>• Overall coordination and oversight of project implementation</li> <li>• Inter-agency coordination at project level, including with the state rural road development agencies (SRRDAs)</li> <li>• Overall oversight on financial aspects, including the availability and sufficiency of counterpart contributions</li> <li>• Coordination with the SRRDAs on submission of reports to ADB, including annual reports and financial statements</li> <li>• Consultant recruitment at project level (technical support consultant, institutional strengthening consultant, road safety experts), and contribution to the quality assurance of the consultant's outputs and deliverables</li> <li>• Consolidation of withdrawal applications received from the SRRDAs and submission to ADB</li> </ul>
Implementing agency	<p><b>State rural road development agencies<sup>b</sup></b></p> <ul style="list-style-type: none"> <li>• Day-to-day project management and inter-agency coordination at state level</li> <li>• Consultant recruitment at the state level (project implementation consultant and detailed project report consultant)</li> <li>• Preparation of detailed project reports and bidding documents</li> <li>• Procurement of works</li> <li>• Quality assurance of works and services of consultants and counterpart staff</li> <li>• Ensuring project sustainability at the post implementation stage</li> <li>• Ensuring efficient operation of the rural road network management units (RRNMUs) and the rural connectivity training and research centers (RCTRC), and availability of sufficient funding for staffing and associated running costs</li> <li>• Preparation and submission of withdrawal applications to the NRIDA</li> <li>• Submission of project progress reports and other reports as required to the NRIDA</li> <li>• Submission of the annual report and financial statements to the NRIDA</li> <li>• Maintaining project accounts and loan financial records</li> <li>• Keeping supporting documents for project financial statements and project accounts</li> </ul>
Asian Development Bank (ADB)	<ul style="list-style-type: none"> <li>• Monitoring and review of overall program implementation in consultation with the executing agency/implementing agency, including, but not limited to, progress in the achievement of project outputs, progress of contract award and disbursements, procurement and performance audits, and compliance with loan covenants</li> <li>• Posting on the ADB website of updated project data sheets and safeguard documents per the disclosure provision of ADB's Safeguard Policy Statement (2009)</li> <li>• Timely processing of withdrawal applications and release of eligible funds</li> </ul>

<sup>a</sup> Established as the National Rural Roads Development Agency. The agency was renamed the National Rural Infrastructure Agency in May 2018.

<sup>b</sup> The functions of the SRRDA are carried out respectively by the Assam State Road Board (ASRB), the Chhattisgarh Rural Road Development Agency (CGRRDA), the Madhya Pradesh Rural Road Development Authority (MPRRDA), the Odisha State Rural Road Agency (OSRRA), and the West Bengal State Rural Development Agency (WBSRDA).

Source: Asian Development Bank.

## B. Key Persons Involved in Implementation

### Coordination Committee

The coordination committee formed under the first Rural Connectivity Investment Program (RCIP) will oversee the implementation of the program, and consists of

- (i) National-level coordination committee, headed by the Joint Secretary (Rural Connectivity) and Director General (NRIDA), and
- (ii) State-level coordination committee, headed by the secretary of the project executing agency or the chief executive officer of the implementing agency.

### Executing Agency (National Level)

Ministry of Rural Development (MORD)	Officer's name	Ms. Alka Upadhyay
	Position	Joint Secretary (Rural Connectivity)
	Telephone	+91-11-2-3384707
	Email address	<a href="mailto:alkaupadhyay90@yahoo.com">alkaupadhyay90@yahoo.com</a>
	Website	<a href="http://www.rural.nic.in">http://www.rural.nic.in</a>
	Office address	Ministry of Rural Development, Krishi Bhawan, New Delhi
National Rural Infrastructure Development Agency (NRIDA) (National Level)	Officer's name	Mr. Uttam Kumar
Ministry of Rural Development	Position	Director
	Telephone	+91-11-4-1000472
	Email address	<a href="mailto:uttam.basant@gov.in">uttam.basant@gov.in</a>
	Website	<a href="http://www.pmsgsy.nic.in">http://www.pmsgsy.nic.in</a>
	Office address	5th Floor, 15-NBCC Tower, Bhikaji Cama Place, New Delhi-110066

### Executing Agency (Government of Assam)

Public Works Department	Officer's name	Mr. Rajesh Khemprai
	Position	Commissioner and Special Secretary cum CEO
	Telephone	+91-943-5075302
	Email address	<a href="mailto:as-guw1@nic.in">as-guw1@nic.in</a>
	Website	<a href="http://www.apwd.in">http://www.apwd.in</a>
	Office address	Assam Sachivalaya, Dispur, Guwahati-6

### Executing Agency (Government of Chhattisgarh)

Panchayat and Rural Development Department	Officer's name	Mr. M.K. Raut
	Position	Additional Chief Secretary
	Telephone	+91-771-4080317
	Email address	<a href="mailto:mkrout84@yahoo.com">mkrout84@yahoo.com</a>
	Office address	Room No. 317, DKS (Mantralay) Bhavan, Raipur

### Executing Agency (Government of Madhya Pradesh)

Panchayat and Rural Development Department	Officer's name	Mr. Iqbal Singh Bains
	Position	Additional Chief Secretary
	Telephone	+91-755-2551114
	Email address	<a href="mailto:acsprdmp@gmail.com">acsprdmp@gmail.com</a>
	Office address	Mantralaya, Vallabh Bhawan, Bhopal, 462004

### Executing Agency (Government of Odisha)

Rural Development Department	Officer's name	Mr. B.P. Sethi
	Position	Principal Secretary
	Telephone	+91-674-2536740

Email address [rdsec.or@nic.in](mailto:rdsec.or@nic.in)  
 Website <http://www.rdodisha.gov.in/>  
 Office address Rural Development Dept., Government of Odisha,  
 Sanchivalaya Marg, Bhubaneswar

#### **Executing Agency (Government of West Bengal)**

Panchayat and Rural Development Department Officer's name Mr. Saurabh Kumar Das  
 Position Principal Secretary and Chief Executive Officer, WBSRDA  
 Telephone +91-33-2-2424422  
 Email address [secy-prd@nic.in](mailto:secy-prd@nic.in), [sayrabhdas136@gmail.com](mailto:sayrabhdas136@gmail.com)  
 Mobile +91-990-3931373  
 Office address Dept. of Panchayats and Rural Development  
 HC-7, Sector-III, Salt Lake, Kolkata - 700106

#### **Implementing Agency (Assam)**

Assam State Road Board Officer's name Mr. D. Saharia  
 Position Chief Engineer (Roads)  
 Telephone +91-943-5046159  
 Email address [as-guw2@nic.in](mailto:as-guw2@nic.in)  
 Website <http://www.apwd.in>  
 Office address PWD (Road), Assam, Chandmari, Guwahati -781003

#### **Implementing Agency (Chhattisgarh)**

State Rural Road Development Agency Officer's name Mr. Rakesh Chaturvedi  
 Position Chief Executive Officer  
 Telephone +91-771-2424275  
 Email address [cg-itno@nic.in](mailto:cg-itno@nic.in); [cg-ceo@nic.in](mailto:cg-ceo@nic.in)  
 Mobile +91-975-5003260  
 Website <http://cgrrda.gov.in/>  
 Office address Vikas Bhawan, Civil Lines, Raipur

#### **Implementing Agency (Madhya Pradesh)**

State Rural Road Development Authority Officer's name Mr. P.K. Nigam  
 Position Engineer-in-Chief  
 Telephone +91-947-9373132  
 Email address [cgm2mprrda@rediffmail.com](mailto:cgm2mprrda@rediffmail.com)  
 Website [www.mprrda.com](http://www.mprrda.com)  
 Office address 5th Floor, Block II, Paryavas Bhavan, Arera Hills,  
 Bhopal (MP) 462004

#### **Implementing Agency (Odisha)**

State Rural Road Development Agency Officer's name Mr. B.N. Mishra  
 Position Chief Engineer PMGSY  
 Telephone +91-943-7569885  
 Email address [cerw\\_bbsr@yahoo.com](mailto:cerw_bbsr@yahoo.com)  
 Office address Chief Engineer, Rural Works (Odisha),  
 Madhusudan Nagar, Unit-IV, Bhubaneswar-751001

#### **Implementing Agency (West Bengal)**

State Rural Road Development Agency Officer's name Mr. Satyabrata Chakrabarti  
 Position Additional Chief Executive Officer  
 Telephone +91-9830049293  
 Email address [wbsrdacal@yahoo.co.in](mailto:wbsrdacal@yahoo.co.in), [wbsrdacal@gmail.com](mailto:wbsrdacal@gmail.com)  
 Office address West Bengal State Rural Development Agency,  
 HC-7, Sector-III, Salt Lake, Kolkata – 700106

**Asian Development Bank**

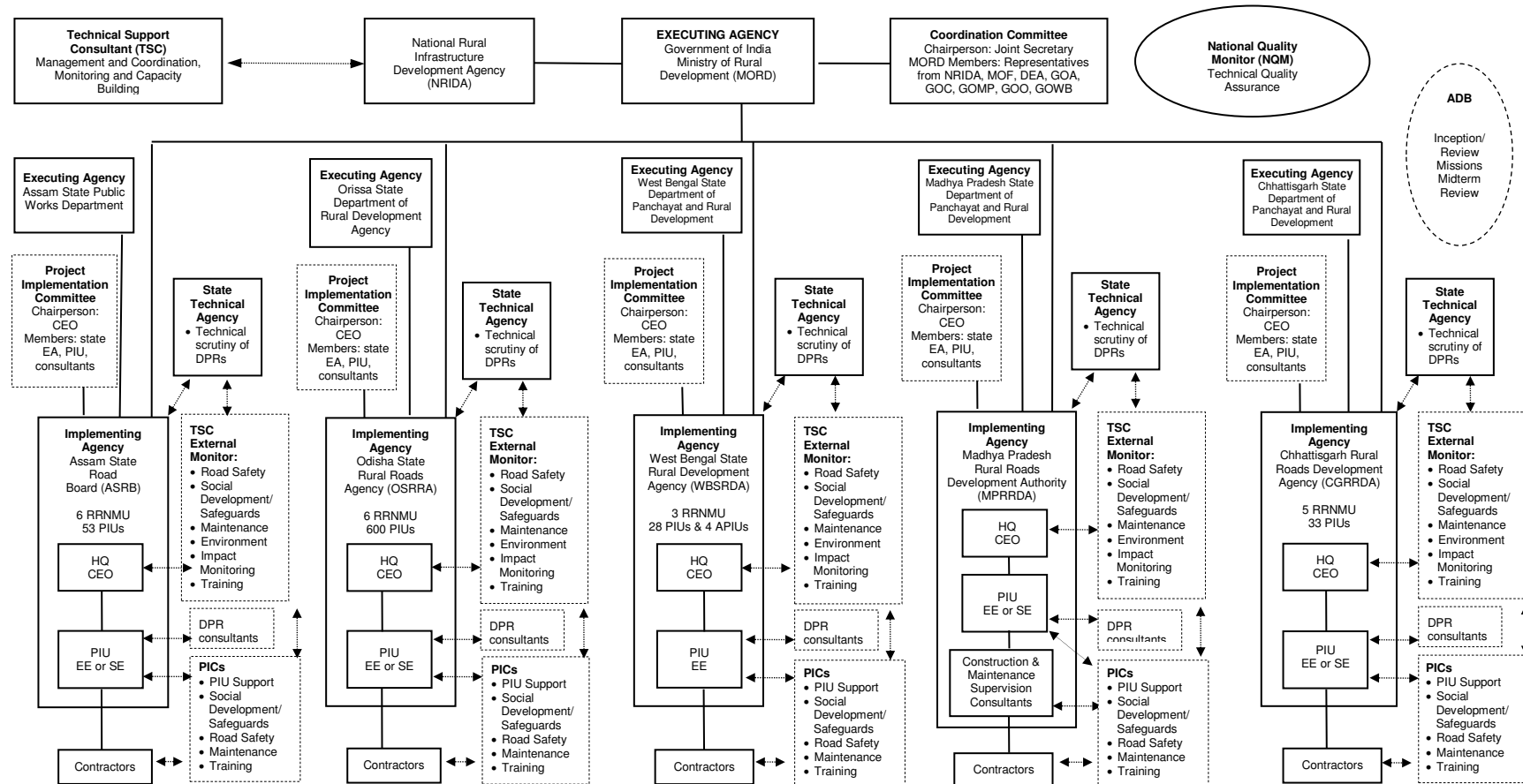
India Resident Mission  
of South Asia Department  
(INRM)

Mr. Kenichi Yokoyama  
Country Director  
Telephone +91-11-2410 7200  
Email address [kyokoyama@adb.org](mailto:kyokoyama@adb.org)

Mr. Prabhasha Sahu  
Senior Project Officer (Transport)  
Telephone +91-11-2410 7200  
Email address [psahu@adb.org](mailto:psahu@adb.org)

## C. Project Organization Structure

Figure 4: Project Organization Structure



ADB = Asian Development Bank, ASRB = Assam State Road Board, CEO = chief executive officer, CGRRDA = Chhattisgarh Rural Road Development Agency, DEA = Department of Economic Affairs, DPR = detailed project report (road design), EE = executive engineer, GOA = Government of Assam, GOC = Government of Chhattisgarh, GOMP = Government of Madhya Pradesh, GOO = Government of Odisha, GOWB = Government of West Bengal, HQ = headquarters, MOF = Ministry of Finance, MORD = Ministry of Rural Development, MPRRDA = Madhya Pradesh Rural Road Development Authority, NQM = national quality monitor, NRIDA = National Rural Infrastructure Development Agency, OSRRA = Odisha State Rural Road Agency, PIU = program implementation unit, PIC = project implementation consultant, PMC = project management consultant, SE = superintending engineer, STA = State Technical Agency, TSC = technical support consultant, WBSRDA = West Bengal State Rural Development Agency. Source: Asian Development Bank.



#### IV. COSTS AND FINANCING

7. The investment program is estimated to cost \$1,225.26 million, including taxes and duties, physical and price contingencies, interest, and other charges during implementation (Table 3).

**Table 3: Investment Program**  
(\$ million)

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Rural road improvement	1,120.49
2. Institutional strengthening	6.88
3. Rural road sustainability enhancement	1.30
<b>Subtotal (A)</b>	<b>1,128.67</b>
<b>B. Contingencies</b>	<b>57.50</b>
<b>C. Financing Charges during Implementation<sup>c</sup></b>	<b>39.09</b>
<b>Total (A+B+C)</b>	<b>1,225.26</b>

<sup>a</sup> Includes taxes and duties of \$90.23 million to be financed from government resources.

<sup>b</sup> In mid-2017 prices.

<sup>c</sup> Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate (LIBOR) plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

#### A. Cost Estimates Preparation and Revisions

8. The cost estimates were prepared by the participating state rural road development agencies (SRRDA) and endorsed by the Ministry of Rural Development (MORD). The project cost will be updated by the project implementation consultant (PIC) during construction based on changing quantities and application of the price escalation clause in the civil works contract. The SRRDAs will update the list of roads to be financed by the subsequent tranche during project implementation based on the adjusted cost provided by the PIC.

#### B. Key Assumptions

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

- (i) Exchange rate: ₹66.76 = \$1.00 (as of 25 April 2018)
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are shown in Table 4.

**Table 4: Escalation Rates for Price Contingency Calculation**  
(%)

Item	2017	2018	2019	2020	2021
Foreign rate of price inflation	1.40	1.50	1.50	1.50	1.60
Domestic rate of price inflation	4.00	4.60	4.50	4.50	4.50

Source: Asian Development Bank estimates.

10. The Government of India has requested a multitranche financing facility (MFF) in an amount up to \$500 million from ADB's ordinary capital resources to help finance a part of the investment program. The MFF will consist of three tranches, subject to the government's submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement.<sup>3</sup> The financing plan is in Table 5.

**Table 5: Financing Plan**  
(\$ million)

Source	Amount			Total	Share of Total (%)
	Tranche 1	Tranche 2	Tranche 3	Amount	
Asian Development Bank					
Ordinary capital resources (loan)	250.00	110.00	140.00	500.00	40.81
Government of India	415.32	193.00	116.94	725.26	59.19
<b>Total</b>	<b>665.32</b>	<b>303.00</b>	<b>256.94</b>	<b>1,225.26</b>	<b>100.00</b>

Source: Asian Development Bank estimates.

11. Project 1 is estimated to cost \$665.32 million, with ADB financing \$250 million. The scope of project 1 includes civil works, consulting services, and project management.<sup>4</sup> ADB will finance the civil works related to rural road construction, and the Government of India will finance utility shifting, social mitigation, consulting services, and project management. The loan will use the sector lending modality and have a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility,<sup>5</sup> a commitment charge of 0.15% per year, and such other terms and conditions set forth in the draft loan and project agreements. Based on the straight-line method, the average maturity is 15.25 years, and the maturity premium payable to ADB is 0.10% per year.

12. Project 2 is estimated to cost \$303 million, with ADB financing \$110 million. The scope of project 2 includes civil works and project management. ADB will finance the civil works related to rural road construction, and the Government of India will finance utility shifting, social mitigation, and project management. The loan will use the sector lending modality and have a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility (footnote 5), a commitment charge of 0.15% per year, and such other terms and conditions set forth in the draft loan and project agreements. Based on the straight-line method, the average maturity is 15.25 years, and the maturity premium payable to ADB is 0.10% per year.

<sup>3</sup> At approval, the multitranche financing facility was designed to be implemented in two tranches.

<sup>4</sup> Civil works cover rural road construction, utility shifting, and social mitigation.

<sup>5</sup> The interest includes a maturity premium of 10 basis points. This is based on the above loan terms and the government's choice of repayment option and dates.

### C. Detailed Cost Estimates by Financier

**Table 6: Detailed Cost Estimates by Financier – Facility**  
(\$ million)

No.	Project Component	Total Cost <sup>a</sup>	ADB		Government of India	
			Amount	(%)	Amount	(%)
<b>A. Investment Costs<sup>b</sup></b>						
<b>A1. Rural Connectivity Improvement</b>						
1.	Civil works	1,110.00	500.00	45.05	610.00	54.95
2.	Utility shifting	0.30			0.30	100.00
3.	Social mitigation	0.30			0.30	100.00
4.	Equipment	6.00			6.00	100.00
	Subtotal (A1)	1,116.60	500.00	44.78	616.60	55.22
<b>A2. Consulting Services</b>						
5.	Technical support consultants	0.78			0.78	100.00
6.	Project implementation consultants	3.89			3.89	100.00
7.	Institutional strengthening consultants	2.21			2.21	100.00
8.	Road safety consultant	1.30			1.30	100.00
	Subtotal (A2)	8.18			8.18	100.00
<b>A3. Recurrent Costs</b>						
9.	Project management	3.89			3.89	100.00
	Subtotal (A3)	3.89			3.89	100.00
	<b>Total Base Cost (A1 + A2 + A3)</b>	<b>1,128.67</b>	<b>500.00</b>	<b>44.30</b>	<b>628.67</b>	<b>55.70</b>
<b>B. Contingencies</b>						
1.	Physical	5.04			5.04	100.00
2.	Price	52.46			52.46	100.00
	<b>Subtotal (B)</b>	<b>57.50</b>			<b>57.50</b>	<b>100.00</b>
<b>C. Financial Charges during Implementation<sup>c</sup></b>						
1.	Interest during construction	36.96			36.96	100.00
2.	Commitment charges	2.13			2.13	100.00
	<b>Subtotal (C)</b>	<b>39.09</b>			<b>39.09</b>	<b>100.00</b>
	<b>Total Project Cost (A+B+C)</b>	<b>1,225.26</b>	<b>500.00</b>	<b>40.81</b>	<b>725.26</b>	<b>59.19</b>

ADB = Asian Development Bank.

<sup>a</sup> Includes taxes and duties of \$90.23 million to be financed from government resources.

<sup>b</sup> In mid-2017 prices.

<sup>c</sup> Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate (LIBOR) plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

**Table 7: Detailed Cost Estimates by Financier – Tranche 1**  
(\$ million)

No.	Project Component	Total Cost <sup>a</sup>	ADB		Government of India	
			Amount	(%)	Amount	(%)
A. Investment Costs <sup>b</sup>						
A1. Rural Connectivity Improvement						
1.	Civil works	595.48	250.00	41.98	345.48	58.02
2.	Utility shifting	0.15			0.15	100.00
3.	Social mitigation	0.15			0.15	100.00
4.	Equipment	6.00			6.00	100.00
	Subtotal (A1)	601.78	250.00	41.54	351.78	58.46
A2. Consulting Services						
5.	Technical support consultants	0.78			0.78	100.00
6.	Project implementation consultants	3.89			3.89	100.00
7.	Institutional strengthening consultants	1.71			1.71	100.00
8.	Road safety consultant	1.00			1.00	100.00
	Subtotal (A2)	7.38			7.38	100.00
A3. Recurrent Costs						
9.	Project management	1.59			1.59	100.00
	Subtotal (A3)	1.59			1.59	100.00
	Total Base Cost (A1 + A2 + A3)	610.75	250.00	40.93	360.75	59.07
B. Contingencies						
1.	Physical	3.55			31.55	100.00
2.	Price	31.96			31.96	100.00
	Subtotal (B)	35.52			35.52	100.00
C. Financial Charges during Implementation <sup>c</sup>						
1.	Interest during construction	18.23			18.23	100.00
2.	Commitment charges	0.82			0.82	100.00
	Subtotal (C)	19.05			19.05	100.00
	Total Project Cost (A+B+C)	665.32	250.00	37.58	415.32	62.42

ADB = Asian Development Bank.

<sup>a</sup> Includes taxes and duties of \$48.86 million to be financed from government resources.

<sup>b</sup> In mid-2017 prices.

<sup>c</sup> Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate (LIBOR) plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

**Table 8: Detailed Cost Estimates by Financier – Tranche 2**  
(\$ million)

No.	Project Component	Total Cost <sup>a</sup>	ADB		Government of India	
			Amount	(%)	Amount	(%)
A. Investment Costs <sup>b</sup>						
A1. Rural Connectivity Improvement						
1.	Civil works	275.95	110.00	39.86	165.95	60.14
2.	Utility shifting	0.15			0.15	100.00
3.	Social mitigation	0.15			0.15	100.00
	Subtotal (A1)	276.25	110.00	39.82	166.25	60.18
A2. Consulting Services						
4.	Institutional Strengthening Consultants	0.25			0.25	100.00
5.	Road Safety Consultant	0.15			0.15	100.00
	Subtotal (A2)	0.40			0.40	100.00
A3. Recurrent Costs						
6.	Project management	0.73			0.73	100.00
	Subtotal (A3)	0.73			0.73	100.00
	Total Base Cost (A1 + A2 + A3)	277.38	110.00	39.66	167.38	60.34
B. Contingencies <sup>c</sup>						
1.	Physical	3.00			3.00	100.00
2.	Price	13.13			13.13	100.00
	Subtotal (B)	16.13			16.13	100.00
C. Financial Charges during Implementation <sup>d</sup>						
1.	Interest during construction	9.11			9.11	100.00
2.	Commitment charges	0.37			0.37	100.00
	Subtotal (C)	9.49			9.49	100.00
	Total Project Cost (A+B+C)	303.00	110.00	36.30	193.00	63.70

ADB = Asian Development Bank.

<sup>a</sup> Includes taxes and duties of about \$22 million. Such amount does not represent an excessive share of the project cost. The government will finance taxes and duties through cash contribution.

<sup>b</sup> In mid-2018 prices as of 30 January 2018.

<sup>c</sup> Physical contingencies computed at 1% for civil works. Price contingencies computed at average of 1.4% on foreign exchange costs and 5.2% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>d</sup> Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate (LIBOR) plus a spread of 0.5%. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

**D. Detailed Cost Estimates by Year**

**Table 9: Detailed Cost Estimates by Year – Facility**  
(\$ million)

<b>Project Component</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>Total</b>
<b>A. Investment Costs</b>								
<b>A1. Rural Connectivity Improvement</b>								
1. Civil works	80.00	200.00	264.58	270.52	176.00	87.82	31.08	1,110.00
2. Utility shifting	0.10	0.10	0.05	0.05				0.30
3. Social mitigation	0.10	0.10	0.05	0.05				0.30
4. Equipment	3.00	3.00						6.00
Subtotal (A1)	83.20	203.20	264.68	270.62	176.00	87.82	31.08	1,116.60
<b>A2. Consulting Services</b>								
5. Technical support consultants	0.17	0.17	0.17	0.17	0.12			0.78
6. Project implementation consultants	0.86	0.86	0.86	0.86	0.43			3.89
7. Institutional strengthening consultants	0.38	0.44	0.49	0.49	0.30	0.08	0.03	2.21
8. Road safety consultant	0.22	0.26	0.29	0.29	0.18	0.05	0.02	1.30
Subtotal (A2)	1.63	1.72	1.81	1.81	1.03	0.13	0.04	8.18
<b>A3. Recurrent Costs</b>								
9. Project management	0.35	0.51	0.86	0.86	0.69	0.43	0.17	3.89
Subtotal (A3)	0.35	0.51	0.86	0.86	0.69	0.43	0.17	3.89
<b>Total Base Cost (A1 + A2 + A3)</b>	<b>85.18</b>	<b>205.43</b>	<b>267.36</b>	<b>273.29</b>	<b>177.73</b>	<b>88.39</b>	<b>31.30</b>	<b>1,128.67</b>
<b>B. Contingencies</b>								
1. Physical			2.28	3.29	1.80	0.91	0.31	8.59
2. Price			11.40	14.94	19.65	2.46	0.46	48.91
Subtotal (B)			<b>13.68</b>	<b>18.23</b>	<b>21.45</b>	<b>3.37</b>	<b>0.77</b>	<b>57.50</b>
<b>C. Financial Charges during Implementation</b>								
1. Interest during construction	0.51	2.37	5.60	8.59	10.74	5.93	3.21	36.96
2. Commitment charges	0.34	0.48	0.57	0.40	0.22	0.09	0.04	2.13
Subtotal (C)	<b>0.85</b>	<b>2.85</b>	<b>6.17</b>	<b>8.99</b>	<b>10.96</b>	<b>6.01</b>	<b>3.25</b>	<b>39.09</b>
<b>Total Project Cost (A+B+C)</b>	<b>86.03</b>	<b>208.29</b>	<b>287.20</b>	<b>300.51</b>	<b>210.13</b>	<b>97.77</b>	<b>35.32</b>	<b>1,225.26</b>

Source: Asian Development Bank estimates.

**Table 10: Detailed Cost Estimates by Year – Tranche 1**  
(\$ million)

<b>Project Component</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>Total</b>
<b>A. Investment Costs</b>						
<b>A1. Rural Connectivity Improvement</b>						
1. Civil works	80.00	160.00	160.00	140.00	55.48	595.48
2. Utility shifting	0.10	0.05				0.15
3. Social mitigation	0.10	0.05				0.15
4. Equipment	3.00	3.00				6.00
Subtotal (A1)	83.20	163.10	160.00	140.00	55.48	601.78
<b>A2. Consulting Services</b>						
5. Technical support consultants	0.17	0.17	0.17	0.17	0.12	0.78
6. Project implementation consultants	0.86	0.86	0.86	0.86	0.43	3.89
7. Institutional strengthening consultants	0.38	0.38	0.38	0.38	0.19	1.71
8. Road safety consultant	0.22	0.22	0.22	0.22	0.11	1.00
Subtotal (A2)	1.63	1.63	1.63	1.63	0.85	7.38
<b>A3. Recurrent Costs</b>						
9. Project management	0.35	0.35	0.35	0.35	0.18	1.59
Subtotal (A3)	0.35	0.35	0.35	0.35	0.18	1.59
<b>Total Base Cost (A1 + A2 + A3)</b>	<b>85.18</b>	<b>165.08</b>	<b>161.99</b>	<b>141.99</b>	<b>56.52</b>	<b>610.75</b>
<b>B. Contingencies</b>						
1. Physical			1.60	1.40	0.55	3.55
2. Price			8.40	8.60	14.96	31.96
Subtotal (B)			<b>10.00</b>	<b>10.00</b>	<b>15.52</b>	<b>35.52</b>
<b>C. Financial Charges during Implementation</b>						
1. Interest during construction	0.51	2.07	4.22	5.50	5.93	18.23
2. Commitment charges	0.34	0.33	0.08	0.05	0.02	0.82
Subtotal (C)	<b>0.85</b>	<b>2.40</b>	<b>4.30</b>	<b>5.55</b>	<b>5.95</b>	<b>19.05</b>
<b>Total Project Cost (A+B+C)</b>	<b>86.03</b>	<b>167.48</b>	<b>176.29</b>	<b>157.54</b>	<b>77.99</b>	<b>665.32</b>

Source: Asian Development Bank estimates.

**Table 11: Detailed Cost Estimates by Year – Tranche 2**  
(\$ million)

<b>Project Component</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Total</b>
<b>A. Investment Costs</b>						
<b>A1. Rural Connectivity Improvement</b>						
1. Civil works	40.00	70.00	70.00	60.00	35.95	275.95
2. Utility shifting	0.05	0.05	0.05			0.15
3. Social mitigation	0.05	0.05	0.05			0.15
Subtotal (A1)	40.10	70.10	70.10	60.00	35.95	276.25
<b>A2. Consulting Services</b>						
4. Institutional Strengthening Consultants	0.06	0.06	0.06	0.06	0.03	0.25
5. Road Safety Consultant	0.03	0.03	0.03	0.03	0.02	0.15
Subtotal (A2)	0.09	0.09	0.09	0.09	0.04	0.40
<b>A3. Recurrent Costs</b>						
6. Project management	0.16	0.16	0.16	0.16	0.08	0.73
Subtotal (A3)	0.16	0.16	0.16	0.16	0.08	0.73
<b>Total Base Cost (A1 + A2 + A3)</b>	<b>40.35</b>	<b>70.35</b>	<b>70.35</b>	<b>60.25</b>	<b>36.08</b>	<b>277.38</b>
<b>B. Contingencies</b>						
1. Physical		0.68	1.28	0.64	0.40	3.00
2. Price		3.00	5.61	2.79	1.73	13.13
Subtotal (B)		<b>3.68</b>	<b>6.90</b>	<b>3.43</b>	<b>2.13</b>	<b>16.13</b>
<b>C. Financial Charges during Implementation</b>						
1. Interest during construction	0.30	1.06	1.97	2.73	3.04	9.11
2. Commitment charges	0.15	0.11	0.07	0.03	0.01	0.37
Subtotal (C)	0.45	1.17	2.04	2.76	3.06	9.49
<b>Total Project Cost (A+B+C)</b>	<b>40.80</b>	<b>75.21</b>	<b>79.29</b>	<b>66.44</b>	<b>41.26</b>	<b>303.00</b>

Source: Asian Development Bank estimates.



## E. Allocation and Withdrawal of Loan Proceeds

13. Tables 12 and 13 set forth the categories of expenditure items to be financed out of the proceeds of the loans and the allocation of amounts of the loan to each such category.

**Table 12: ADB Regular Ordinary Capital Resources Loan for Tranche 1**

Category			ADB Financing
Number	Item	Amount Allocated (\$ million)	Percentage and Basis for Withdrawal from the Loan Account
1	Works	250	41.98% of total expenditure claimed
	Total	250	

ADB = Asian Development Bank.

**Table 13: ADB Regular Ordinary Capital Resources Loan for Tranche 2**

Category			ADB Financing
Number	Item	Amount Allocated (\$ million)	Percentage and Basis for Withdrawal from the Loan Account
1	Works	110	39.86% of total expenditure claimed
	Total	110	

ADB = Asian Development Bank.

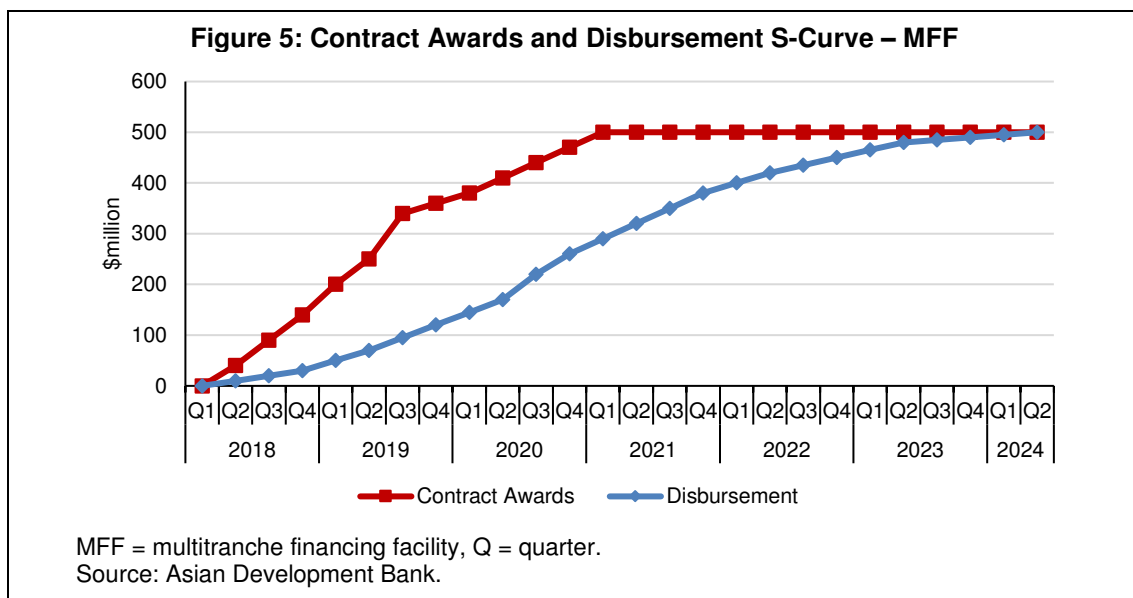
## F. Contract and Disbursement S-Curve

**Table 14: Contract Awards and Disbursement Baseline Projections**  
(\$ million)

Year	Contract Awards					Disbursement				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2018	0	40	50	50	140	0	10	10	10	30
2019	60	50	90	20	220	20	20	25	25	90
2020	20	30	30	30	110	25	25	50	40	140
2021	30				30	30	30	30	30	120
2022						20	20	15	15	70
2023						15	15	5	5	40
2024						5	5			10

Q = quarter.

Source: Asian Development Bank estimates.

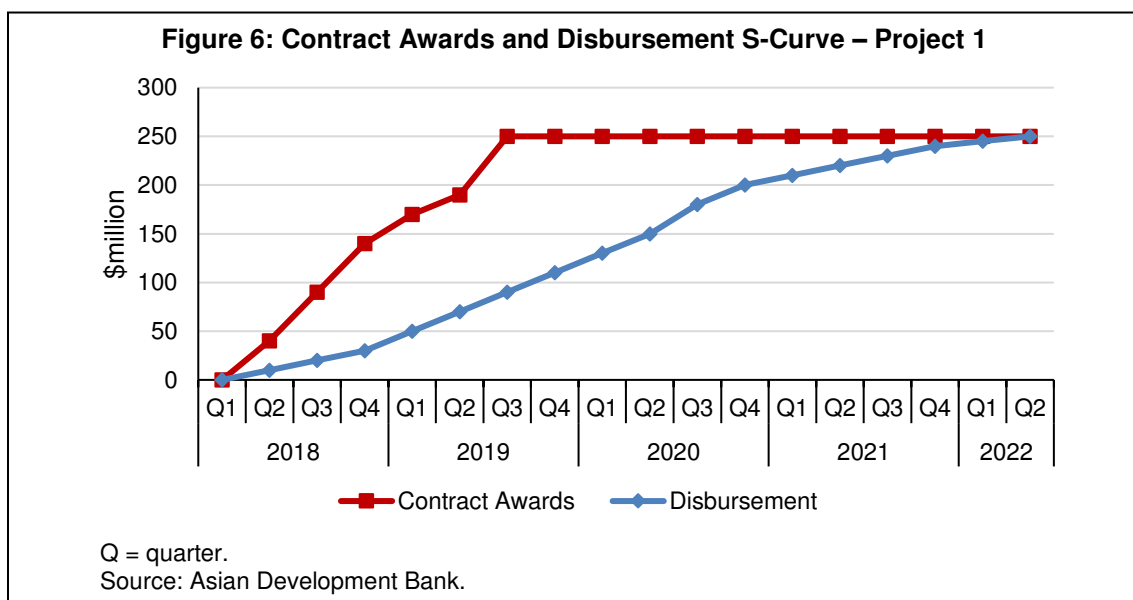


**Table 15: Contract Awards and Disbursement Baseline Projections – Project 1**  
(\$ million)

Year	Contract Awards					Disbursement				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2018	0	40	50	50	140	0	10	10	10	30
2019	30	20	60	-	110	20	20	20	20	80
2020						20	20	30	20	90
2021						10	10	10	10	40
2022						5	5			10

Q = quarter.

Source: Asian Development Bank estimates.

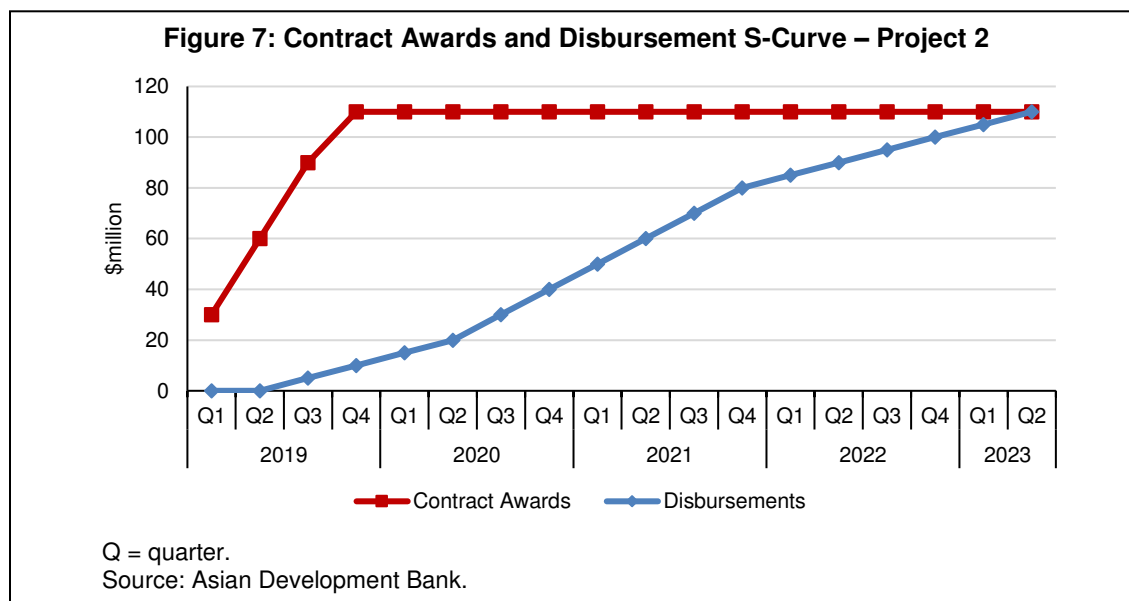


**Table 16: Contract Awards and Disbursement Baseline Projections – Project 2**  
(\$ million)

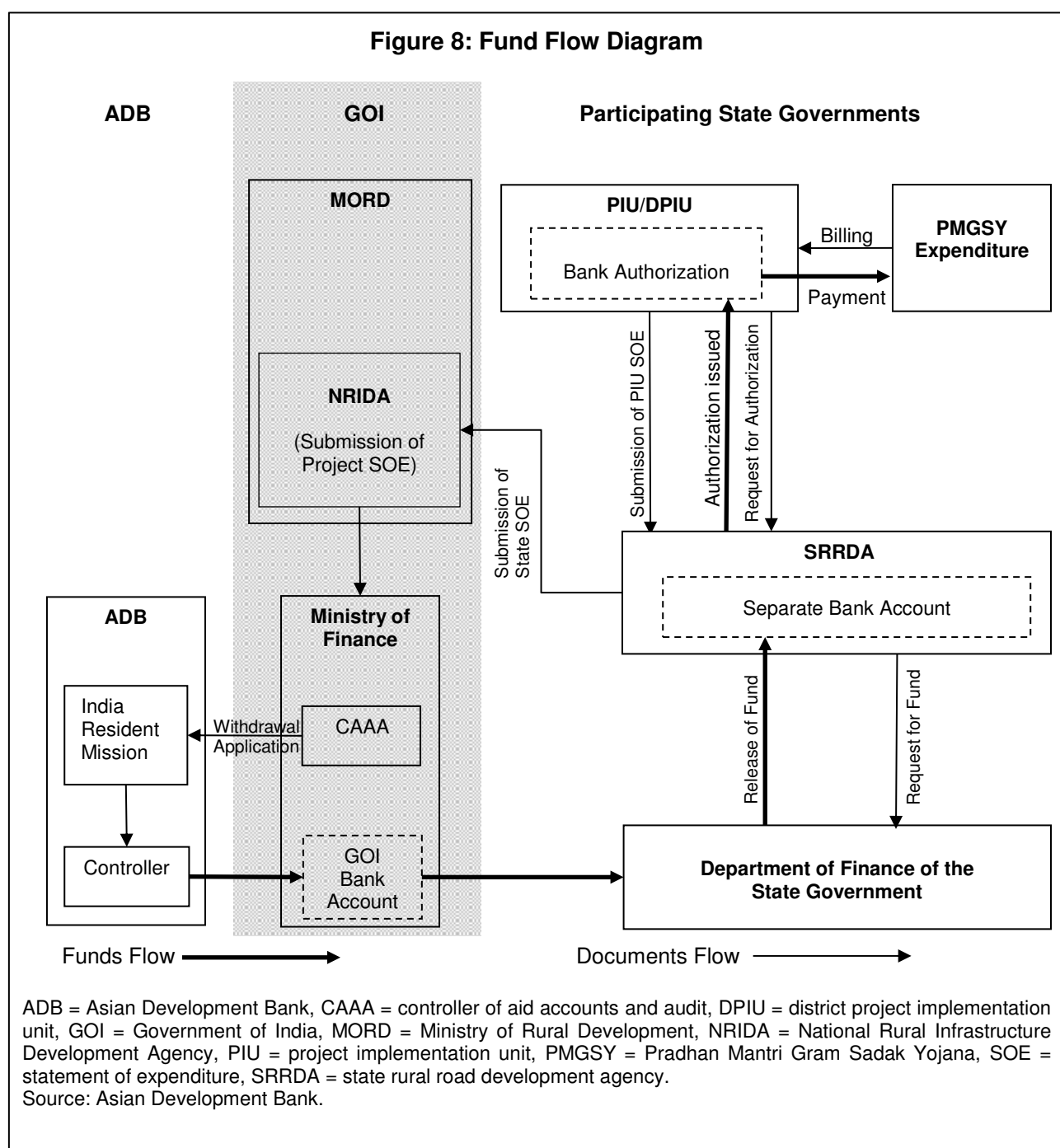
Year	Contract Awards					Disbursement				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
2019	30	30	30	20	110			5	5	10
2020						5	5	10	10	30
2021						10	10	10	10	40
2022						5	5	5	5	20
2023						5	5			10

Q = quarter.

Source: Asian Development Bank estimates.



## G. Fund Flow Diagram



## V. FINANCIAL MANAGEMENT

### A. Financial Management Assessment

14. The financial management assessment (FMA) was conducted from December 2016 to May 2017 in accordance with ADB's Guidelines for the Financial Management and Analysis of Projects and Financial Due Diligence: A Methodology Note, and Technical Guidance Note.<sup>6</sup> The FMA considered the capacity of the state rural road development agencies, including fund-flow arrangements, governance, staffing, budgeting, accounting and financial reporting systems, internal control procedures, financial information systems, and internal and external auditing arrangements.

15. The risk to the ADB assistance project at the country level is considered *moderate*. The proposed financial management action plan is shown in Table 17.

**Table 17: Financial Management Action Plan**

Key Risks	Risk Mitigating Activity	Timeline	Responsible Entity
Internal audit	Appointment of Internal Auditor as prescribed in the PMGSY guidelines for the year 2017–2018 and formation of Audit Committee	July 2018	SRRDA
APFS	The standardized TORs for the audit of ADB-funded projects agreed between the CAG, India, and ADB will be followed.  For the APFS FY2014 to FY2017, MPRRDA will resubmit APFS to be in compliance with requirements.	Before loan effectiveness	SRRDAs
Training on OMMAS	Training of the field staff on the usage of OMMAS	As needed for new staff	NRIDA
Training on ADB policies and procedure	Impart training to all field staff involved in the ADB project	As needed for new staff	ADB and NRIDA
Reporting and monitoring	Preparation of quarterly reports for the ADB project with financial and disbursement reports as well as variance analysis of physical and financial progress	At project start	SRRDA and NRIDA
Reconciling the subsidiary ledger	Periodic reconciliation of subsidiary ledger in OMMAS	Throughout project period	SRRDA and NRIDA

ADB = Asian Development Bank, APFS = audited project financial statements, CAG = comptroller and auditor general, FY = fiscal year, MPRRDA = Madhya Pradesh Rural Road Development Authority, NRIDA = National Rural Infrastructure Development Agency, OMMAS = Online Management, Monitoring and Accounting System, PMGSY = Pradhan Mantri Gram Sadak Yojana, SRRDA = state rural road development agency, TOR = terms of reference.

Source: Asian Development Bank.

16. The SRRDAs have satisfactory financial management capability to (i) record the required financial transactions, (ii) provide regular and reliable financial statements, (iii) provide reliable monitoring reports, and (iv) safeguard the financial assets. The SRRDAs also have the capacity to handle the proposed project. The minimum required policies and procedures are in place. The statutory audit function of the SRRDA is currently carried out by an independent auditor appointed as per the PMGSY guidelines. The SRRDAs are currently meeting ADB's financial management requirements as the implementing agency. A summary of the findings is shown in Table 18.

<sup>6</sup> ADB. 2009. *Financial Due Diligence: A Methodology Note*. Manila. <http://www.adb.org/documents/financial-due-diligence-methodology-note>.

**Table 18: Summary of the Financial Management Assessment**

<b>Particulars</b>		<b>Conclusions</b>
A	Executing and implementing agency	The Ministry of Rural Development (MORD) through the National Rural Infrastructure Development Agency (NRIDA), together with the Government of Assam, Government of Chhattisgarh, Government of Madhya Pradesh, Government of Odisha, and Government of West Bengal, serve as the executing agency of the Second Rural Connectivity Investment Program. The NRIDA acts as the coordinator on behalf of MORD in executing the project at the central level. The Assam State Road Board (ASRB), Chhattisgarh Rural Road Development Agency (CGRRDA), Madhya Pradesh Rural Road Development Authority (MPRRDA), Odisha State Rural Road Agency (OSRRA), and West Bengal State Rural Development Agency (WBSRDA)—uniformly called the state rural road development agency (SRRDA)—are the implementing agencies wholly responsible for the implementation of projects financed by the Asian Development Bank (ADB) under the investment program, as agreed jointly between the borrower and ADB, and in accordance with the policies and procedures of the Government of India and ADB.
B	Funds flow arrangements	The SRRDAs have enough capacity and capability to work under the proposed fund-flow arrangements acceptable to ADB. Hence, the fund-flow arrangements are considered reliable.
C	Staffing	Dedicated finance and accounting staff are now on deputation and/or contract basis at the SRRDA. The SRRDA ensures that it will keep key finance and accounts staff until the end of the project and fill vacant positions immediately. In case of other requirements, some state agencies will provide outsourced support.
D	Accounting policies and procedures	The SRRDA follows the Pradhan Mantri Gram Sadak Yojana (PMGSY) guidelines as well as manuals and state government rules in case there is no specific direction provided. PMGSY accounting guidelines are based on the well-established Public Works Accounting System prevailing in India, with its own chart of accounts and balance sheet. The PMGSY guidelines will be reviewed and updated by the NRIDA from time to time. An online-based software, the Online Management, Monitoring and Accounting System (OMMAS), has been developed separately for the PMGSY by the Centre for Development of Advanced Computing (C-DAC). This software supports the accounting, reporting, and monitoring systems.
E	Internal audit	Internal audit functions are outsourced to a chartered accountant firm. The internal auditor audits the accounts, accounting procedures, and systems for all project accounts maintained in the SRRDA and conducts internal audits twice a year. The internal auditor reports to the chief executive officer and attends audit committee meetings. The report of the internal auditor is presented to the audit committee for review. The internal audit findings are also reviewed by the statutory auditors and government auditors. The internal audit arrangement is acceptable to ADB. Internal audit was not conducted in the state agencies of CGRRDA and OSRRA during 2015–2016. There is no audit committee in CGRRDA, OSRRA, and WBSRDA.
F	External audit	The annual financial statements are audited by an independent statutory auditor appointed from the panel and approved by the Comptroller and Auditor General (CAG) of the Government of India. The audit report of the statutory auditor is forwarded to the NRIDA for review every year. Audits for the year 2015–2016 of all SRRDAs have been completed. The CAG will also conduct special audits, review audits, and proprietary audits on selective basis, if required. The present external audit arrangement is acceptable to ADB.
G	Reporting and monitoring	<p>The receipts and expenditures for the PMGSY, including the ADB component, are entered in the OMMAS software by C-DAC. Online data entries are made by the project implementation unit (PIU). The management can view online all information they require by entering their user name and password. The OMMAS software can also generate periodic financial statements.</p> <p>For the audited project financial statement (APFS), it is noted that the submitted audit reports on the loans under the first Rural Connectivity Investment Program (RCIP) did not fully comply with ADB's reporting requirements.</p>

Particulars		Conclusions
H	Information systems	For the PMGSY, including the first RCIP, the computerized double-entry software OMMAS is already in operation. Although there may be some deficiency, the software can generate the minimum reporting requirements acceptable to ADB. There is room for improvement in the software. Tally software and spreadsheet are also used by the SRRDA for generating other reports.

Source: Asian Development Bank.

17. **Risk analysis.** During the implementation phase, the SRRDA might face some risks that can generally be divided into two main categories: (i) country level, and (ii) organization/project level. Financial management risks shall need to be considered and updated throughout the life of the project. Risk mitigation measures shall also be updated accordingly. The risk assessment and mitigation measures are shown in Table 19.

**Table 19: Summary of Financial Management Internal Control and Risk Assessment**

Risk	Risk Assessment	Risk Description	Mitigation Measures or Action Plans
<b>Inherent Risk</b>			
1. Country-specific	L	Country-specific	No country-specific risks in this project.
2. Entity-specific	M	Experience of the implementing agency in implementing the project	The implementing agency of the project are the state rural road development agencies (SRRDAs) through various project implementation units (PIU) situated in Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal, which have since been carrying out the ADB-funded projects of the Rural Connectivity Investment Program (RCIP). Whenever a new PIU is added, training is given by the SRRDA office. Since the statement of expenditure (SOE) is prepared at the PIU level, it is also recommended to provide training to all concerned staff once a year to ensure uniformity and quality in the preparation of SOEs.
3. Project-specific	L	No project-specific risks	Not applicable.
<b>Overall Inherent Risk</b>	<b>M</b>		
<b>Control Risk</b>			
1. Implementing entity	M	The SRRDA of each participating state, which is proposed to manage and implement the proposed project, is a government agency	Key staff in the finance and accounts sections are either on deputation from other government departments or on contract basis, and have qualifications and experience in finance and accounting. The project is implemented through the PIU at field level. Providing training on ADB policies and procedures will reduce the control risks of the implementing entity.

<b>Risk</b>	<b>Risk Assessment</b>	<b>Risk Description</b>	<b>Mitigation Measures or Action Plans</b>
2. Fund flow	L	Timely release of counterpart fund to the project	Timely availability of counterpart funds will be ensured by implementing the proposed fund-flow arrangements. The Ministry of Rural Development (MORD) and participating state governments shall ensure the timely release of funds to the SRRDA, including counterpart funds to the projects as per loan covenants, since the project is on reimbursement basis.
3. Staffing	M	Dedicated finance and accounting staff for the SRRDA and PIU	Dedicated finance and accounting staff are now on deputation and/or contract basis at the SRRDA. The SRRDA ensures that it will keep key finance and accounts staff until the end of the project and fill vacant positions immediately. Some state agencies will take care of outsourced support services in case this is required.
4. Accounting policies and procedures	L	The accounting policies and procedures and its updating	Accounting policies and procedures are already in place. All executing agencies and implementing agencies are applying the Pradhan Mantri Gram Sadak Yojana (PMGSY) guidelines and accounts manual.
5. Internal audit	M	Internal audit function is outsourced	The internal auditor should conduct internal audits twice a year in line with the terms of reference of the PMGSY guidelines. The SRRDA will appoint an internal auditor for each year. The internal auditor reports to the chief executive officer or empowered officer. The internal audit findings are also reviewed by the statutory auditors and the Comptroller and Auditor General (CAG) of India. In relation to the five state agencies, the Odisha State Rural Road Agency (OSRRA) did not appoint an internal auditor for 2015–2016. The Chhattisgarh Rural Road Development Agency (CGRRDA) appointed an internal auditor for 2015–2016 but did not complete the tasks. There is no audit committee to review audit reports in the CGRRDA, OSRRA, and West Bengal State Rural Development Agency (WBSRDA). It is recommended that an audit committee be formed to review internal audits, statutory audits, and all other audits made by the state agencies.



<b>Risk</b>	<b>Risk Assessment</b>	<b>Risk Description</b>	<b>Mitigation Measures or Action Plans</b>
6. External audit	M	The audit of the project financial statements should be done by the independent auditor acceptable to ADB, and the reports should follow legal agreement requirements, generally accepted accounting principles, or auditing standards.	The external audit of the SRRDAs is done by an independent statutory auditor appointed from the panel and approved by the Comptroller and Auditor General of India. The audit is conducted in accordance with the PMGSY guidelines. There has been generally no delay in the audits by the SRRDAs. All state agencies completed the audit for the year 2015–2016 and submitted a copy to the NRIDA. The standardized terms of reference (TOR) for the audit of ADB-funded projects agreed between the CAG, India, and ADB will be followed. ADB will communicate any deficiencies or issues on audited project financial statement (APFS), and the Madhya Pradesh Rural Road Development Authority (MPRRDA) will take immediate actions to address them, including resubmission of the audit report.
7. Reporting and monitoring	H	Financial reports and disbursement reports are to form part of the quarterly progress report  Audited project financial statements do not follow ADB's reporting requirements	The receipts and expenditures for the PMGSY project, including the ADB component, are entered in the Online Management, Monitoring and Accounting System (OMMAS) software developed by the Centre for Development of Advanced Computing (C-DAC). Online data entry is made by the PIU and all information required by the management can be viewed online with their user name and password. The software can generate periodic financial statements. Some subsidiary ledgers that are not in the software reports are generated with the spreadsheet. However, there is room for improvement in the system. Quarterly and annual progress reports with physical and financial progress shall be made mandatory for the proposed project.  The standardized terms of reference (TOR) for the audit of ADB-funded projects agreed between the CAG, India, and ADB will be followed. ADB will communicate any deficiencies or issues on APFS, and the MPRRDA will take immediate actions to address them, including resubmission of APFS.

<b>Risk</b>	<b>Risk Assessment</b>	<b>Risk Description</b>	<b>Mitigation Measures or Action Plans</b>
8. Information systems	M	Optimal use of technology in the finance and accounts wing for the preparation of accounts and reporting requirements.	For the PMGSY project including the first RCIP, the computerized double entry software OMMAS is already operational. Although there is some deficiency, the software can generate the minimum reporting requirements. There is room for improvement in the software. Tally software and spreadsheet are also used by the SRRDA for generating other reports.
<b>Overall Control Risk</b>	<b>M</b>		

H = high, S = substantial, M = moderate, L = low.

Source: Asian Development Bank.

## **B. Disbursement Arrangements for ADB Funds**

18. The loan proceeds will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).<sup>7</sup> The project is funded by ADB and loan proceeds will be disbursed through reimbursement procedures. The statement of expenditure (SOE) procedure will be used to reimburse eligible expenditure for payments equal to or less than \$100,000. SOE records will be maintained and made readily available for review by ADB's disbursement and review mission or upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit.<sup>8</sup> Any individual payment to be reimbursed under the SOE procedure shall not exceed the equivalent of \$100,000. All supporting documents for payments shall be submitted to ADB for reimbursement for payments of \$100,000 or more. Abolishing the SOE ceiling is not recommended considering the involvement of different implementing agencies and the number of project implementation units involved in the program.

19. Pursuant to ADB's Safeguard Policy Statement (SPS 2009), ADB funds may not be applied to the activities described in the ADB Prohibited Investment Activities List set forth in Appendix 5 of the Safeguard Policy Statement. The SRRDA should also ensure that the investments are in compliance with applicable national laws and regulations and that it will apply the prohibited investment activities list to all subprojects financed by ADB.

20. The SRRDAs will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting supporting documents, and (iv) preparing and sending withdrawal applications to ADB. Before the submission of the first withdrawal application, the government shall submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is \$100,000, unless otherwise approved by ADB. The NRIDA is to consolidate claims to meet this limit for reimbursement claims. Withdrawal applications and supporting documents will demonstrate, among other things, that the goods and/or services were

<sup>7</sup> Available at [http://www.adb.org/Documents/Handbooks/Loan\\_Disbursement/loan-disbursement-final.pdf](http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf)

<sup>8</sup> Checklist for SOE procedures and formats are available at  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/chap-09.pdf](http://www.adb.org/documents/handbooks/loan_disbursement/chap-09.pdf)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Contracts-100-Below.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Contracts-100-Below.xls)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Contracts-Over-100.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Contracts-Over-100.xls)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Operating-Costs.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Operating-Costs.xls)  
[http://www.adb.org/documents/handbooks/loan\\_disbursement/SOE-Free-Format.xls](http://www.adb.org/documents/handbooks/loan_disbursement/SOE-Free-Format.xls)

produced in or from ADB members, and are eligible for ADB financing. The borrower should ensure sufficient category and contract balances before requesting disbursements.

21. All disbursements under government financing will be carried out in accordance with the regulations of the respective state governments.

### **C. Accounting, Auditing and Public Disclosure**

22. The MORD and the participating states will (i) maintain separate accounts and records for the projects; (ii) prepare annual financial statements for the projects in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the projects audited annually by independent auditors whose qualifications, experience, and terms of reference are acceptable to ADB, in accordance with international standards for auditing or the national equivalent acceptable to ADB; (iv) as part of each such audit, have the auditors prepare a report (which includes the auditors' opinion on the use of the loan proceeds and compliance with the financial covenants of the legal agreements as well as on the use of the procedures for the statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the projects that were identified in the course of the audit, if any); and (v) furnish to ADB, no later than 6 months after the close of the fiscal year to which they relate, copies of such audited financial statements, audit report, and management letter, all in the English language, and such other information concerning these documents and the audit thereof as ADB shall from time to time reasonably request.

23. The MORD and the participating states will enable ADB, upon ADB's request, to discuss the financial statements for the projects with the auditors appointed by (i) the MORD, and (ii) the states, and will authorize and require any representative of such auditors to participate in any such discussions requested by ADB. This is provided that such discussions shall be conducted only in the presence of an authorized officer of the MORD or the relevant state, unless the MORD or the state shall otherwise agree.

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

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

26. The government, the MORD, and the SRRDA have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.<sup>9</sup> ADB reserves the right to require a change in the auditor (in a

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<sup>9</sup> ADB's approach and procedures regarding delayed submission of audited project financial statements:

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

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

27. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Public Communications Policy 2011.<sup>10</sup> After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.<sup>11</sup>

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processing of requests for new contract awards and disbursement such as new replenishment of imprest accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.

- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

<sup>10</sup> Public Communications Policy: <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

<sup>11</sup> This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraphs 97(iv) and/or 97(v).

## VI. PROCUREMENT AND CONSULTING SERVICES

### A. Procurement Capacity Assessment of Investment Program States

28. **Summary of the procurement assessment.** Regular procurement reviews conducted by ADB review missions throughout the implementation of Rural Road Sector II Investment Program (RRS)-II and the first RCIP in the investment program states, and dedicated missions of the procurement experts confirm that arrangements for the procurement of civil works under PMGSY in all these states are adequate and proved successful under both previous MFFs. The agreed procurement procedure has been followed in the implementation of projects 1–5 under RRS-II, and projects 1–3 under the first RCIP. Procurement assessment confirmed that the guidelines of the NRIDA have been followed by all states for procurement of works, and fundamentals of the process are in place with some variation in each state, which comply with the state-specific procurement rules and ADB procurement guidelines. E-procurement as assessed and approved by ADB is being used in all investment program states. Adequate advertisement procedures including the online system, and delineation of duties between bid evaluation, recommendation for award, and approval of contract award, are in place in all states.

29. **Risks and recommendations for mitigation of risks.** The overall risk is low. The procurement system in the investment program states are found to be transparent. It is based on the e-procurement system that has been in place since 2005, and subsequently further improved as per ADB procurement guidelines in 2009. Training by the RCTRC should include training at least twice a year on procurement for PIU staff, engineers, contractors, panchayat raj institutions, etc. to anticipate high turnover of staff in the relevant agencies. The standard bidding documents for the first RCIP should be used for procurement of subprojects under the investment program, and this should be monitored by the procurement cell of the chief engineer's office. The investment program states will continue to take all necessary steps to ensure that procurement capacity built into the PMGSY program is maintained throughout the implementation of the investment program. All these measures will reduce anticipated risks to a low to negligible level. The detailed procurement process adopted under the first RCIP and the investment program is described in section C below.

### B. Advance Contracting and Retroactive Financing

30. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2015, as amended from time to time).<sup>12</sup> The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, executing agencies, and implementing agencies have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the investment program.

31. Withdrawals from the loan account may be made for reimbursement of eligible civil works expenditures incurred under the investment program before the effective date, but not earlier than 12 months before the date of signing of the loan agreement, subject to a maximum amount equivalent to 20% of the loan amount.

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<sup>12</sup> ADB. 2015. [Procurement Guidelines](#). Manila.

### C. Procurement of Works

32. All procurement of civil works financed by ADB will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) (footnote 12). The procurement will be carried out using single-stage, two-envelope bidding procedure. For the road construction or upgrade, investment program states will be following the national competitive bidding (NCB) procurement process similar to the one approved by ADB for RRS-II and RCIP, including advance contracting and retroactive financing provisions of the FFA. The standard PMGSY bidding document (improved in agreement with ADB) used in the first RCIP and electronic mode of procurement will be used.<sup>13</sup> Contracts will include civil works and 5-year post-construction maintenance and the defect liability period.<sup>14</sup> Shopping will be used if the estimated amount is less than \$100,000. Further details are specified in the procurement plan provided in Appendix A.

33. The following approval procedures will be adopted for NCB civil works contracts for road construction intended for financing under the investment program:

- (i) ADB will review technical bid evaluation reports for one civil work contract package under each tranche in each state prior to the financial bid opening (the summary reporting form on technical bid evaluation is in Appendix F);<sup>15</sup>
- (ii) Upon ADB clearance of the technical bid evaluation reports, the SRRDA will proceed with the financial bid opening and evaluation and submit financial bid evaluation reports for the same civil works contract package to ADB for clearance before the contract award (the summary reporting form on financial bid evaluation is in Appendix G);<sup>16</sup>
- (iii) If ADB finds the financial bid evaluation for the contract package under each project satisfactory, the SRRDA will proceed with procurement procedures and contract award for subsequent contract packages under the project without prior ADB review and approval. In these cases, the following post review (sampling) procedures will apply: (a) the SRRDA will retain a record of all procurement documentation, including copies of the signed contracts and the bid evaluation reports, to be available for the post review (sampling);<sup>17</sup> (b) at the time of each contract award, the SRRDA will provide ADB with a certified summary sheet reporting on the main aspects of the bid evaluation and contract award (the reporting form is in Appendix H); (c) the SRRDA

<sup>13</sup> Approval of e-TS for national competitive bidding (NCB) in all states was granted by ADB in 2009–2011.

<sup>14</sup> The packaging was done considering that (i) procurement involves construction of rural roads scattered throughout the states/districts, and in remote areas; and (ii) each contract includes a 5-year post-construction maintenance, and this will need involvement of local labor from the nearby communities. Accordingly, using around 2,100 NCB contracts for a total value of around \$1,110 million is deemed more economical and efficient instead of combining bids into more sizeable packages that would enable the use of the international competitive bidding (ICB) mode of procurement, and reduce the number of contracts to be managed. The approach adopted to packaging follows the common approach to packaging adopted under the nationwide PMGSY being implemented in 29 states across India and proved effective over more than 17 years of implementation. An adequate number of PIUs matching the contract packaging both under PMGSY and the investment program are in place.

<sup>15</sup> Each investment program state may start technical bid evaluation for all contract packages but will not proceed with the financial bid opening until ADB clearance for the technical bid evaluation reports for the first civil works contract packages under the tranche is obtained.

<sup>16</sup> Each investment program state may proceed with financial bid opening for all contract packages but will not proceed with the contract award until ADB clearance for the financial bid evaluation reports for the same civil work contract packages under the tranche is obtained.

<sup>17</sup> Original documentation on the procurement process may be kept at PIUs. However, the copies of the documentation shall be kept at the state rural road development agency headquarters to enable easy access for review and auditing.

will promptly inform ADB on achieving the award of 50% of contracts under each tranche for conducting post review (sampling) and procurement audit; (d) the post review (sampling) and audit will be based on a systematic sampling approach: 2–4 packages to be reviewed in each district (depending on the number of packages in the district), one of which should have the highest bid price. This sampling approach is taken by considering the need to facilitate (a) full compliance with ADB procurement guidelines, (b) full coverage of review to all PIUs, and (c) efficiency of ADB resources to perform the audit.

- (vi) Based on this post review (sampling) and audit, if any contract award is found to be unacceptable, ADB may refuse to finance the contract.

34. Under project 1, consulting services will be engaged under the government's financing for the technical support consultant (TSC), project implementation consultants (PIC), institutional strengthening consultant (ISC), and road safety experts. The terms of reference for all consulting services are referred to in section E below.

#### **D. Procurement Plan**

35. The procurement plans for projects 1 and 2 are in Appendix A. These documents describe the threshold and review procedures of all procurement of goods, works, and consulting services to be undertaken for the investment program. The procurement plans will be updated at least once every 18 months or whenever change in the procurement arrangements is required and agreed.

#### **E. Consultants' Terms of Reference**

36. The terms of reference (TOR) of the consultants engaged under project 1 are provided in the following appendices:

- (i) TOR for Project Implementation Consultant: Appendix B
- (ii) TOR for Technical Support Consultant: Appendix C
- (iii) TOR for Institutional Strengthening Consultant: Appendix D
- (iv) TOR for Road Safety Experts: Appendix E

## VII. SAFEGUARDS

### A. Environment

37. **Environment safeguards compliance.** Projects 1 and 2 have been categorized *B* as per ADB's Safeguard Policy Statement (SPS) 2009. A due diligence report (DDR) for environment safeguards has been prepared for project 1 to establish the project's compliance with the loan agreement, project agreements, initial environmental examinations (IEE), and environmental management plans (EMP) for each state, and the permits and clearances secured so far. Overall, the result of due diligence showed that so far, project 1 is compliant with the environment clauses of the loan agreement, project agreement, environmental assessment and review framework (EARF), IEEs and EMPs, and permits and clearances.

38. For project 2, a state level IEE report has been prepared based on a 10% sample review of the environmental checklists completed for the 204 roads in Madhya Pradesh, covering 168 packages with a total length of about 2,800 km. The report identified the likely environmental impacts of proposed roads typical during construction phase. Based on the transect walks conducted on sample roads, specific EMPs for each road were proposed. In the EMP, environmental impacts, corresponding mitigating and enhancement measures, responsibilities in the implementation and supervision of implementing EMP provisions, the performance targets and monitoring indicators, the cost and the timeline to implement the provisions are indicated. Typical environmental impacts include air and water pollution, health and safety impacts on workers and the community, waste generation from workers, construction debris generation, removal of trees, and removal of electric and water utilities, among others.

39. **Environmental assessment.** The following steps will be followed for conducting environmental assessment for all projects under the investment program in accordance with the EARF for the investment program. PICs will complete the environmental checklist based on site visits for all road subprojects, including bridges longer than 50 meters. The technical support consultant (TSC) will review the completed environmental checklists with verified site visits for at least 10% of sample roads in each investment program state per project. The TSC will then prepare state-level IEE reports and standard EMP for all road subprojects, based on the completed environmental checklists. Relevant environment safeguard clauses and the standard EMP will be included in the bidding document while road-specific EMPs will be available and provided to contractors together with the detailed project reports. Specific environmental issues and information for each road will be extracted from the completed environmental checklists to be incorporated into standard EMPs and converted to road-specific EMPs.

40. **Ensuring implementation of environmental standards.** Relevant environment safeguard clauses and the standard EMP will be included in the bidding documents. The SRRDAs will prepare and provide subproject-specific EMPs to contractors to allow them to estimate and include the required costs for EMP implementation in their bids.

41. **Grievance redress.** Grievances, if any, will be considered at the village level by the grievance redress committee (GRC) consisting of members of the *gram panchayat* (village-level administrative body) and the *pradhan* (leader) or *up-pradhan* (deputy) of the *gram panchayat* (footnote 2). The GRC will meet to address grievances as needed. Grievances not resolved at the village level will be addressed through the GRC at the district level, comprised of the following:

- (i) executive engineer of the PIU,



- (ii) member of *zilla parishad* (district council),
- (iii) member of the grievance committee of the concerned *gram panchayat*, and
- (iv) representatives of affected peoples as active participants in the proceedings of grievance redressal.

## B. Social

42. **Land availability.** The construction of rural roads will be carried out mostly within the existing right-of-way, with widening and minor realignments in some cases that will require narrow strips of land to be made available outside the existing road. In such cases, the voluntary land donation process will be provided as an option to community members. The process has been widely used under the PMGSY and other rural development schemes across India and proven effective. Therefore, eminent domain will not be exercised under this project.

43. The PMGSY voluntary donation and participation procedures were refined under the guidelines of the state-specific community participation frameworks (CPF) that were prepared to comply with ADB's Safeguard Policy Statement (2009). The CPFs have been disclosed on ADB's website since the MFF approval. The key principles of the CPF are the following:

- (i) To conduct transect walks for each road, as required under the PMGSY. These should be verified and documented by a third party (i.e., PIC). The goals of the transect walks and consultation process are to inform people of the project, get their inputs for the road design, and identify persons who would be impacted by the project (i.e., loss of land, partial or complete structure).
- (ii) To conduct a socioeconomic census survey of all the affected persons. This is to be carried out by the PIC.
- (iii) To obtain memorandum of understanding (MoUs) between the affected individual and the PIUs. This is to be verified by the PICs for all, including for voluntary donations.
- (iv) To assist and link affected vulnerable households to government poverty alleviation and employment programs.

44. **Social safeguards compliance of projects 1 and 2.** As per CPF requirements, transect walks have been conducted for all roads proposed. It is expected that impact minimization and inputs provided by transect walk participants will be reflected in the updated detailed project reports to the extent possible. This will be supplemented by design reconnaissance exercise by the design consultants.

45. For the preparation of projects 1 and 2, the socioeconomic census surveys were conducted by the PICs and identified affected persons, including vulnerable households. According to the sample reviewed, (i) impacts were limited to narrow strips of land and external sections of structures (boundary walls, fences, and in some instances, verandahs); (ii) no affected persons would be physically relocated as a result of voluntary donations; (iii) no affected individual would lose over 5% of their land. According to the review, a memorandum of understanding on voluntary donation was obtained for each individual affected by the project. The identified vulnerable affected persons will be linked to state and national employment and poverty alleviation schemes during the implementation of the project and monitored and reported in the annual social monitoring reports. The social compliance report for each participating state has been disclosed on the ADB website.

46. For future tranches, compliance with the CPF for ongoing projects will need to be

assessed and confirmed that their preparation and implementation followed the guidelines of the CPF and that there were no outstanding claims related to voluntary donation. The due diligence report, which combines findings for all the investment program states, is disclosed on the ADB website.

47. Each investment program state will ensure that, subsequent to the award of works contract, no road section or part thereof will be handed over to the contractor unless the applicable provisions of the CPF have been complied with.

48. The implementation of the CPF will be monitored closely. All SRRDAs have appointed focal persons to monitor and manage social safeguards under the RCIP. The internal monitoring will be carried out by the PIUs with the support of the PICs. In addition to CPF documents, the PICs will keep consolidated records of all affected persons, vulnerable affected persons, structures and other assets affected, and memorandums of understanding with affected individuals. The PIUs/PICs will also closely monitor and document grievances and their resolution. External monitoring will continue to be carried out by the TSC, who will review completed CPFs with site verifications for a minimum representative sample of 10% of the roads in each investment program state under projects 1 and 2. This will include an assessment of the grievance mechanism efficiency and resolution.

49. **Indigenous people.** Through the census survey, scheduled tribes and castes have been identified in project roads in all five states. Given that the project involves minor upgrades to existing roads, it will not lead to further impact on any of the scheduled tribes and castes in the areas. There will be no impact on their tribal and cultural identity. In fact, they will receive similar benefits from the investment program as the non-scheduled tribe households, as this will be providing connectivity to habitations and increasing access to better facilities in health, education, and markets. This has also been confirmed by the TSC's subsequent review of the due diligence process. Moreover, the CPF has special provisions for all scheduled tribe households. In case of any significant impacts on scheduled tribes under any subproject, the mitigation shall follow the requirements as set out in the CPF. As also laid down in the CPF, for any impact on land involving traditional and tenure rights of the scheduled tribes, the legal provisions laid down by the Government of India and the related investment program state pertaining to land transfer will be followed.

## VIII. GENDER AND SOCIAL DIMENSIONS

### A. Gender

50. Gender analysis was carried out as part of the social and poverty assessment and gender action plan preparation. It was found that with the expected improved connectivity to nearby towns and villages, the investment program will improve access of women to health and educational services. In particular, improved connectivity will contribute to a higher rate of safe child deliveries, and reduce maternal and prenatal deaths and child mortality. Better transport services will also open up opportunities for more girls to enroll in schools, universities, and various educational institutions outside of their villages. Women noted that, presently, they mostly go on foot, often on earthen tracks that are impassable in the rainy season. Better roads would make access to their destinations safer, faster, and more comfortable. Aside from increasing the use of motorized transport, all-weather roads will also offer more opportunities for non-motorized transport such as through the government program providing bicycles to female students. This will in turn reduce school dropouts among female students.

51. **Gender mainstreaming features of the investment program.** A gender action plan (GAP) has been developed for the investment program; project-specific GAPs have been developed to reflect gender-specific activities and targets relevant to the project.

52. The GAP for projects 1 and 2 is provided in Table 18. The GAP progress will be monitored quarterly by the PIU/PIC as per the template in Appendix I and a state analytical report will be submitted annually. The TSC will provide a GAP assessment, highlighting lessons learned upon project completion.

**Table 20: Gender Action Plan – Project 1 and Project 2**

Activities	Indicators and Targets	Responsibility	Time Frame
<b>Output 1. Rural roads in the investment program states improved</b>			
<b>1. Design Phase</b>			
1.1.1 Consider the specific needs of vulnerable users (elderly, women, children, and disabled) in the design and modification of roads.	Road design features installed in rural roads, e.g., speed bumps, rumble strips, zebra crossings, cautionary/informative signage, guard stones, shoulders used as safe sidewalks, etc.	PIU, PIC, TSC	Y1 to Y3
1.1.2 Involve women from the local communities in project areas in the identification of road alignment and decision making during the transect walk.	At least 20% of community members consulted on the design of RCIP roads are women. (Baseline: 0%)	PIU, PIC, ZP, GP, PRI	Project preparation
1.1.3 Women are represented in GRCs	At least 30% of members in GRCs are female. (Baseline: 0%)	PIU, PIC	Project preparation and Y1 – onwards
<b>2. Construction Phase</b>			
1.2.1 Hire women workers in road construction. Ensure equal wages for equal work.	At least 33% of workers hired in road construction works are women. (Baseline: 0%)	PIU, Contractor	Y1 – onwards

Activities	Indicators and Targets	Responsibility	Time Frame
1.2.2 Conduct public STD and HIV/AIDS prevention.	At least 500 community members (target: 50% women) from subproject habitations participated in HIV/AIDS and human-trafficking awareness sessions	PIU	Y1 – onwards
<b>3. Road Safety</b>			
1.3.1 Ensure the communities' participation in road safety awareness campaigns.	For the investment program, at least 30,000 students with increased understanding of road safety. (Baseline: 0)  At least 40% of students participating in the sessions are girls. (Baseline: 0%)	PIC, TSC, PIU	Y1
<b>4. Project monitoring</b>			
1.4.1 Collect sex-disaggregated data during preparation of the baseline census survey, subproject monitoring, and impact assessment reports.	Baseline surveys of affected households, social monitoring reports, and impact assessment reports have sex-disaggregated data.	PIU, PIC, TSC	Project preparation and Y1 – onwards
1.4.2 GAP monitoring and reporting	Gender specialist in each PIU is appointed or recruited for implementation and monitoring of GAP.  GAP progress update is prepared and reported annually.  Combined GAP completion report highlighting lessons learned submitted upon project completion.	PIU, PIC, TSC	Y1 – onwards
<b>Output 2. Institutional capacity of PMGSY implementing agencies strengthened</b>			
2.1 Female PMSGY engineers trained in rural road development through rural connectivity training and research center operations	15% of the PMGSY engineers trained are women.	RCTRC, TSC	Y1 – onwards

GAP = gender action plan, GP = gram panchayat, GRC = grievance redress committee, IAY = Indira Awaas Yojana, PIC = project implementation consultants, PIU = project implementation unit, PMGSY = Pradhan Mantri Gramin Sadak Yojana, PMIS = project management information system, PRI = panchayati raj institution, RCIP = Rural Roads Connectivity Improvement Project, RCTRC = Rural Connectivity Training and Research Center, RRNMU = Rural Road Network Management Unit, STD = sexually transmitted diseases, TSC = technical support consultant, Y = year, ZP = zilla parishad.

Source: Asian Development Bank.

## B. Health and Labor

53. The incidence of HIV/AIDS is not anticipated to rise as a result of the program. Each state shall ensure through specific provisions in the bid documents and the works contracts financed under the investment program that the contractors shall follow all applicable labor laws, international core labor standards, and to the extent possible, the GAP. Provisions in the works contract will be included to (i) carry out awareness programs for road workers at worksites and

the local communities on the risks of sexually transmitted infections, including HIV/AIDS, as part of health and safety measures; (ii) follow and implement all statutory provisions on labor (including equal pay for equal work, not employing or using children as labor), health, safety, welfare, sanitation, and working conditions; and (iii) maximize employment of women and the local poor and disadvantaged persons for construction while at the same time enabling the project to achieve construction timelines. The PIUs will coordinate with the State AIDS Control Society (SACS) and other public health agencies to carry out HIV/AIDS awareness programs for workers and to disseminate information at worksites.

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

### A. Program Design and Monitoring Framework

54. The design and monitoring framework (DMF) of the investment program is included in Appendix 1 of the report and recommendation of the President (RRP), and the DMFs for projects 1 and 2 are in Appendix J.

### B. Monitoring

55. **Project performance monitoring.** The achievement of the project performance targets will be assessed against the output indicators as stipulated in the DMF. The SRRDAs, assisted by the technical support consultants (TSC), project implementation consultants (PIC), and other consultants as required, will establish and implement a project performance management system (PPMS) in each state. The PPMS will include detailed methodology of data collection and analysis to ensure statistical validity, isolation of compounding factors, and comparison with baseline and control data. At a minimum, the indicators will be monitored before and after project construction, both on the subprojects and control roads.

56. Indicators to be monitored may include, but not be limited to, the following:

**Table 21: Project Performance Monitoring Indicators**

Category	Indicators	Remarks
Rural connectivity	Length of roads constructed or upgraded	Total, by district, by habitation size, by type of terrain, etc.
	Number of newly connected habitations	Total, by district, by habitation size
	Period of construction	By road length, by terrain
	Frequency and duration of holding up of civil works by rural communities	By causes, including instances of omissions in design
Road safety	Percentage of DPRs for project roads undergoing RSAs and percentage of DPRs amended following the RSAs	
	Percentage of existing roads undergoing RSAs and percentage of existing roads improved following RSA recommendations	
Safeguards	Records of safeguard monitoring activities	
	Number of project roads monitored	By year, by number, and length of project roads
	Number of persons consulted during the transect walk	Number of women being consulted should be recorded and reported.
Asset management	Pavement condition index for project roads under 5-year maintenance	
	Pavement condition index for project roads after 5-year maintenance	
	Number of project roads beyond the 5-year maintenance contract programmed for maintenance	Number of roads, total length, and budget, by year. List of project roads should be reported.
	RRNMU operations	Number of staff, annual budget

Category	Indicators	Remarks
		for RRNMU operations
Capacity building	Number of PIU, RRNMU, PRI, consultants, contractors staff to be trained by RCTRC	
Innovation	Number of PIU staff, PRI representatives, DPR consultants, and contractors trained by RCTRCs	
	Innovations on rural road projects tested or recommended	By type of innovations; number of roads and kilometers should be recorded.
	RCTRC operations	Number of staff, annual budget for RRNMU operations

DPR = detailed project report, PIU = project implementation unit, PRI = panchayat raj institution, RCTRC = rural connectivity training and research center, RRNMU = rural road network management unit, RSA = road safety audit. Source: Asian Development Bank.

57. The TSC will also establish a system for the monitoring of socioeconomic indicators in the selected habitation served by project roads as compared to the unconnected habitations, such as (i) poverty rates, (ii) number of maternal and infant deaths, (iii) number of total versus safe deliveries, (iv) immunization rates, (v) unemployment rates, (vi) agricultural production of perishable goods, (vii) income and expenditures of rural households, and (viii) district cash turnover of agricultural produce in local markets served by project roads, etc. The TSC will conduct baseline surveys at the project outset.

58. The SRRDAs will also monitor (i) the project budget and actual expenditure, (ii) ratio of kilometers of rural road network per one staff dedicated to rural road maintenance, (iii) road maintenance cost per kilometer, and other relevant indicators.

59. The results of the performance monitoring will be carefully documented and made accessible to the MORD, NRIDA, ADB, and the participating states. The TSC will establish a practice of annual presentation to the MORD, NRIDA, and ADB on the key performance indicators of the project.

60. **Compliance monitoring.** Compliance with loan covenants will be monitored through (i) ADB's project administration missions—including the project inception mission—to discuss and confirm the timetable for compliance with the loan covenants; (ii) project review missions will assess compliance with particular loan covenants and, where there is any noncompliance or delay, discuss proposed remedial measures with the executing agencies; and (iii) the midterm review mission, if necessary, will review covenants to assess whether they are still relevant or need to be changed or waived due to changing circumstances.

61. **State-level safeguards monitoring and reporting.** The SRRDAs will be responsible for internal monitoring of the social and environmental aspects of the program. Each SRRDA will have a safeguard focal person to provide oversight on the implementation of safeguards in their respective state. The PIU with the support of the PICs will monitor the implementation of the community participation framework and the environmental management plan. Specifically, in the monitoring of the implementation of EMP by the contractor, the PIU, with the support of the PICs, will prepare monitoring reports covering pre-construction, during construction, and during operation stages of the subproject. Annual environmental monitoring reports and annual social reports will be prepared by the SRRDA with support from the TSC, for submission to NRIDA and ADB and disclosure on the ADB website. The monitoring and evaluation for the social safeguard aspect will be done by using the baselines collected during the project design: (i) the number of

affected persons and vulnerable affected persons, including those who need to be included in any government-sponsored programs, and (ii) woman participation in construction activities in each state.

62. **National level safeguard monitoring and reporting.** The TSC will perform the task of national monitoring and evaluation. The TSC will have social development specialists and environmental experts as part of the team, who will be responsible for organizing tasks for monitoring and evaluation. The monitoring cycle will be once in 6 months. The TSC will submit to the SRRDAs, the NRIDA, and ADB the periodic monitoring reports, including the annual social and environmental monitoring reports for disclosure on the ADB website.

63. **Responsibilities for environmental and social monitoring.** The following entities will have responsibilities for implementing environmental measures:

- (i) **Contractor**
  - Implement all mitigation measures included in the EMP attached to the bidding documents and the road-specific EMP included with the detailed project report.
  - Bear all costs for EMP implementation and include in the bid bill of quantities any mitigation costs not covered under the cost of physical works or other schemes and agencies.
  - Process and obtain all relevant statutory clearances and permits related to construction.
- (ii) **Project implementation unit**
  - Review and verify the environmental checklists prepared by the PIC.
  - Monitor implementation of the EMP by the contractor.
  - Review and approve monitoring reports prepared by the PIC.
  - Obtain all project-related statutory clearances and permits where relevant.
  - Ensure all memorandums of understanding for land donations are obtained.
- (iii) **Project implementation consultant**
  - Conduct transect walks, carry out public consultations, and prepare environmental checklists for each and every road and bridge that is longer than 50 meters for all non-sample roads.
  - Prepare road-specific EMP based on the standard EMP prepared by the TSC and information collected in the environment checklists and the detailed project report.
  - Conduct regular monitoring of EMP implementation by the contractor.
  - Provide technical guidance to the contractor where necessary.
  - Prepare monitoring reports covering pre-construction, during construction, and operation stages and submit these to the PIU.
  - Monitor project implementation to ensure this is conducted according to community participation framework requirements.
  - Monitor the implementation of the gender action plan and submit annual monitoring reports.
- (iv) **State rural road development agency**
  - Review and approve all environment checklists and IEE reports (to be done by the concerned focal person for environment safeguards).
  - Prepare annual environmental monitoring reports for submission to the NRIDA



and to ADB for disclosure on the ADB website.

- Review and approve due diligence reports prepared by the TSC for ongoing subprojects at the time of preparation for follow-on tranches and forward these to the NRIDA.
- Ensure that the standard EMP is attached to the bidding documents and that the road-specific EMP is attached to the detailed project report.
- Obtain all project-related statutory clearances and permits where relevant.
- Coordinate with local agencies (such as the local panchayats) and schemes (such as the Mahatma Gandhi National Rural Employment Guarantee Act) for implementation of selected relevant environment mitigation measures.

(v) **Technical support consultant**

- Conduct due diligence for at least 10% of all environment checklists that are prepared by the PIC.
- Based on the approved environment checklists, prepare state-level IEE reports along with a standard EMP.
- Review monitoring reports prepared by the PIC and conduct site verification for a minimum of 10% of roads.
- Provide training and technical advice to the PIU and PIC where necessary.
- Prepare safeguard due diligence reports for ongoing subprojects at the time of preparation for follow-on tranches and submit these to the SRRDA.
- Prepare annual social and environmental monitoring reports for submission to the NRIDA and to ADB for disclosure on their website.

## C. Evaluation

64. ADB inception missions will be fielded within 3 months after the legal agreements for the project are declared effective; thereafter, regular reviews will follow at least annually. As necessary, special loan administration missions and a midterm review mission will be fielded, under which any changes in scope or implementation arrangement may be required to ensure the achievement of project objectives. The NRIDA at the central level and the SRRDAs at the state level will monitor the project implementation, in accordance with the schedule and time-bound milestones, and keep ADB informed of any significant deviations that may result in the milestones not being met. Within 6 months of physical completion, the NRIDA will submit a project completion report to ADB.<sup>18</sup>

## D. Reporting

65. Disaggregated data for all output and outcome indicators will be updated and reported quarterly. The investment program states through the NRIDA will provide ADB with (i) quarterly progress reports submitted within 45 days after the end of each quarter in a format consistent with the project performance management system and the design and monitoring frameworks, and will provide information necessary to update ADB's project performance reporting system;<sup>19</sup> (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iii) a project

<sup>18</sup> Project completion report format is available at <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>.

<sup>19</sup> ADB's project performance reporting system is available at <http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>.

completion report within 6 months of physical completion of each project under the investment program. To ensure viability and sustainability, project accounts and the audited project financial statement, together with the associated auditor's report, will be adequately reviewed (as outlined in Part V of this updated FAM).

66. For civil works, progress will be reported on a regular basis by the PIUs through the Online Management, Monitoring and Accounting System (OMMAS). The SRRDAs will submit monthly progress reports to the MORD via NRIDA through the relevant state government. Based on these reports, the MORD, with assistance from the NRIDA, will include in the quarterly progress reports all required information on the progress of implementation of civil works. This will include data on progress made during the period of review, changes if any in the implementation schedule, problems or difficulties encountered and remedial actions taken, and work to be undertaken in the coming quarter.

67. As far as environmental and social safeguards and gender action plan reporting are concerned, the following reports will be submitted: (i) annual social and environmental monitoring reports, and (ii) annual GAP monitoring reports and GAP completion report highlighting lessons learned.

68. The state-wise annual capacity building report should be prepared by the RCTRC, summarizing the training activities in sufficient detail. The reports will be submitted by the RCTRC to the respective SRRDAs. The SRRDAs will submit this report to the TSC for the preparation of the annual capacity building report to be submitted to the NRIDA.

69. The state-wise innovation report will be prepared by the TSC to monitor the implementation of the new innovations used in the road construction. The monitoring activities will include, but not be limited to, the type of innovative approaches used, site-specific constraints and solutions, and the quantity of the innovative approach.

## **E. Stakeholder Communication Strategy**

70. Various information will be provided to the general public regarding the investment program and each of its projects, including the scope, general progress status, beneficiaries, invitation for bids, and consultant recruitment notices. The information will be made available and updated through the official website of each investment program state, the MORD, and ADB. ADB's communication strategy is summarized in Table 22.

**Table 22: ADB's Communication Strategy**

<b>Project Documents</b>	<b>Means of Communication<sup>a</sup></b>	<b>Responsible Party</b>	<b>Frequency</b>	<b>Audience(s)</b>
Project data sheet (PDS)	ADB website	ADB	Initial PDS no later than 30 calendar days from approval of the concept paper; quarterly updates afterwards	General public
Design and monitoring framework (DMF)	ADB website	ADB	Draft DMF after fact-finding mission for the project	General public
Initial environmental examination reports (IEEs)	ADB website PMGSY website	ADB	Post fact-finding mission for the investment program and each tranche	General public, project-affected people in particular
Community participation framework (CPF)	ADB website PMGSY website	ADB	Post fact-finding mission for the program	General public, project-affected people in particular

<b>Project Documents</b>	<b>Means of Communication<sup>a</sup></b>	<b>Responsible Party</b>	<b>Frequency</b>	<b>Audience(s)</b>
Summary poverty reduction and social strategy (SPRSS)	ADB website	ADB	Post fact-finding mission for the program	General public, project-affected people in particular
Environmental and social safeguard compliance reports	ADB website	ADB	Post fact-finding mission for the program	General public, project-affected people in particular
Social safeguards due diligence report of ongoing tranches	ADB website	ADB	Post fact-finding mission for the program	General public, project-affected people in particular
Gender action plan	ADB website	ADB	Post fact-finding mission for the program	General public, project-affected people in particular
Legal agreements	ADB website	ADB	No later than 14 days from Board approval of the project	General public
Documents produced under technical assistance	ADB website	ADB	Within 2 weeks of completion	General public
Facility administration manual	ADB website	ADB	After loan negotiations	General public
Social monitoring reports	ADB website	ADB	Annually	General public, project-affected people in particular
Environment monitoring report	ADB website	ADB	Annually	General public, project-affected people in particular
Major change in scope	ADB website	ADB	Within 2 weeks of approval of the change	General public

ADB = Asian Development Bank, PMGSY = Pradhan Mantri Gram Sadak Yojana.

<sup>a</sup> The PMGSY website will have a hyperlink to the ADB website where all these documents will be posted.

Source: Asian Development Bank.

## X. ANTICORRUPTION POLICY

71. The Government of India, the Ministry of Rural Development, the states, and the executing and implementing agencies, are advised of ADB's Anticorruption Policy (1998, as amended to date). Consistent with its commitment to good governance, accountability, and transparency, implementation of the projects under the facility shall adhere to ADB's Anticorruption Policy. ADB reserves the right to review and examine, directly or through its agents, any alleged corrupt, fraudulent, collusive, or coercive practices relating to the projects under the facility.<sup>20</sup> In this regard, investigation of government officials, if any, would be requested by ADB to be undertaken by the government. To support these efforts, relevant provisions of ADB's Anticorruption Policy are included in the Loan Regulations and the bidding documents. In particular, all contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the MORD, the states, the executing and implementing agencies, and all contractors, suppliers, consultants, and other service providers as they relate to the projects under the facility. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the projects.<sup>21</sup>

72. To support these efforts, relevant provisions of ADB's Anticorruption Policy are included in the loan regulations and the bidding documents. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the states and implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the projects under the facility. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contract under the project.

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

By email at [integrity@adb.org](mailto:integrity@adb.org) or [anticorruption@adb.org](mailto:anticorruption@adb.org)

By phone at +63 2 632 5004

By fax to +63 2 636 2152

By mail at the following addresses (Please mark correspondence Strictly Confidential):

Office of Anticorruption and Integrity

Asian Development Bank

6 ADB Avenue, Mandaluyong City

1550 Metro Manila, Philippines

74. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all contractors, suppliers, consultants, and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the investment program. To support these efforts, relevant provisions are included in the loan and project agreement/regulations and the bidding documents for each of the projects under the investment program.

<sup>20</sup> Anticorruption Policy: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

<sup>21</sup> ADB's Integrity Office website: <http://www.adb.org/integrity/unit.asp>

## **XI. ACCOUNTABILITY MECHANISM**

75. People who are, or may in the future be, adversely affected by the program may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.<sup>22</sup>

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<sup>22</sup> Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

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

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

**Table 23: Record of Changes to the Facility Administration Manual**

Date Revised	Section	Revision
XXX	Various	Approval of tranche 2

Source: Asian Development Bank.

## PROCUREMENT PLAN

### Basic Data

<b>Project Name:</b> Second Rural Connectivity Investment Program - Tranche 1		
<b>Project Number:</b> 48226-003	<b>Approval Number:</b> 3611	
<b>Country:</b> India	<b>Executing Agency:</b>	Ministry of Rural Development, Panchayat and Rural Development Department (Government of Chhattisgarh), Panchayat and Rural Development Department (Government of Madhya Pradesh), Panchayat and Rural Development Department (Government of West Bengal), Public Works Department State of Assam, Rural Development Department (Government of Odisha)
<b>Project Procurement Classification:</b> Category B	<b>Implementing Agency:</b>	
<b>Project Procurement Risk:</b> Low	Assam State Road Board, State Rural Development Agency (West Bengal), State Rural Roads Agency (Odisha), State Rural Roads Development Agency (Chhattisgarh), State Rural Roads Development Authority (Madhya Pradesh)	
<b>Project Financing Amount:</b> US\$ 665,320,000 <b>ADB Financing:</b> US\$ 250,000,000 <b>Cofinancing (ADB Administered):</b> <b>Non-ADB Financing:</b> US\$ 415,320,000	<b>Project Closing Date:</b> 31 December 2020	
<b>Date of First Procurement Plan:</b> 4 July 2017	<b>Date of this Procurement Plan:</b>	27 September 2017

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

#### 1. Procurement and Consulting Methods and Thresholds

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

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding for Goods	US\$ 3,000,000 and Above	
National Competitive Bidding for Goods	Between US\$ 100,000 and US\$ 2,999,999	The first NCB is subject to prior review, thereafter post review.
Shopping for Goods	Up to US\$ 99,999	
International Competitive Bidding for Works	US\$ 40,000,000 and Above	
National Competitive Bidding for Works	Between US\$ 100,000 and US\$ 39,999,999	The standard bidding document for the first RCIP will be used. For each state under each tranche: prior review for 1st NCB; post-review (sampling) for succeeding NCBs; prior review for 1st Technical Bid Evaluation Reports and Financial Bid Evaluation Reports of the same contracts, post-review (sampling) for succeeding evaluation reports.
Shopping for Works	Up to US\$ 99,999	

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

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

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

Package Number	General Description	Estimated Value	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
None							

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

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

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
None							

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

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

Goods and Works								
Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review (Prior/ Post)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
AS	Rural Road Construction for the State of Assam	137.44	303	NCB	Post (sampling)	1S2E	Q3 / 2017	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Small Works  Comments: First NCB will be prior review. succeeding will be post (sampling)
CG	Rural	97.98	41	NCB	Post	1S2E	Q3 / 2017	Prequalification



	Road Construction for the State of Chhattisgarh				(sampling)			on of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Small Works  Comments: First NCB will be prior review. succeeding will be post (sampling)
MP	Rural Road Construction for the State of Madhya Pradesh	213.96	119	NCB	Post (sampling)	1S2E	Q3 / 2017	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Small Works  Comments: First NCB will be prior review. succeeding will be post (sampling)
OD	Rural Road Construction for the State of Odisha	98.36	383	NCB	Post (sampling)	1S2E	Q3 / 2017	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Small Works  Comments: First NCB will be prior review. succeeding will be post (sampling)
WB	Rural Road Constructi	47.75	181	NCB	Post (sampling)	1S1E	Q3 / 2017	Prequalification of Bidders: N

	on for the State of West Bengal							Domestic Preference Applicable: N  Bidding Document: Small Works  Comments: First NCB will be prior review. succeeding will be post (sampling)
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Consulting Services								
Package Number	General Description	Estimated Value	Number of Contract s	Recruitment Method	Review (Prior/ Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
None								

## B. Indicative List of Packages Required Under the Project

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

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
None							
Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments
None							

## C. Non-ADB Financing

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

Goods and Works				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Comments
None				
Consulting Services				
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Comments

Institutional Strengthening Consultant	1,710,000.00	1	QCBS	GoB Fund; Contract award, Q4 2017
Project Implementation Consultants	34,890,000.00	5	QCBS	GoB Fund; Contract award, Q4 2017
Road Safety Specialists	1,000,000.00	5	ICS	GoB Fund; Contract award, Q4 2017
Technical Support Consultant	780,000.00	1	QCBS	GoB Fund; Contract award, Q4 2017

## PROCUREMENT PLAN – TRANCHE 2

### Basic Data

<b>Project Name:</b> Second Rural Connectivity Investment Program – Tranche 2	
<b>Project Number:</b> 48226-004	<b>Approval Number:</b> [TBD]
<b>Country:</b> India	<b>Executing Agencies:</b> Ministry of Rural Development; Panchayat and Rural Development Department (Government of Madhya Pradesh)
<b>Project Procurement Classification:</b> B	<b>Implementing Agency:</b> Madhya Pradesh Rural Roads Development Authority
<b>Procurement Risk:</b> Low	
<b>Project Financing Amount:</b> \$303,000,000 <b>ADB Financing:</b> \$110,000,000 <b>Non-ADB Financing:</b> \$193,000,000	<b>Project Closing Date:</b> 30 June 2023
<b>Date of First Procurement Plan:</b> April 2018	<b>Date of this Procurement Plan:</b> August 2018

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

#### 1. Procurement and Consulting Methods and Thresholds

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

Procurement of Goods and Works		
Method	Threshold	Comments
National Competitive Bidding (NCB) for Works	Between \$100,000 and \$39,999,999	The standard bidding document for the first RCIP will be used; prior review for 1st NCB; post-review (sampling) for succeeding NCBs; prior review for 1st technical bid evaluation reports and financial bid evaluation reports of the same contracts, post-review (sampling) for succeeding evaluation reports.

Consulting Services	
Method	Comments
Quality-and Cost-Based Selection (QCBS)	80:20
Individual Consultant Selection	

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

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

Package Number	General Description	Estimated Value (\$ million)	Procurement Method	Review	Bidding Procedure <sup>6</sup>	Advertisement Date	Comments <sup>7</sup>
TBD	Rural road construction (168 packages, indicative packages in Section B)	275.04	NCB	Post-review Sampling (see Section 1)	1S2E	Q1/2018	Small works

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

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

Package Number	General Description	Estimated Value (\$ million)	Recruitment Method	Review	Advertisement Date	Type of Proposal	Comments
N/A							

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

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

Goods and Works								
Package Number	General Description	Estimated Value (\$ m)	No. of Contracts	Procurement Method	Review	Bidding Procedure	Advertisement Date	Comments
N/A								

Consulting Services								
Package Number	General Description	Estimated Value (\$ m)	No. of Contracts	Procurement Method	Review	Bidding Procedure	Advertisement Date	Comments
N/A								

### B. Indicative List of Packages Required Under the Project

The following table provides an indicative list of goods, works, and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period). [Refer to Section 2 above.]

SI No.	District	Block	Name of the Road	Length (km)
1	Alirajpur	Alirajpur	ML01-Alirajpur-Mathwad Road to Baheda-Baddala	7.25
2		Bhabra	ML01-Chotipole to Barzer	8.00
3		Sondwa	T02-Umrli Sondwa Walpur to Fadtala	23.30
	<b>Alirajpur Total</b>			<b>38.55</b>
4	Balaghat	Baihar	T24-Baihar to Katangi	10.60
5		Baihar	T22-Sijora to Khajra	8.57
6		Balaghat	T22-Naharwani to Hatta	4.13
7		Balaghat	T21-Chacheri to Laveri	2.68
8		Birsa	T25-Km 13 of T07 to Devgaon	28.40
9		Katangi	T22-Khajri to Lingapaunar	18.15
10		Kirnapur	T21-Paraswada-Mundesara to Kirnapur	13.40
11		Kirnapur	T23-Halditola-Badgaon-Dahedi-Bhalwa-Mate-Road	14.18
12		Lalbarra	MRL21-Lawada-Kope to Newargaon	10.00
13		Lanji	T23-Dulhapur to Kalpathari	8.20
14		Lanji	T25-Singola to Ladsa Road	9.30

SI No.	District	Block	Name of the Road	Length (km)
15		Paraswara	T21-Dora to Gudma	12.10
16		Waraseoni	T22-Budbuda to Bodalkasa-Jaramohgaon	12.70
	<b>Balaghat Total</b>			<b>152.40</b>
17	Barwani	Pati	ML01-Osada Semli Bamnali to Rosar Road	17.89
	<b>Barwani Total</b>			<b>17.89</b>
18	Betul	Amla	T02-Amla-Tirmau-Kharpadakhedi to Bahmni Pankha Multai Bordehi Road	26.38
19		Athner	T02-Athner Ghoghrajod Mendha Chhindwad to Bothi	34.69
20		Betul	T01-Dhoul to Gehuras Mathni	7.45
21		Betul	T04-NH-69 to Arul	7.18
22		Bhainsdehi	T02-Sawalmendha to Gadrajhiri (Bothi Khairwada to Bakud jod)	17.00
23		Bhimpur	T02-Duliya to Titwi (Maharashtra Border)	4.80
24		Bhimpur	T01-Khedi to Chunaloma	14.00
25		Chicholi	T01-Nasirabad-Ratanpur to Alampur	20.70
26		Ghoda Dongri	MRL01-Pandhra to Chordongri	3.95
27		Ghoda Dongri	T05-Siwanpat to Dulhara	8.90
28		Ghoda Dongri	MRL03-Padhar(Ghana) to Chhuri	6.60
29		Multai	T02-S.H.-26 Lendagondi-Dob-Siladehi-Semariya Pandri to N.H.47	16.88
30		Prabhat Pattan	T04-Ghat Amrawati Baghoda Devgaon Devbhilai to Narkhed	12.30
31		Shahpur	T05-Bondari to Kanhegoan	3.33
32		Shahpur	T06-Kesiya to Sehra	7.18
33		Shahpur	T04-Kajli to Dudar	1.83
	<b>Betul Total</b>			<b>193.14</b>
34	Bhind	Bhind	T03-Bhind-Seoda-Pandari Tehngur Road	32.58
35		Gohad	T07-Gohad Road to Khurd	7.00
36		Gohad	T03-Gohad mou road to Katrol	9.40
37		Gohad	MRL08-Chitora to Pali (Dirman)	7.70
38		Gohad	T05-Mou Seonda to Amayan	10.10
	<b>Bhind Total</b>			<b>66.78</b>
39	Bhopal	Phanda	T17-T07 (Kolar Road) to T05 Ratanpur	10.00
	<b>Bhopal Total</b>			<b>10.00</b>
40	Burhanpur	Burhanpur	T04-Pura to Lingafata Road	5.20
41		Burhanpur	T01-Burhanpur-Dharni Road to Jainabad-Sarola	8.85
42		Burhanpur	T02-Dariyapur-Jasondi Road to Fopnarkala	4.25
43		Burhanpur	T03-Indore-Ichhapur Road to Borsar	2.80
44		Burhanpur	MRL01-Maitha to Turakgurada Road	5.10
45		Khaknar	T01-Ghanshyampura to Badziri Road	2.75
	<b>Burhanpur Total</b>			<b>28.95</b>
46	Chhatarpur	Bijawar	T04-Amroniya to Amarpura	6.00
	<b>Chhatarpur Total</b>			<b>6.00</b>
47	Damoh	Damoh	MRL01-Damoh-Jujhar-Hinoti-Sakha-Ghangri-Nohta Road	32.00
48		Jabera	MRL01-Singrapur-Kondakalan-Pondi-Mala Road	24.40
49		Patera	T07-Patera-Bilakhurd Road	11.54
50		Tendukheda	T06-Tejgarh-Hinoti Sarra-Pura-Jhalon-Bamnoda-Taradehi Road	46.00
	<b>Damoh Total</b>			<b>113.94</b>
51	Dewas	Bagli	T01-Bagli Punjabura Road	15.00
52		Dewas	T01-Vijayganj Mandi to Jawasia	10.70
53		Kannod	T01-MDR (Gadiya) to Bhatasa Ajnas (Amoda)	24.19
54		Khatagaon	T01-Pipliyankar (SH-22) to Kolari	11.30
55		Sonkachh	T01-Pushpagiri Bhopal Road to Anabad Salamkhedi	12.00
56		Tonk Khurd	T01-Bhorasa Budasa Tonkkhurd Gorwa Aagrod	22.00
	<b>Dewas Total</b>			<b>95.19</b>
57	Dhar	Badnawar	T10-Badnawar (Delchi) to Rajod	19.33

SI No.	District	Block	Name of the Road	Length (km)
58		Dhar	T03-Tisgaon to Gunawad	21.13
59		Dhar	MRL04-Kiloli to Sadalpur	9.38
60		Dharampuri	T02-Dhamnod to Rupatta Fata via Sundrel Road	12.60
61		Gandhwani	T11-Chickli Phata (Haranchapda) to Gandhwani Singhana	22.70
62		Manawar	T07-Ganpur to Bakaner (IB)	29.93
63		Nalchha	T02-Mhow Neemuch Road to Sagore	14.10
64		Nisarpur	T01-MDR/Kukshi-Sighana(Lohari) to SH-26/New (Piplia)	9.90
65		Sardarpur	T06-Amjhera to Bhopawar Ringnod Road	26.38
66		Sardarpur	T09-Rajgarh (T05) to Timaychi (Jhaknawada Phata)	14.15
67		Tirla	T01-Salkanpur Fata to Dhar (via Dilawara )	16.63
	<b>Dhar Total</b>			<b>196.21</b>
68	Gwalior	Bhitarwar	T04-Gadhota Tiraha to Mastura, Rahi, Bela, Itma Upto Bargawan	17.90
	<b>Gwalior Total</b>			<b>17.90</b>
69	Harda	Harda	T01-Sirali to Harda Magradha Road (Sukharas)	18.64
70		Khirkiya	T01-Sirali to Rahatgaon	24.77
71		Timarni	T01-Balagaon to Khamgaon	16.45
	<b>Harda Total</b>			<b>59.86</b>
72	Hoshangabad	Babai	T02-Sirwad-Gajanpur-Talkesri-Furtala	5.70
73		Babai	T03-SH 22 (Anchalkheda)-Manwada-Madawan to Babai Ari Road	7.75
74		Bankhedi	T01-Bankhedi to Padrai Thakur	5.35
75		Bankhedi	T06-SH 22 to Kamthi	8.35
76		Hoshangabad	T01-Itarsi Lohariya-Tara Road to Rampur	12.50
77		Kesla	T02-Itarsi-Dharamkundi Road to Parcha	9.53
78		Pipariya	T06-Kanhwar (Crossing) to Purenakala	16.54
79		Seoni Malwa	T06-Seoni Malwa to Nanderwada	11.66
80		Seoni Malwa	T09-Shivpur Bhiladiya Road to Richhi	5.68
81		Sohagpur	T03-Gujarkhedi Bhokhedi Biladiya Sonsarkheda Road	11.02
82		Sohagpur	T02-Guramkhedi to Pamli	13.05
	<b>Hoshangabad Total</b>			<b>107.13</b>
83	Indore	Depalpur	T01-Chittoda to Pitawali	16.60
84		Indore	T01-Byepass T02 to Jhalariya	8.53
85		Mhow	T01-MDR 1505 (Bagdi Manpur Road) to Malipura	20.60
86		Sanwer	T01-Indore-Ujjain Road to Rajoda	30.10
	<b>Indore Total</b>			<b>75.83</b>
87	Jhabua	Jhabua	T22-T03 Jhabua Jobat Road to Bhoira Road to Dekal Choti to Kalapan Road to Ranapur Kundanpur Road	17.97
88		Meghnagar	T24-T04 Agral Chaipura Kotnai Road (PWD)	20.50
89		Meghnagar	T23-T03 Dedla Fata to Patlawad Road	8.01
90		Petlawad	T21-T02 Ratlam Ghughari Road to Sarangi	17.85
91		Rama	T26-T07 Jhabua Para Road to Jhekela to Rotla Gomla Road	7.65
92		Ranapur	T23-T04 Tandi Kanjwani Road to Mandlinatu to Sotiya Jalam to Gujrat Border	12.88
93		Thandla	T22-T01 Bamniya Talawada Road to Khawasa Bajana	5.00
	<b>Jhabua Total</b>			<b>89.85</b>
94	Katni	Badwara	T01-Singaudi Road to Pipariyakala	10.64
95		Badwara	L022-Kuwan to Baran Mahgawan	11.60
96		Bohriband	MRL02-Dhanwahi to Neemkheda	12.70
97		Dhimarkhera	T01-Dheemarkhera to Anterved Das.	15.45
98		Katni	MRL01-Katni-V-Garh to Dithwara	20.02
99		Rithi	MRL02-Deori Kalan to Hardwara (Khamariya No.1)	9.84
100		Vijayraghogarh	MRL01-Barhi Road (Singodi) to Khirwa No.1	5.05
	<b>Katni Total</b>			<b>85.30</b>
101	Khandwa	Baldi	T01-Khirkiya to Malood	18.95
102		Chhegon Makhan	T01-Ahemadpur to Indore Burhanpur Road	10.60

SI No.	District	Block	Name of the Road	Length (km)
103		Chhegon	T02-Indore Icchapur Road (Bhojakhedi) to Chirwel	11.10
104		Makhan		
105		Harsud	T01-Khandwa Hoshangabad to Barud	8.10
106		Khalwa	T01-Sunderdev Fata to Gulai Road	15.58
107		Khandwa	T02-Khandwa Harsud Road to Khar	13.70
			T01-Khandwa Mundi Road to Dudhwas	15.40
	<b>Khandwa Total</b>			<b>93.43</b>
108	Khargone	Barwaha	T02-Gawalu to Okhla (up to dist. Border Dewas)	22.79
109		Bhagwanpura	T04-Dhulkot Kabri Road to Gujar Bawadi-II	6.20
110		Bhikangaon	T01-Rodia to Anjangaon MDR	13.52
111		Gogawa	T01-Bagdara to Nagjhiri Khargone	15.30
112		Kasrawad	T03-Kasrawad-Lohari Road to Selda Plant	25.15
113		Khargone	T01-Barud Phata (SH26)-Balwadi to Mohna Phata	20.33
114		Maheshwar	T04-Maheshwar to Karhi via Mahetwada Bablai	33.65
	<b>Khargone Total</b>			<b>136.93</b>
115	Mandsour	Garoth	T03-Kurawan to Basai	20.03
116		Malhargarh	T01-Nahargarh Hingoriya Road	20.80
117		Sitamaui	T01-Sitamaui to Kayampur	16.93
	<b>Mandsour Total</b>			<b>57.75</b>
118	Morena	Ambah	T01-Dimni (SH-2) to Jkhona Road (T-02 of Morena block)	4.44
119		Joura	T01-A.B. Road NH-3 Jarah Rd to ABC canal via Khandoli, Kok Sigh Ka Pura	13.20
120		Joura	T02-M.S. Road (Mungawali) to Devgarh via Galetha	23.97
121		Kailaras	T01-M.S. Road to Arroda	9.60
122		Morena	T01-Shikarpur Fatak to MDR Bichola Road via Bicholi, Nagra, Kajibasai	13.50
123		Morena	T02-Mragpura Road to Kulhada via Gadora	10.30
124		Porsa	T01-Ambah Pinahat Road (MDR) to Porsa Ater Road ( SH-2)	22.48
125		Sabalgarh	MRL03-Heerapur Jhundpura Road	4.61
	<b>Morena Total</b>			<b>102.09</b>
126	Neemuch	Manasa	T01-Manasa Parda Kanjarda Deiken Road	26.50
	<b>Neemuch Total</b>			<b>26.50</b>
127	Panna	Ajaygarh	T02-App. Road to Pista	11.00
	<b>Panna Total</b>			<b>11.00</b>
128	Raisen	Badi Breli	MRL01-NH-12-Magardha-Maheswar Road	12.03
129		Begamganj	MRL02-T01 (Begamganj) to Sunehra	7.25
130		Begamganj	T02-Beerpur to Badgawan Munjfta	13.35
131		Gairtganj	MRL01-Gairatganj-Rampura Road to Andhiyari	5.10
132		Gairtganj	MRL02-SH-42 Chandoniganj to Padariyaganj	3.80
133		Gairtganj	T04-Gairatganj to Rampura Kala	9.45
134		Obedullaganj	T01-Mandideep-Polaha-Nandor Road	10.10
135		Obedullaganj	T02-NH-12 (Mandideep)-(via Dahod) NH-12 Noorganj to Dahod Road	17.75
136		Sanchi	MRL02-Bhopal-Vidisha Road to Bhartipur (Shahpur)	4.23
137		Silwani	MRL01-Silwani-Udaipura Road to Chunetiya Madhiya Road	10.20
138		Udaipura	MRL01-NH-12 (Udaipura) to Anghora	11.00
	<b>Raisen Total</b>			<b>104.26</b>
139	Ratlam	Alot	T03-Alote Sherpur via Malya Road	15.13
140		Bajna	T03-Adwaniya Chandgrah Road to Bajna Baswada (Mandliya) Road	15.70
141		Piploda	T07-M.N.Road Lasudiyaniathi to Naveli Thikriya Rajshthan Border	21.23
142		Piploda	T03-Jaora Amba Road to Badayalamata Sailana Road	23.00
143		Ratlam	T06-Palsoda to Panchad Road	18.88
	<b>Ratlam Total</b>			<b>93.93</b>



SI No.	District	Block	Name of the Road	Length (km)
144	Rewa	Naigarhi	T22-T002 to Harditiwariyan	11.03
145		Sirmour	T21-Sirmour to Gondaha (Part) Ajaraha via Dol Maghiyar	36.25
	<b>Rewa Total</b>			<b>47.28</b>
146	Sagar	Banda	ML01-MDR toTinsuwa	18.71
147		Bina	ML05-Basari to Dhand	17.65
148		Deori	MRL01-T-09 to Jaitpur Kachhya	4.76
149		Deori	MRL02-Chandpur to Anantpura	3.80
150		Deori	MRL03-T-09 to Marhi Jamuniya	2.13
151		Jaisinagar	T02-Raja Bilhara to Khamkua	12.13
152		Kesli	ML01-Bhusora to Deori Naharmau	16.58
153		Khurai	ML08-SH14 to Bhilon	16.28
154		Malthon	T08-Rajwans to Rounda	21.70
155		Rahatgarh	MRL04-NH26 to Mothi	23.25
156		Sagar	ML01-NH86 to Mohli	11.45
157		Shahgarh	ML04-T004 to Baraj	4.35
	<b>Sagar Total</b>			<b>152.79</b>
158	Satna	Ram Nagar	T31-Gulwar Gujara Road to Sagouni Kala	8.83
159		Ram Nagar	MRL04-T03 to Semariya	6.10
160		Rampur Baghelan	MRL05-Satna Amarpatna Road to Pondi Garada	7.40
161		Sohawal (Satna)	MRL10-Nimi Baraj to Kuwan Poindha Kala Road	10.20
	<b>Satna Total</b>			<b>32.53</b>
162	Seoni	Barghat	T04-Jamuntola to Gudma	13.55
163		Chhapara	T04-Bakhari to Ramgarh	28.75
164		Dhanora	T04-Barbaspur-Harduli to Sunwara-Amanala (Ganeshganj Sunwara (T06) to Harduli)	13.93
165		Ghansor	T02-Mehta to Barela (Baroda)	13.68
166		Kevlari	MRL01-Dokarranji to Panwas-Paraspani	4.80
167		Kevlari	MRL02-Dhutura to Khairi-Sakari	6.50
168		Kurai	T02-Badalpar to Belpeth	11.20
169		Lakhnadon	T01-Joba Adegaon-Madhi-Khakariya-Bijori to District Border (Joba (NH-26) to Chhapara (NH-7) (up to LDon B.B.)	27.82
170		Seoni	T03-Diwthi to Bhomatola	7.80
171		Seoni	T04-Katiya to Meharapipariya-Karkoti	13.20
	<b>Seoni Total</b>			<b>141.22</b>
172	Shajapur	Agar	MRL01-Palda to Ladwan	12.00
173		Barod	T01-Nipania Hanuman to Agar	15.27
174		Kalapipal	T02-Ranyal to Khamlaya	22.11
175		Moman Barodiya	T04-Chitawad to Manglaj	6.64
176		Moman Barodiya	T02-Tingajpur to Shujalpur Road 17.2 km	7.90
177		Nalkheda	T01-Susner Zirapur Road to Badagaon	37.90
178		Shajapur	T02-Devla Bihar to Kamkheda via Semli Chacha	15.00
179		Shujalpur	T01-Polaikalan Khatsue Road via Himaleshwar Mahadev	27.50
180		Susner	T01-Dehariya Susner to Susner	13.30
	<b>Shajapur Total</b>			<b>157.62</b>
181	Shivpuri	Karera	T12-Shivpuri Jhansi Road (NH25) to Teela	5.10
182		Karera	T11-Sirsod-Pichore Road(T05) to Kurrol (T04) via Badora	23.95
183		Shivpuri	T22-Singhanwas (SH06) to Kunwarpur	14.84
184		Shivpuri	T24-NH-27 (Surwaya) to Pichhore Gora Road (MDR-T05) via Mohangarh, Bira	27.83
	<b>Shivpuri Total</b>			<b>71.72</b>
185	Tikamgarh	Jatara	T01-Acharra to Ghumtaghat	8.10
	<b>Tikamgarh Total</b>			<b>8.10</b>

SI No.	District	Block	Name of the Road	Length (km)
186	Ujjain	Badnagar	T02-Pirjhalar to Ralayata (District Boundry)	6.24
187		Badnagar	T04-Unhel Chambal Road to Kanjad	9.01
188		Ghatiya	T01-Sodang to Pipliyahama Road	14.83
189		Khachrod	T02-Ranipipliya to Mundla Parwal	8.50
190		Khachrod	T01-Buranabad to Padsutiya	6.50
191		Mahidpur	T01-Jharda Kundikheda to Kheda Khjuriya Road	27.20
192		Tarana	T01-Tarana Limbadit Makdon Kadodiya Dupada Road	38.83
193		Ujjain	MRL05-Dewas Road to Harnawada	2.14
194		Ujjain	MRL02-Indore Road to Navakheda	1.55
195		Ujjain	T01-Ujjain Maxi Road to Biaora	3.20
196		Ujjain	T02-Lekoda to Kakariya Chirakhan	5.99
	<b>Ujjain Total</b>			<b>123.98</b>
197	Vidisha	Basoda	MRL08-NH-86 Kasba Bagrod to Borodiya Bagrod	9.40
198		Basoda	MRL07-T03 Tyonda Pathari Road to Sairwasa Turn	11.33
199		Gyaraspur	T02-NH-86 (Kalapatha) to Haidargarh	11.83
200		Kurvai	MRL05-Bandora to Akhai	27.20
201		Lateri	MRL01-Anandpur to Pagrani	16.65
202		Nateran	ML02-Dhadhon to Golna via Amkheda Sukha, Satpada Hat	18.94
203		Sironj	T01-Rusalli Dama (SH-14) to Barej (PWD)	29.74
204		Vidisha	MRL04-Bhairokhedhi (NH-86) to Ahmedpur via Palki Tharr	18.00
	<b>Vidisha Total</b>			<b>143.09</b>
	<b>GRAND TOTAL</b>			<b>2,859.09</b>

### C. List of Awarded and Ongoing, and Completed Contracts

The following tables list the awarded and ongoing contracts, and completed contracts.

#### 1. Awarded and Ongoing Contracts

Goods and Works							
Package Number	General Description	Estimated Value (\$ million)	Awarded Contract Value (\$ million)	Procurement Method	Advertisement Date	Date of ADB Approval of Contract Award	Comments
N/A							

Consulting Services							
Package Number	General Description	Estimated Value (\$ million)	Awarded Contract Value (\$ million)	Procurement Method	Advertisement Date	Date of ADB Approval of Contract Award	Comments
N/A							

#### 2. Completed Contracts

Goods and Works							
Package Number	General Description	Estimated Value (\$ million)	Awarded Contract Value (\$ million)	Procurement Method	Advertisement Date	Date of ADB Approval of Contract Award	Comments
NONE							

<b>Consulting Services</b>							
<b>Package Number</b>	<b>General Description</b>	<b>Estimated Value (\$ million)</b>	<b>Awarded Contract Value (\$ million)</b>	<b>Procurement Method</b>	<b>Advertisement Date</b>	<b>Date of ADB Approval of Contract Award</b>	<b>Comments</b>
NONE							

#### **D. Non-ADB Financing**

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

<b>Goods and Works</b>				
<b>General Description</b>	<b>Estimated Value \$ m (cumulative)</b>	<b>Estimated Number of Contracts</b>	<b>Procurement Method</b>	<b>Comments</b>

<b>Consulting Services</b>				
<b>General Description</b>	<b>Estimated Value (cumulative)</b>	<b>Estimated Number of Contracts</b>	<b>Recruitment Method</b>	<b>Comments</b>
N/A				

## **TERMS OF REFERENCE: Project Implementation Consultant**

1. The Second Rural Connectivity Investment Program will improve rural connectivity and accessibility in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal to facilitate safer and more efficient access to livelihood and socioeconomic opportunities for the rural communities. With the assistance of the Asian Development Bank (ADB), the program will construct rural roads to all-weather standard for the unconnected habitations and upgrade rural roads linking to the state's district centers for an aggregate length of 12,000 kilometers. The program also includes capacity development components to strengthen the operations of rural road network management units (RRNMUs) and rural connectivity training and research centers (RCTRCs) in the five states.
2. For the investment in physical infrastructure to be effective and sustainable, the investment program will strengthen the institutional capacity in road safety and road maintenance of the executing and implementing agencies. The executing agency at the national level is the Ministry of Rural Development (MORD) through the National Rural Infrastructure Development Agency (NRIDA), supported at the state level by the governments of the five investment program states. The implementing agencies are the state rural road development agencies (SRRDAs).
3. The Project Implementation Consultant will be engaged to assist the state rural road development agencies in sustaining rural road maintenance and road safety and in implementing safeguard frameworks and innovations in line with the guidelines of the Prime Minister's Rural Roads Program or Pradhan Mantri Gram Sadak Yojana (PMGSY).

### **I. SCOPE OF WORK**

#### **A. Road Maintenance**

##### **1. Road maintenance inspections**

- (i) Conduct maintenance inspections on a sample of post-construction roads under the Rural Roads Sector I Project (RRSI), Rural Roads Sector II Investment Program (RRSII-IP), Rural Connectivity Investment Program (RCIP), Second RCIP, and other PMGSY roads (at least 2 roads from each district, with at least 1 road under the initial 5-year maintenance contract and at least 1 road under post 5-year maintenance, and minimum 60 roads per year).
- (ii) Prepare (a) maintenance inspection reports for each road inspected, and (b) annual maintenance audit reports for the inspected roads in the state.

##### **2. Road maintenance planning**

- (i) Assist the RRNMUs and project implementation units (PIU) in preparing a comprehensive inventory of all PMGSY roads on a yearly basis in the district.
- (ii) Assist the RRNMUs and PIUs in preparing annual road maintenance management plans for PMGSY roads, which will include both roads under initial post-construction 5-year maintenance contracts, and roads under post 5-year maintenance.
- (iii) In consultation with the respective SRRDA, discuss and facilitate the handover of road maintenance planning responsibility to the RRNMU or PIU staff as appropriate, and provide support when required.

### **3. Road maintenance training**

- (i) In coordination with the RCTRC in each state, provide training and support to PIUs for conducting inspections on road maintenance and for the use of local labor for maintenance works.
- (ii) Conduct an annual road maintenance workshop for state governments, which will include reporting the progress and results achieved, issues encountered, and proposed countermeasures.

## **B. Road Safety**

### **1. At the detailed project report preparation stage**

- (i) Conduct road safety audits (RSA) including mandatory field visits (jointly with PIUs) on 30 detailed project reports (DPR) for roads with at least one road from each district in each batch, and prepare concise RSA reports listing road safety issues and proposed measures to mitigate and/or eliminate road safety issues.
- (ii) Conduct follow-up desk review of final DPRs to check how the issues identified by 30 RSAs under the above task in B.1(i) are addressed and reported to PIUs.
- (iii) Based on the RSAs under the batch, prepare the summary of RSA issues and suggestions for the batch and submit this summary to the PIU and/or SRRDA for review and action on the remaining unaudited DPRs as appropriate, as this will address issues identified on road safety audited roads but perceived to be common on other roads under the batch.

### **2. During construction**

- (i) Conduct road safety inspections (RSI) jointly with the RRNMU or PIU on randomly selected roads (at least 10 roads in each tranche) under construction and prepare concise RSI reports listing road safety issues and proposed measures to mitigate and/or eliminate road safety issues, especially for vulnerable road users.
- (ii) Timely report to the RRNMU or PIUs on road safety issues identified during construction and follow up on road safety issues and/or lapses as appropriate.
- (iii) As per direction of the SRRDA, conduct independent analysis of severe road accidents, if any, that have occurred on the ADB-assisted roads under construction, and recommend specific road safety countermeasures for review and endorsement by the RRNMU, PIU and/or SRRDA.

### **3. At the post-construction stage**

- (i) Conduct RSIs on randomly selected roads (at least 10 roads in each tranche) within 3 months after completion of civil works, and prepare concise RSI reports listing road safety issues and proposed measures to mitigate and/or eliminate road safety issues.
- (ii) Conduct RSIs on randomly selected ADB-assisted roads under the Second RCIP (at least 30 roads a year, in addition to immediate post-construction

RSIs described under B.3(i) above) and prepare concise RSI reports listing road safety issues and proposed measures to mitigate and/or eliminate road safety issues.

- (iii) Prepare quarterly road safety monitoring reports in concise matrix format for the roads inspected, including the status of the roads where RSI is conducted, issues observed, and measures proposed for implementation.
- (iv) As per direction of the SRRDA, conduct independent analysis of severe road accidents, if any, that have occurred on ADB-assisted roads and recommend specific road safety countermeasures for review and endorsement by the RRNMU, PIU and/or SRRDA.

#### **4. Road safety training**

- (i) In coordination with the RCTRC and road safety experts, conduct training of RRNMU or PIU staff on RSA and RSI, including the implementation of engineering road safety countermeasures.

### **C. Social, Gender, and Resettlement Safeguard Implementation**

1. Assist the RRNMU or PIU in organizing the transect walk for documenting the social features and profile along the alignment for each subproject proposal. Prepare the record of community participation through the field visits to project-affected communities to assess if community participation framework (CPF) requirements have generally been met. Ensure the involvement of the affected people and community groups in assessing the same.
2. Following the provisions of the CPF, identify the project-affected persons based on participatory techniques such as participatory rapid appraisals (PRA), fully involving the stakeholders in all the measures through community meetings, randomly selected interviews of the affected persons with set-off questionnaires, and secondary and other available data.
3. Prepare the methodology and approach for effectively selecting sample subprojects for monitoring and evaluation on the basis of the socioeconomic profile of project-affected communities and the extent of the project impact on these communities.
4. Identify all the land and structures that will be affected by the project along the proposed alignment, and prepare the detailed inventory of the same by means of resettlement and census surveys, covering 100% affected households along the alignment.
5. Based on the surveys undertaken, prepare support and/or assistance provisions for project-affected persons with particular attention to the vulnerable groups.
6. Assist the RRNMU or PIU in implementing the Gender Action Plan and in monitoring its implementation progress.
7. Assist the RRNMU or PIU and *panchayats* (village councils) in disseminating information on the land affected by the project, transfer support and/or assistance provisions, and the grievances procedure as prescribed in the CPF.
8. Assist the RRNMU or PIU in preparing a written agreement with the State AIDS Control Society on coordinating HIV/AIDS prevention awareness in the vulnerable areas along the project roads.
9. Assist the RRNMU or PIU in preparing monthly reports in compliance with the CPF requirements during project implementation.
10. Prepare a due diligence report of all the project tranches.

## **D. Environmental Safeguards**

4. The Project Implementation Consultant will conduct the following activities as per ADB's Safeguard Policy Statement (2009):

- (i) Assist the RRNMUs or PIUs in checking compliance of the subproject proposal with environmental assessment framework (EAF) provisions during preparation and with identified relevant provisions of the environmental checklist during construction.<sup>1</sup>
- (ii) Provide on-the-job training and support to the RRNMUs or PIUs in implementing environmental safeguards. Through a phased approach in building capacity of RRNMUs or PIUs, demonstrate at least 12 months before contract termination that all PIUs are capable of preparing the environmental checklist, conducting ongoing and post-construction monitoring independently, and recommending corrective actions on detected non-compliance.
- (iii) Prepare needed internal guide documents for the RRNMUs or PIUs in environmental checklist preparation and environmental monitoring. These include, but are not limited to, (a) national and state environmental regulatory briefs (e.g., applicable emissions and effluent guidelines and/or standards); (b) designing effective requirements and environmental best practices in road construction (e.g., occupational health and safety; (c) storm water, waste, noise, air emission, wastewater management; (d) community health and safety; and (e) types of environmental monitoring (inspection, self-monitoring, and citizen monitoring).
- (iv) Assist the RRNMU or PIU in organizing the transect walk for recording the environmental features and/or profile within the right-of-way of each subproject proposal.
- (v) Determine the requirement of regulatory clearances (environment and/or forest and/or archeological) to be sought from the Government of India or state governments, and provide advisory services to the RRNMU or PIU on environmental aspects, including implementation and monitoring of the identified provisions of the environmental checklist by the contractor.
- (vi) Conduct environmental baseline survey, prepare environmental checklist for inclusion in the contract document, and ensure that the contract document includes the environmental responsibilities to implement mitigation measures during the construction stage of the subproject in accordance with PMGSY or PMGSY-II guidelines as appropriate.
- (vii) The Project Implementation Consultant will monitor the impacts of the construction work on the environment and local settlements to ensure that the contractor implements the environmental mitigation measures recommended in the environmental checklist and environmental management plan. Prepare a monthly progress report based on the environmental assessment and review framework during the pre-construction and post-construction stages.

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<sup>1</sup> Environmental Code of Practice has been replaced with environmental list.

## E. Innovation

### 1. Innovation planning

- (i) Review the scope of innovations and the feasibility of their inclusion in the subproject roads to be financed under the Second RCIP, taking into account site-specific constraints and availability of materials.

### 2. Innovation monitoring

- (i) Assist the RRNMU and PIU in conducting inspections before, during, and after construction of rural roads (for at least ten roads using two different kinds of innovations in each tranche) to ensure proper implementation of the innovation.

## II. STAFFING

5. The consulting services will be implemented over the whole period of the investment program, from 2018 to 2022. The person-month inputs required will depend on the requirements by each state.

Position	Indicative Person-Months					
	Assam	CG	MP	Orissa	WB	Total
Road Safety Engineer (1)	TBD	TBD	TBD	TBD	TBD	TBD
Road Maintenance Engineer (1)	TBD	TBD	TBD	TBD	TBD	TBD
Social, Gender, and Resettlement Safeguard Expert (as required by respective state)	TBD	TBD	TBD	TBD	TBD	TBD
Environmental Safeguards Expert (as required by respective state)	TBD	TBD	TBD	TBD	TBD	TBD
Pavement or Materials Engineer (1)	TBD	TBD	TBD	TBD	TBD	TBD

CG = Chhattisgarh, MP = Madhya Pradesh, TBD = to be determined, WB = West Bengal.

Note: To be updated by the state at the time of recruitment.



## **TERMS OF REFERENCE: Technical Support Consultant**

### **A. Introduction**

1. The Technical Support Consultant (TSC) will be engaged to help the National Rural Infrastructure Development Agency (NRIDA) assist the Government of India and the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal in the preparation and monitoring of Asian Development Bank (ADB) assistance for rural road development under the Prime Minister's Rural Roads Program or Pradhan Mantri Gram Sadak Yojana (PMGSY-I and II) through the Rural Connectivity Investment Program (RCIP) and the Second RCIP. The consulting services are specifically required for road safety, road maintenance, compliance monitoring, impact assessment, and innovation.

2. Overall project implementation will need to be in compliance with the covenants set forth in the loan and project agreements, and the framework financing agreement between the Government of India and ADB for each tranche under the RCIP and the Second RCIP. The facility administration manual (FAM) prepared and updated in each tranche will regulate the implementation of the loans/projects under the facility, including for monitoring and reporting. The consultant engaged for this service should ensure their understanding on such requirements.

3. The TSC will comprise a team of national consultants. The TSC will be engaged to cover the following scope of activities:

- (i) Monitoring at the implementation stage of the ongoing loans under the RCIP and tranche 1 of the Second RCIP in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.
- (ii) Preparation stage of tranche 2 of the Second RCIP in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.
- (iii) Impact monitoring study of tranches 1 and 2 under the Second RCIP.
- (iv) Implementation and monitoring of the gender action plan of tranches 1 and 2 of the Second RCIP to ensure gender mainstreaming.
- (v) Monitoring of social and environmental indicators under the project performance management system (PPMS) and the training of PMGSY engineers, as per the tranche design and monitoring framework (DMF) for capacity building.
- (vi) Monitoring the implementation and impacts of new technologies in rural road development by the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.

### **B. Primary Objectives**

4. The primary objectives of the services to be provided by the TSC are the following:

#### **1. Road Safety**

- (i) Conduct systematic road safety auditing of 10% of detailed project reports (DPR) including preparation of formal road safety audit (RSA) and safety check reports.
- (ii) Conduct systematic road safety inspections on a randomly selected sample of roads under maintenance, and document issues and countermeasures.
- (iii) Prepare semi-annual summary road safety monitoring reports.

- (iv) Assist the respective state rural road development authority (SRRDA) and project implementation units (PIU) with road safety complaints and accident investigations.
- (v) Assess the effectiveness of RSA procedures and recommend improvements as needed.

## **2. Social Safeguards**

- (i) Check compliance of subprojects with the community participation framework (CPF) provisions during subproject preparation and implementation.
- (ii) Prepare due diligence reports on a randomly selected sample of roads for all project tranches.
- (iii) Monitor and evaluate the implementation of the community participation process prescribed in the CPF and recommend improvements to the participatory process to ensure the broader participation of the rural population in subproject formulation.

## **3. Environmental Safeguards**

- (i) Assist in reviewing the environmental checklists and road-specific environmental management plans (EMP) for all road subprojects and ensure that they have been prepared in accordance with the requirements of the environmental assessment and review framework (EARF).
- (ii) Prepare state-level initial environmental examination (IEE) reports based on the completed environmental checklists.
- (iii) Prepare monitoring and due diligence reports on a randomly selected sample of roads for all project tranches.

## **4. Road Maintenance**

- (i) Conduct systematic checking of road maintenance management plans and maintenance inspections.
- (ii) Prepare semi-annual road condition and maintenance audit reports.
- (iii) Engage with the rural connectivity training and research center (RCTRC) in each participating state to provide training and support to project implementation consultants (PIC), PIUs, rural road network management units (RRNMU), or *zilla panchayats* (district councils) as needed.
- (iv) Review the effectiveness of existing maintenance procedures and recommend improvements as needed.
- (v) Provide advice to the NRIDA for the maintenance module of the Online Management, Monitoring, and Accounting System (OMMAS).

## **5. Gender Mainstreaming**

- (i) Provide training and support to the PICs and PIUs on implementing and monitoring the gender action plan (GAP) activities at the field level.
- (ii) Monitor and report on the overall implementation of relevant activities included in the GAP for tranches 1 and 2.

## **6. Socioeconomic Impact Monitoring**

- (i) Conduct socioeconomic impact monitoring of selected subproject roads under the program following the methodology developed for monitoring of socioeconomic impacts.

**7. PPMS and Capacity Building Monitoring**

- (i) Advise the NRIDA on the social and environment indicators to be included and monitored in the project performance management system (PPMS).
- (ii) Conduct monitoring of the social and environment indicators under the PPMS, including baseline and ongoing data collection.
- (iii) Conduct monitoring on the implementation and progress of training activities for PMGSY engineers as per the requirement for each tranche in the DMF.

**8. New Technology**

- (i) Monitor the implementation and impacts of new technology or innovations in rural road development in each participating state.
- (ii) Prepare annual monitoring reports on new technology or innovations, indicating the present length of experience with particular new technologies or innovations, the satisfaction level, and the success rate.

**Activity 1: Road Safety**

5. The consultant will perform the following:

- (i) Conduct systematic road safety auditing of detailed project reports or DPRs (at least one DPR from each district and a minimum of 10% of total DPRs in each state), including field visits to the proposed roads, and make random checks of roads under construction and within 3 months after construction to ensure that road safety measures proposed by road safety audits are properly incorporated and working effectively. This will include preparation of formal road safety audit and safety check reports for each DPR/road inspected with the list of identified issues and countermeasures to be submitted to the concerned SRRDA for action.
- (ii) Conduct systematic road safety inspections on randomly selected sample (at least one road from each district and minimum of 30 roads per state per year) of roads under maintenance, and document issues and countermeasures for each road inspected for submission to the concerned SRRDA for action. Sample for inspection would be selected from those districts where a running batch of Second RCIP subprojects is being implemented.
- (iii) Prepare semi-annual summary road safety monitoring reports summarizing in concise matrix format the status of conducted road safety audits, inspections, and follow-up checks, issues found, measures proposed, implementation status, and other important findings.
- (iv) Engage with the RCTRC and the road safety specialist (to be engaged separately) to provide training and support to the PIUs and PICs in road safety auditing and in implementing engineering countermeasures for road safety.
- (v) Regularly assess the effectiveness of existing RSA procedures and implemented RSA recommendations on the ground and recommend changes and actions as needed.
- (vi) Coordinate with the state governments to ensure that road safety mechanisms and programs, in particular through membership in the State Road Safety Council and

District Road Safety Committees created as per provisions of Section 215 of the Motor Vehicles Act, 1988, are followed under the RCIP.

- (vii) In collaboration with the road safety specialist, conduct annual road safety workshops for the state governments and report on the progress and results achieved, issues encountered, lessons learned, and the work plan for the next year.

## **Activity 2: Social Safeguards**

6. The consultant will perform the following:

- (i) Assist the state implementing agencies (IA) in reviewing and scrutinizing the records of community participation generated by the PICs and in verifying the records through field visits to the project-affected communities (at least one from each district and minimum 10% of the total DPRs in each state) to assess whether CPF requirements have been generally met. Ensure the involvement of the affected people and community groups in assessing the same.
- (ii) Prepare the methodology and approach for effectively selecting sample subprojects for monitoring and evaluation based on the socioeconomic profile of the project-affected communities and the extent of expected project impacts in those communities.
- (iii) Review and verify on a sample basis the progress of community consultation for subproject preparation through review of documentary evidence as required by the CPF and through visits to the project-affected community.
- (iv) Verify on a sample basis the monitoring indicators collected by the PIUs/SRRDA on the performance of community participation through visits to the project-affected community and through participatory consultation with the project-affected people, focusing on verifying the extent of participation by the vulnerable segment of the community population.
- (v) Based on the review and verification, evaluate the effectiveness of the community consultation process, and recommend improvements to the CPF procedures, particularly with respect to reporting and monitoring requirements.
- (vi) Prepare due diligence reports based on items 6(i) to 6(v) herein for all project tranches.
- (vii) Provide training and support to the PIUs in implementing social safeguards.
- (viii) Provide training and support to the PICs in the performance of their tasks on social safeguards as needed.
- (ix) Verify the completion of the HIV/AIDS awareness program undertaken by the contractors.

**Activity 3: Environmental Safeguards**

7. The consultant will perform the following:
- (i) Assist in reviewing the checklists for the Environmental Code of Practices (ECOP) prepared by the PICs for all road subprojects in each tranche and ensure that these checklists have been prepared in accordance with the requirements of the EARF.
  - (ii) Based on a sample of at least one road from each district and a minimum 10% of total DPRs in each state, review the ECOP checklists generated by the PICs including site verifications, and prepare state-level IEE reports for the preparation of tranche 2 of the Second RCIP.
  - (iii) Provide advisory services to PIUs on environmental aspects, including seeking regulatory clearances, application of the ECOP checklists and road-specific EMPs, and implementation and monitoring of the road-specific EMPs by the contractor, including by means of training workshops.
  - (iv) Conduct periodic site inspection for determining the efficacy and application of the road-specific EMPs by the contractor and the preparation of monitoring checklists (pre-construction, during construction, and post-construction) by the PIC and suggest any modifications required thereof.
  - (v) Provide training and support to the PICs in the performance of their tasks on environmental safeguards as needed.
  - (vi) Based on the monitoring checklists prepared by the PIC, prepare the monitoring report on an annual basis in accordance with the facility administration manual (FAM).
  - (vii) Prepare due diligence reports on a randomly selected sample of roads for all project tranches.

**Activity 4: Road Maintenance**

8. The consultant will perform the following:
- (i) Conduct systematic checking of road maintenance management plans and maintenance inspections on a sample (at least one road from each district and minimum of 30 roads per state per year) of post-construction roads under RRS-I, RRS-II, and RCIP annually to ensure that road maintenance measures are properly and systematically implemented. The sample for maintenance inspections would be selected from those districts where a running batch of Second RCIP subprojects is being implemented.
  - (ii) Prepare semi-annual road condition and maintenance audit reports for the inspected sample of roads in each state with reference to maintenance activities mentioned in the standard bidding document of the PMGSY.

- (iii) Engage with the RCTRC to provide training and support to the PIUs in the administration of maintenance contracts, including maintenance inspection.
- (iv) Engage with the RCTRC to provide training and support to the PIC, PIU, RRNMU, or zilla panchayats, as the case may be.
- (v) Review the effectiveness of existing maintenance procedures and practices and provide advisory support to the SRRDAs and the NRIDA, including in the amendment of existing bidding documents, manuals, and other maintenance guidelines and procedures.
- (vi) Provide suggestions to the NRIDA regarding the addition, improvement, and use of the maintenance module of the Online Management, Monitoring and Accounting System (OMMAS).
- (vii) Conduct annual road maintenance workshops for the state governments, including reporting on the progress and results achieved, issues encountered, lessons learned, and the work plan for the next year.

#### **Activity 5: Gender Mainstreaming**

9. The consultant will perform the following:
  - (i) Provide training and support to the PICs and PIUs on implementing and monitoring the GAP activities at the field level.
  - (ii) Monitor the overall GAP implementation of relevant activities included in the GAP for all project tranches.
  - (iii) Prepare and submit an annual monitoring report on gender mainstreaming activities as per the requirements of the facility administration manual (FAM).
  - (iv) Propose corrective actions and provide guidance to the PICs and PIUs on improving performance of gender-related indicators in the GAP.

#### **Activity 6: Socioeconomic Impact Monitoring**

10. The consultant will perform the following:
  - (i) Prepare the study methodology, approach, and implementation plan, including the preparation of survey instruments and the approach to project and control sample selection for purposes of the statistical validity of results and availability of data on indicators selected; select project and control sample roads and principal villages; and conduct workshops in all the five investment program states on the approach and methodology for purposes of consultation and building state socioeconomic research capacity. The study methodology for loans under the Second RCIP will generally follow that of the first RCIP.
  - (ii) Prepare the initial inventory of road lengths, population served, existing facilities and services (education, health, shops, other services), and general village

socioeconomic data, disaggregated by sex. It is expected that much of this information will be available with the PICs and PIUs, and there will be a need for an initial reconnaissance survey.

- (iii) After carrying out initial field level piloting, validation, and refinement of the survey instruments at field level, conduct a baseline survey of project roads and principal villages before improvement and of control roads and their principal villages, including establishing arrangements for annual focus groups in each village, selection of persons from institutions in villages to administer self-monitoring, and selection of households and arrangements for tracer studies. The timing of the activities should be discussed with the NRIDA.
- (iv) Conduct semi-annual surveys of selected project roads and principal villages after improvement and of control roads and their principal villages. The timing of the activities should be discussed with the NRIDA.
- (v) Using appropriate quantitative and qualitative techniques, prepare an analysis of the results of the baseline and half-yearly surveys to identify the socioeconomic impacts of the project roads especially on women and vulnerable groups, the mechanisms and process through which impacts took place, and the factors that enabled or inhibited impacts. This analysis should consider both the impacts of the total sample of road improvements and the impacts in each state.
- (vi) Prepare case studies showcasing the positive impacts on the socioeconomic conditions of women in the project influence area.

#### **Activity 7: PPMS and Capacity-Building Monitoring**

- 11. The consultant will perform the following:
  - (i) Advise the NRIDA on the social and environment indicators to be included and monitored under the project performance management system (PPMS).
  - (ii) Conduct monitoring of the social and environment indicators under the PPMS.
  - (iii) Submit an annual report of the social and environment indicators under the PPMS.
  - (iv) Conduct monitoring of the training of PMGSY engineers by the RCTRC against the target as in the DMF tranche.
  - (v) Submit an annual training monitoring report as per the requirements of the facility administration manual.

#### **Activity 8: New Technology**

- 12. The consultant will perform the following:
  - (i) Acquaint with the work done on the project and study available documents, including technology details and specifications available at the NRIDA site, the participating state's SRRDA experience with new technology, rural road

procedures, and the circulars/standards adopted by the NRIDA and SRRDAs for the project.

- (ii) Prepare a note on state-wise use of new technologies indicating their present length, experience with technologies, satisfaction level for any technology, and the success rate. Assess the performance of technology length with respect to riding quality, maintenance need, and serviceability parameters. This note will be included in the annual innovation report.
- (iii) Prepare comments and recommendations in the form of suggestions or ideas to improve the present new technologies used by states based on climatic condition, type of soil, availability of alternative material, and traffic load. Suggest alternative technology if a potential problem has been identified.
- (iv) Provide advice to the NRIDA and SRRDAs regarding additional improvements in the construction methodology that can be adopted to improve the performance of new technology roads.
- (v) Determine the extent to which the current budgetary process impairs the effective planning and implementation of new technology works under the SRRDAs.
- (vi) Prepare and submit an annual state-wise comparative study report on the use of new technology. The study should be done on ease of construction, availability of technology material, cost of construction, construction methodology, and performance of technology. Identify the area of improvement in design and the implementation part of technology, and discuss with the related SRRDA and RRNMU.
- (vii) Engage the RCTRC to conduct and/or facilitate training on new technology:
  - (a) Under each SRRDA, conduct on-the-job training in construction methodology of the technology length. Provide dedicated training to the PIUs on the design and implementation of relevant new technologies.
  - (b) Assess the state-wise capacity building needs on new technology aspects for different target groups and on different aspects of new technology. Based on assessment, design training modules in consultation with the RRNMU and RCTRC heads.
  - (c) Facilitate cross-learning workshops for the state governments, including reporting on the progress and results achieved, issues encountered, lessons learned, and the work plan for the next year. Participating states can share best practices and experiences, and technical aspects can be discussed openly.

### **C. Schedule and Resources**

13. All the activities under the consulting service will be carried out from 1 January 2018 to 31 December 2020. The RCIP and the Second RCIP will be implemented in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.

14. The RCIP consists of three tranches. Table 1 shows the status of each tranche:



**Table 1: Rural Connectivity Investment Program Tranches**

Tranche	ADB Loan No.	Approved Loan Amount	No. of Kilometers Approved	No. of Kilometers Completed
1	2881	\$252 million	3,859	3,724 (97%)
2	3065	\$275 million	3,813	3,197 (84%)
3	3306	\$273 million	6,025	4,313 (72%)

ADB = Asian Development Bank.  
Source: Asian Development Bank.

15. The Second RCIP will tentatively consist of two tranches. Tranche 1 is being proposed for \$250 million, to include the development of around 6,300 kilometers (km) of rural roads in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal, with the implementation period proposed up to December 2021. Tranche 2 will include some 5,700 km in the same states.

#### **D. Estimated Person-Months and Desirable Qualifications**

16. An estimated total of 345 person-months of consulting services are envisaged. In addition, about 300 person-months of survey enumerators will be required. All consultant inputs are intermittent.

**Table 2: Consultant Inputs**

Experts	Number	Person-Months	Tasks Assigned
Rural Development Specialist cum Team Leader	1	15 months	Activity 6, 7, conduct overall coordination, ensure quality of reports and deliverables
Road Safety Specialist*	5	75 (15 months each)	Activity 1
Social Development/Monitoring Specialist*	5	75 (15 months each)	Activity 2, 5, 7
Environment Specialist*	5	75 (15 months each)	Activity 3, 7
Road Maintenance Specialist*	5	75 (15 months each)	Activity 4
Road Materials Engineer (New Technology)*	5	30 (6 months each)	Activity 8
<b>Total</b>		<b>345</b>	

\* National consultants will be based with the implementing agency in each of the respective state capitals of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.  
Source: Asian Development Bank.

17. The prescribed desirable qualifications of each of the above experts are listed below.

- (i) **Rural Development Specialist cum Team Leader** should be a senior-level development specialist and have the minimum of a master's degree or equivalent in geographic or economic or related studies, with experience of preferably 15 years in socioeconomic related studies, of which he/she should have at least 5 years of experience in rural infrastructure, preferably in road projects. The expert should have demonstrated knowledge of socioeconomic studies, poverty eradication, development monitoring, and socioeconomic impact assessment of development projects in India. He/she should have experience as team leader for at least 5 years. Experience in externally funded infrastructure projects would be desirable.

- (ii) **Road Safety Specialist** should be a senior-level road engineer and have the minimum of a bachelor's degree in civil engineering or equivalent, with experience of preferably 15 years in the design of roads including rural roads, of which he/she should have at least 5 years of experience in road safety engineering, including conducting road safety audits and inspections on different types of roads, identification and treatment of black spots, development and implementation of road safety programs, and road safety monitoring and evaluation. He/she should have demonstrated knowledge of engineering road safety measures proved effective in India, especially targeting vulnerable road users in the mixed speed/traffic environments and on rural roads. He/she should have all-round knowledge of all other aspects of road safety, e.g., road safety education, safe way to school programs, and involvement of NGOs. Experience in externally funded infrastructure projects would be desirable.
- (iii) **Social and Gender Development/Monitoring Specialist** should have a master's degree in social science or equivalent, with preferably 7 years of experience in preparing, implementing, and monitoring social development schemes associated with infrastructure projects. He/she should have knowledge of statistical sampling. He/she should be fully familiar with land-related legal provisions and central/state government-sponsored rural development schemes. Experience in externally funded infrastructure projects would be desirable.
- (iv) **Environment Specialist** should have a master's degree in environmental science or equivalent, with preferably 7 years of post-graduate experience in preparing, implementing, and monitoring environment management schemes associated with infrastructure projects. He/she should be fully familiar with legal provisions for environmental management. Experience in externally funded infrastructure projects would be desirable.
- (v) **Road Maintenance Specialist** should be a senior-level road maintenance engineer and have the minimum of a bachelor's degree in civil engineering or equivalent, preferably with specialized training in road maintenance, with experience of preferably 15 years, of which he/she should have managed road maintenance projects for at least 5 years. He/she should have knowledge of best practices, challenges, and lessons learned in the maintenance of rural roads in India. He/she should have experience with drafting, implementation, and monitoring of maintenance and labor-based road contracts in India. Experience with training in maintenance and institutional strengthening of road agencies in conjunction with asset management functions will be an advantage.
- (vi) **Road Construction Expert cum Materials Engineer** should have at least a master's degree or the equivalent in civil engineering or related field, preferably with 15 years of experience in road construction and materials. Experience in research and development in road construction will be much preferred.

18. The executing agency, the NRIDA, can request the Team Leader and some key experts of the first-ranked consultant to be present during contract negotiation.

## E. Reports

19. The consultant will submit within 15 days from the end of the month/quarter/semester, as appropriate, the following reports, both in hard and soft copies and with the executive summaries as needed:

**Table 3: Reporting Requirements**

<b>Report</b>	<b>Due Date</b>	<b>MORD/NRIDA</b>	<b>SRRDAs</b>	<b>ADB</b>
Inception Report	Month 1	1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
Progress Reports including Appendices of individual DPR scrutinizing results	Quarterly	1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
Due Diligence Reports on social and environmental safeguards	2 months prior to submission of PFR	2 hard copies 1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
Road Safety Monitoring Report including Appendices of individual DPR audits and road inspections	Semi-annual and Yearly	1 hard copy 1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
Road Condition and Maintenance Audit Report including Appendices of individual road inspection reports	Yearly	1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
Socioeconomic Impact Monitoring Report	Yearly	1 hard copy 1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
Gender Action Plan Monitoring Report	Yearly	1 hard copy 1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
PPMS Monitoring Report for Social and Environment Indicators	Yearly	1 hard copy 1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
Project Completion Report <sup>a</sup>	Month 36	2 hard copies <sup>b</sup> 1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies
State-wise comparative study on the use of new technology and assessment of state-wise capacity building needs on new technology, and the aspect of different target groups of new technology	Semi-annual	1 hard copy 1 soft copy	1 hard copy & 1 soft copy for concerned state	2 soft copies

ADB = Asian Development Bank, DPR = detailed project report, MORD = Ministry of Rural Development, NRIDA = National Rural Road Development Agency, PFR = periodic financing request, PPMS = project performance management system, SRDA = state rural road development authority.

<sup>a</sup> The project completion report shall contain the basic data, loan data, effectiveness in achieving outcomes (farm output, education, health, transport, land values, and road safety), environmental and social impacts, compliance with the loan covenant, other impacts, and overall assessment and recommendations. It shall contain Appendices with all the survey data collected under the baseline survey and each of the half-yearly (semi-annual) and annual surveys.

<sup>b</sup> One each for MORD and the NRIDA.

Source: Asian Development Bank.

## **F. Facilities and Services to be Provided by the Employer**

20. Accommodations for an office in each of the capital cities of Assam, Chhattisgarh, Odisha, Madhya Pradesh, and West Bengal will be provided by the respective SRRDA. The consultant has to make his/her own arrangements for office purposes in the field, if required, for which no

extra payment would be made.

21. The consultant will be given access to all data available with the NRIDA and the SRRDAs that are required to perform the tasks, including district road plans, comprehensive new connectivity priority list (CNCPL) and comprehensive upgradation priority list (CUPL), project proposals, DPRs, and progress reports produced by the PICs.

22. The SRRDAs of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal will ensure participation of their respective staff in joint field visits with the Technical Support Consultant (TSC) as required for the enhancement of the TSC inputs and on-the-job training. These will include joint road safety audits, maintenance inspections, etc.

### **Annex to TOR: Monitoring of Socioeconomic Impacts**

1. The overall approach will be to establish a systematic, regular, and reliable source of quantitative data for purposes of documenting impacts of the road connectivity improvements. Qualitative instruments will be included for purposes of understanding and enriching the quantitative findings, but will not be considered an acceptable substitute for producing sound quantitative findings.
2. Each of the monitoring instruments will adopt a before-after-with-and-without approach to documenting impacts. This will be achieved by (i) establishing a control sample of roads selected to match the types of road conditions and social conditions of the roads to be improved under the Second Rural Connectivity Investment Program (RCIP); and (ii) before improvements, conducting a baseline survey for the selected sample of the first batch of roads and control roads, and after improvements, conducting annual monitoring surveys for the same first batch and control roads.
3. Monitoring will examine impacts at three levels: (i) traffic, (ii) transport use, and (iii) village level.
  - (i) It is expected that the surveys of traffic will cover 150 project roads (30 in each state) in the first batch and a control sample of 50 roads (10 in each state).
  - (ii) Surveys of transport users will cover 75 (about 15 in each state) of the 150 project roads selected for traffic surveys and 75 (about 15 in each state) of the 50 roads chosen as control samples for the traffic surveys.
  - (iii) The village-level surveys will focus on the principal village served by each of the 75 project roads and 25 control roads covered under the transport user surveys. Additionally, a community self-monitoring module will be carried out in 15 of the 45 principal villages served by project roads, and 10 household tracer studies will be conducted in each of these 15 villages.
4. In all aspects of the study, the samples of project and control roads will be selected with a view to being representative of the overall population of roads in the first batch in each state. The household to be selected for household tracer studies will include those which were directly affected by the project roads and those which belong to the vulnerable groups eligible for support and assistance under the community participation framework.
5. Monitoring of the socioeconomic impact of the Second RCIP will be done over the whole period of the Second RCIP using the sample of project and control roads selected under the program. The consultant will include specific indicators of the Design and Monitoring Framework in the number of indicators being monitored.
6. Also, the Technical Support Consultant (TSC) will continue monitoring the sample of project and control roads selected and monitored under the Rural Roads Sector-II Program (RRSIIP) by the current TSC recruited under the first RCIP to ensure that full socioeconomic benefits and their dynamic over time are captured.
7. The six expected monitoring instruments to be used are summarized in Table C.1. It is expected that the TSC will implement these instruments in a concerted manner to maximize synergy between instruments and enable efficient use of study resources.

**Table C.1: Expected Monitoring Instrument**

Subject	Instrument/Source	Frequency	Scope
Traffic	24 hour traffic counts	Annual	150 project roads, 50 control roads
Users/Passengers	Passengers/Users	Annual	75 project roads, 25 control roads
Villagers' Perceptions	Village focus group	Annual	Principal village for each of 75 project roads, 25 control roads
Village Primary Data	Key informant interviews	Annual	Principal village for each of 75 project roads, 125 control roads
Village Primary Data	Community self-monitoring	Quarterly	15 principal villages selected from 45 principal villages for village level impact survey
Change Process	Household tracer studies	Quarterly	10 households in each of the 15 principal villages for community self-monitoring

8. **Village self-monitoring.** The consultant will select villagers or village-level institutions in 15 villages to administer self-monitoring of socioeconomic status on a quarterly basis over the period of the study. The consultant will (i) initially facilitate selection of simple self-monitoring indicators and methods by the villagers; and (ii) then conduct quarterly visits to collect data, discuss the data, provide advice on making refinements of approach, if necessary; and (iii) provide villagers with a cumulative record of the data collected up to that time. It is expected that this approach may help identify and document indicators that are especially relevant to village life and that can be reliably tracked, but might not be well known to outsiders (including the consultants). Possible candidates for administering the self-monitoring at village level might be a school teacher, Panchayat (village council) representative, university student, or retired government official (Table C.2).

9. **Household tracer surveys.** In each of the 15 selected villages, the consultant will select ten households and conduct quarterly surveys of these households to identify the process of change associated with the program road improvements and the manner and extent that it impacts on the selected households. Households will be selected by poverty group, probably on the basis of their landholdings or other proxy indicators of poverty status. It is suggested that these should comprise (i) three non-poor households, (ii) four poor households, and (iii) three ultra-poor households. In each household category, at least one household should have a member engaged in paid employment, including employment outside the village. These surveys will be conducted at the same time as the village self-monitoring.

**Table C.2: Village Primary Data for Previous 12-Month Period**

Category	Indicator	Source
Transport	• Number, quality, frequency, and regularity of bus services	• Key informant
	• Journey time and fares to principal destination	• Key informant
	• Road condition for through journey to principal destination	• Key informant
Poverty	• Proxy indicator of number of poor and non-poor households, e.g., house construction material, assets	• Observation • Key informant
Health	• Safe delivery rate <sup>a</sup>	• Village health worker
	• Maternal deaths <sup>b</sup>	• Village health worker

Category	Indicator	Source
	<ul style="list-style-type: none"> <li>• Perinatal<sup>b</sup> deaths of newborns and stillbirths</li> </ul>	<ul style="list-style-type: none"> <li>• Village health worker</li> </ul>
	<ul style="list-style-type: none"> <li>• Under-5 mortality</li> </ul>	<ul style="list-style-type: none"> <li>• Village health worker</li> </ul>
	<ul style="list-style-type: none"> <li>• 0–5 years coverage under immunization program</li> </ul>	<ul style="list-style-type: none"> <li>• Village health worker</li> </ul>
	<ul style="list-style-type: none"> <li>• Number of health campaigns on sanitation, polio, family life education, HIV/AIDS, etc.</li> </ul>	<ul style="list-style-type: none"> <li>• Village health worker</li> </ul>
Education	<ul style="list-style-type: none"> <li>• Post primary dropout rate by gender</li> </ul>	<ul style="list-style-type: none"> <li>• Village primary school</li> </ul>
	<ul style="list-style-type: none"> <li>• Number of primary teachers and teacher attendance</li> </ul>	<ul style="list-style-type: none"> <li>• Village primary school</li> </ul>
	<ul style="list-style-type: none"> <li>• Primary school inspection visits</li> </ul>	<ul style="list-style-type: none"> <li>• Village primary school</li> </ul>
Enterprise	<ul style="list-style-type: none"> <li>• Number of micro-enterprises in village by type</li> </ul>	<ul style="list-style-type: none"> <li>• Village lead bank</li> <li>• Village informal micro credit sources</li> <li>• Village sarpanch</li> <li>• Panchayat ward member</li> </ul>
Agriculture	<ul style="list-style-type: none"> <li>• Crop diversification</li> <li>• Available produce marketing options</li> </ul>	<ul style="list-style-type: none"> <li>• Village lead farmers</li> <li>• Village farmers</li> <li>• Village <i>mandi</i> (market)</li> </ul>
	<ul style="list-style-type: none"> <li>• Increase in produce sales in local Haat</li> <li>• Access to more Haats</li> <li>• Access to more traders for marketing forest products (non-timber forest products [NTFP])</li> </ul>	<ul style="list-style-type: none"> <li>• Haat entrepreneurs</li> <li>• NTFP traders</li> </ul>
Land	<ul style="list-style-type: none"> <li>• Land value per hectare/acre</li> </ul>	<ul style="list-style-type: none"> <li>• Revenue department</li> <li>• Estate brokers</li> <li>• Farmers</li> <li>• Key informant</li> </ul>
Employment	<ul style="list-style-type: none"> <li>• Wage rate for laborer in village</li> </ul>	<ul style="list-style-type: none"> <li>• Village lead farmers</li> <li>• Village agriculture worker</li> <li>• Krishi Vigyan Kendras (agriculture science centers)</li> <li>• Key informant</li> </ul>
	<ul style="list-style-type: none"> <li>• Increased employment opportunity within village/block</li> <li>• Change in migration patterns</li> <li>• Number of people obtaining work outside village—commuters and migrant workers</li> </ul>	<ul style="list-style-type: none"> <li>• Block development officer</li> <li>• Village agriculture worker</li> <li>• Village sarpanch (head)</li> <li>• Migrant laborers</li> </ul>
Government programs	<ul style="list-style-type: none"> <li>• Access to and intervention of major development programs and services, including electricity, safe water supply, irrigation, sanitation, and agriculture extension services</li> </ul>	<ul style="list-style-type: none"> <li>• Block development officer</li> <li>• Krishi Vigyan Kendras</li> <li>• Primary health care</li> <li>• Grameen lead banks</li> </ul>
Participation/empowerment	<ul style="list-style-type: none"> <li>• Active participation of Panchayat in planning and implementation of development scheme</li> <li>• Women participation in various developmental programs</li> <li>• Micro planning and self-monitoring at village level</li> </ul>	<ul style="list-style-type: none"> <li>• Panchayat proceedings</li> <li>• Number of women directly participating in development programs</li> <li>• Micro plans at village/panchayat level</li> </ul>
Road safety	<ul style="list-style-type: none"> <li>• Number of deaths and injuries due to accidents on the road to the village</li> </ul>	<ul style="list-style-type: none"> <li>• Key informant</li> </ul>

<sup>a</sup> At hospital/health facility<sup>b</sup> Around the time of delivery

**TERMS OF REFERENCE: Institutional Strengthening Consultant**  
**(Support to the Rural Connectivity Training and Research Centers**  
**for Rural Road Asset Management)**

**A. Background of the Project**

1. The Government of India has applied for a loan of \$500 million under the Second Rural Connectivity Investment Program (RCIP). The investment program will construct 13,000 kilometers (km) of roads for rural connectivity and upgradation to connect 1,200 habitations in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal. The investment program will also contain provision for the institutional development component. This component will manage the road assets and develop the human resources needed to manage the rural road network. In particular, the Rural Connectivity Training and Research Center (RCTRC) will train the staff of the five RCIP states in the management of the rural road network and to undertake research for its effective management.

2. The investment program will engage an Institutional Strengthening Consultant for the development of procedures covering the business process and associated capacity building of human resources, especially in relation to design, operations, social and environmental safeguards, financial management, road safety, and road asset management.

3. To ensure high skill standards of engineers, technicians, site supervisors, concerned staff of the *panchayat raj institution* (PRI), design consultants, and construction contractors involved in the development and maintenance of the rural road network, there is a need for systematic, sustainable, and high quality training adapted to the specifics of the rural roads.<sup>1</sup> The training should also build on the extensive experiences and lessons accumulated from over 14 years of implementation of the Prime Minister's Rural Road Program or Pradhan Mantri Gram Sadak Yojana (PMGSY). The rural road network in India, around 510,600 km, makes up 85% of the total road network in the country. However, the qualifications and training of civil engineers are oriented for high category roads. While the National Rural Infrastructure Development Agency (NRIDA) has developed certain capabilities in conducting specialized practice-oriented research on PMGSY roads, activities are not systematic and support is needed for staffing, business procedures, and facilities to become sustainable.

4. The Second RCIP will equip RCTRCs in Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal with state-of-the-art facilities and finance consulting services to assist them in rolling out systematic and large-scale training in their states and targeted rural road research programs. Support for the RCTRC staff will be provided in the apprenticeship mode over a period of 24 months by the Institutional Strengthening Consultant who will be contracted under the Second RCIP. The Institutional Strengthening Consultant will support RCTRCs in research and in compiling best practices and experiences in rural roads, which will be used in training and developing guidelines, manuals, etc. by the Ministry of Rural Development (MORD) and the NRIDA. The Capacity Development Technical Assistance (CDTA) consultant engaged under TA 8110-IND has developed the generic operational manual on policies, procedures, tools, and guidelines for running these units. It is anticipated that by the end of 2019, the RCTRCs will have

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<sup>1</sup> The *panchayat raj institution* (PRI) comprises a collective body of directly elected people responsible for development activities in an area. There are three panchayat levels: *gram panchayat* at the village level, intermediate *panchayat* at the block level, and *zilla panchayat* at the district level. In some states, the PRI is involved in rural road maintenance.



trained around 4,000 project implementation unit (PIU) engineers, technicians, site supervisors, as well as 300 representatives of the PRI, 100 design consultants, and 300 contractors in the five RCIP states.

## **B. Objectives of the Institutional Strengthening Consultant Services**

5. The broad objective of the Institutional Strengthening Consultant services is to help the five RCIP states achieve a good degree of self-sufficiency in managing a large training organization, the RCTRC, so that by the time the consultant completes the assignment after two years, the RCTRCs are able to manage their affairs sustainably and to continuously improve their performance into the future.

6. The consultant, in coordination with the five states, will monitor the state's progress and provide feedback and continuous improvements to the governance policies, management systems, and guidelines necessary to manage the RCTRC units.

7. In conjunction with the RCTRCs, the consultant will develop long-term (5-year) training plans based on thorough training-need analysis, which will be required to meet the RCIP states' future manpower needs for managing the whole state rural road network. These plans are to be formally presented to the RCTRC directors so that they can prepare long-term financial support for training.

8. In conjunction with the RCTRCs, the consultant will prepare, in accordance with the procedures developed by the CDTA consultant, detailed annual budgets for the annual training programs and the overhead-type operations of the RCTRC. These are to be presented to the state government for obtaining the budget required for the annual training program, overhead expenses, and running costs of the RCTRC.

9. The consultant will train RCTRC staff in how to run the RCTRCs as a sustainable business in all required facets, including budgeting and the management of training contracts.

10. The consultant will engage specialist external training providers from India and abroad to provide technical and management trainings, which are to be paid from the consultancy financed under the loan. Training may be in the RCTRC itself, in other areas of the state, in other states, or abroad. Training may be by face to face lessons, or distance education, or videoconferencing, or similar means. Technical and management training may be for internal RCTRC staff as well as for external staff and officials from the Rural Road Network Management Units (RRNMU), State Government, Public Works Department, Rural Engineering Services, Irrigation Department, the PIU, the PRIs, and the private sector.

11. It is not the role of the consultant or the RCTRC staff to provide all technical training on road engineering subjects to external participants. However, it is expected that if there are staff in the higher-level organization that can provide some technical training, they will do so.

12. The consultant will help manage technical and management training for internal (i.e., RCTRC staff) and external stakeholders such as staff from the state rural road development authority (SRRDA), the RRNMUs, the PIU, PRIs, and private sector participants. The external training providers for technical training will be engaged for 1 year or more depending upon the requirements and will be engaged by the participating state using funds from the state or the RCIP loan.

13. The consultant will organize joint workshops where management and technical training can be discussed openly by all states.

14. The consultant will assist the RCTRCs in establishing further partnerships as required with leading rural road training and research institutions in India and overseas.

15. The consultant should support the RCTRCs in developing long-term rural road research plans and annual research programs with estimated long-term and annual budgets. Technical oversight of the research should be the responsibility of the director of the RCTRC or its management board as the research may be carried out in-house using the internal resources within the SRRDA and the RCTRC, or be outsourced to other research organizations, or carried out jointly. The consultant will provide a Materials Engineer who will train the RCTRC and RRNMU laboratory staff (i.e., all pilot RRNMUs and all RCTRCs) in up to ten organizations in how to

- (i) set up a laboratory with equipment and storage areas in the optimum locations;
- (ii) use all the equipment provided;
- (iii) establish laboratory management systems, including procedures, computer-based record keeping, etc.;
- (iv) operate and maintain laboratory equipment safely;
- (v) obtain the standards and procedures for all required tests; and
- (vi) perform sampling, testing, and recording procedures.

16. The RCTRCs will continue to be built up progressively to train annually around 2,000 PIU engineers, technicians, site supervisors; 150 concerned representatives of PRIs; and 50 design consultants and 150 contractors. On average, each RCTRC will train approximately 20% of these target quantities per year but with the bigger states doing more than the smaller states. Therefore, by the time the assignment is completed after 2 years of operations, the five RCTRCs will have jointly trained some 4,000 PIU engineers, 300 PRI staff (of which at least 30% should be women), 100 design consultants, and 300 contractors.

17. These are considered realistic minimum targets, which will vary from state to state and will be focused on the specific needs of each state. This will require the consultant to help the RCTRCs undertake detailed assessments of the task requirements for each type of organization, evaluate the capabilities and competencies of the staff in each organization, and determine the gap between the skills required and the skills available. This will lead to the planning and implementation of the training or recruitment required.

18. The consultant will help the RCTRC update the RCTRC Operations Manual on an annual basis, based on the learnings for the year.

### **C. Scope of Services**

19. The consultant will continue the institutional development of the RCTRCs as standalone businesses. Such continuous improvement should become second nature to the RCTRCs in all aspects of their work. They need to be taught how to evaluate their performance and to use feedback, consultations, self-review, and brainstorming sessions to continually improve their capabilities.

20. The focus will be on continually updating and expanding the management information systems required and training the RCTRC staff in how to manage a professional and modern training organization. As noted above, this will require updating the RCTRC Operations Manual

and the training manuals annually. It will also require additional training manuals to be developed. In short, the consultant will continue with the training of RCTRC staff, both old and new, and in updating the management systems established and rolled out by the CDTA consultant. This is a never-ending task.

21. **Specific training programs.** The consultant will help the RCTRCs plan and organize specific training programs based on the specific training needs of each of the participating states. These training programs will cover the internal management of the RCTRCs (herein called RCTRC management training) and external training of staff in the SRRDAs, RRNMUs, PIUs, PRIs, the private sector, and any other external agencies involved with the asset management of rural infrastructure. The external training, whether provided by internal or external training providers, will cover

- (i) general technical training of junior engineers;
- (ii) specialized technical and engineering management training, such as in contract management, asset management, and human resource development for middle-level engineers; and
- (iii) leadership and financial management training for senior engineers.

22. The RCTRCs have minimal staff and, accordingly, most of the external training will be developed, presented, and evaluated by external training providers. Reference can be made to the RCTRC organizational structure suggested by the CDTA consultant in November 2013, which is to be modified by each participating state to make them state-specific. The consultant will need to be flexible in the support it recommends to each state RCTRC. For example, those states which do not recruit the recommended numbers will need to outsource more support for any specified amount of training. The different states have differing abilities to engage staff either on a permanent or finite time basis. It will be essential to get buy-in from the states' senior officers, including the finance officers, as each PIU will annually train 400 PIU staff, 10 PRI staff (of which approximately 10 will be women), 10 design consultants, and 30 contractors, on average.

23. **Staffing of RCTRC.** The staff will comprise the following:

- (i) Director
- (ii) Manager (training, faculty, human resources and training database, research, information and communication technology [ICT], administration, finance)
- (iii) Assistant manager (training, testing, research)
- (iv) Laboratory technicians (3)
- (v) Administrative staff (data entry operator, clerks, accountant, etc.)
- (vi) Finance officer
- (vii) Pool of external faculty (resource persons)

24. Initially, the RCTRC staff will function mainly for managing the training, and not do the training even if some of the consultants or RCTRC permanent staff can also deliver some required technical or management training, which will be a plus and a good example to the staff in other RCTRCs.

25. The consultant will monitor and report the physical progress of the training and, where possible, the financial position of the RCTRC in each state, in quarterly progress reports against the planned progress. States will be benchmarked against each other for various parameters and indicators, preferably in graphical format.

26. The consultant, in conjunction with the RCTRCs, will develop, within 12 months of its appointment, a long-term 5-year training plan with corresponding 5-year budgets. It will also help the RCTRC management prepare annual training programs and annual budgets for internal operations and external training. The training plans and annual programs will be for the internal training required for RCTRC staff to manage the organization as well as the external technical and management training for those in external organizations, such as staff in the SRRDA, RRNMUs, PIUs, PRIs, and the private sector for managing the rural road network assets as well as staff responsible for finance and human resource management.

27. The consultant will help each RCTRC conduct “training needs assessments” for the whole state for all PMGSY and Panchayati Raj rural roads. Depending on the state’s wishes, the long-term training plans and the annual training programs may also include other roads such as state roads. This will depend on the state’s perceived needs for human capital to run the whole state road network and its ability to pay for any necessary human resource development.

28. **Management information system.** The consultant will, in conjunction with the RCTRC director, develop the overall management information system (MIS) required by the RCTRC. The MIS will include, but not be limited to, the following:

### **1. Management and Administration**

- (i) Information on the management board, including their responsibilities, key performance indicators, board papers, and recommendations of board meetings
- (ii) Policies, procedures, and other related information as shown in the RCTRC Operations Manual as developed initially by the CDTA consultant
- (iii) General administration
- (iv) Setting key performance indicators, evaluation of performance, recommendations for future employment, etc.

### **2. Human Resource Management**

- (i) Human resource development plans and policies
- (ii) A student management system that captures all necessary personal and academic information on the students, including their performance over time
- (iii) RCTRC staff human resource development (HRD) records
- (iv) Staff administrative records
- (v) Registers on the Panchayati Raj rural road organization, including their staffing numbers, education and experience levels, locations, training received to date, and an assessment of training needs, etc.

### **3. Finances**

- (i) Financial management of the organization
- (ii) Finances of the RCTRC, including all expenditures and revenues
- (iii) Long-term training plans (5 years)
- (iv) Annual plans and budgets
- (v) Communications to staff and students
- (vi) Descriptions of all jobs required for managing the rural road network asset
- (vii) Experience and skills level of all personnel in the state involved with managing rural roads

#### **4. Training**

- (i) Assessment of training and recruitment needs
- (ii) Training needs assessments
- (iii) Long-term training plans
- (iv) Annual training programs and budgets
- (v) Registers of curricula, full details on training courses, including lesson plans, objectives, competencies required, etc.
- (vi) Registers on lecturers, including personal details, experience, and the training they deliver
- (vii) Information on external training providers within the state, within India, and abroad
- (viii) Contracts with external training providers, including tendering, evaluation, selection, contract values, payment conditions, performance evaluation, reporting
- (ix) Database or register of all courses
- (x) Electronic copies of all training materials
- (xi) Records of all trainings given

#### **5. Asset Management**

- (i) Asset registers of all physical assets such as buildings and landscaping, furnishings, office and communications equipment, utilities, and infrastructure such as vehicles
- (ii) Registers on the maintenance of assets such as buildings and landscaping, utilities, vehicles, furniture, office equipment, etc. This will include names of maintenance contractors, costs, dates, work done, etc.

#### **6. Private Sector**

- (i) Registers on the private sector involved with rural road asset management, including consultants and construction contractors. Such information will include the names, locations, ownership, management, staffing, skills levels, education, and an assessment of training needs, etc.
- (ii) Promotional materials for securing private clients
- (iii) Registers from the RRNMUs on relevant aspects such as contractors' and individuals' performance

#### **7. Information Technology**

- (i) Registers of all information and communication technology (ICT) equipment, providers, and costs
- (ii) Records on costs of original equipment and any maintenance undertaken on them
- (iii) Training provided to RCTRC or RRNMU staff on how to use the ICT equipment and software

#### **8. Miscellaneous**

- (i) All other requirements that can be stored digitally

29. **Technical training programs.** The consultant will, in conjunction with the RCTRC

management, develop or procure the necessary technical training programs. The technical programs may be delivered by the internal RCTRC staff but will be generally delivered by the external training organizations. The training programs will include, but not be limited to, the following:

## **1. Internal Management Training of RCTRC Staff**

- (i) Principles of human resource development and human resource management
- (ii) Training of trainers
- (iii) Asset management (also for RRNMU staff)
- (iv) Financial management
- (v) Administrative management
- (vi) How to use the RCTRC management information system (MIS)
- (vii) Obtaining high-level support for annual programs and budgets

## **2. Technical Training of External Trainees from the Public and Private Sectors**

### **a. Road and Bridge Inventory**

- (i) Geographic information systems (GIS) for mapping and storing relevant data such as time-based road condition, contract information, maintenance carried out, financial information, and other relevant information that can be conveniently stored on GIS
- (ii) Managing data

### **b. Road, Bridge, and Culvert Condition Surveys**

- (i) Road, bridge, and culvert condition surveys and data collection, transfer, and storage on a GIS or other database

### **c. Asset Management**

- (i) Developing asset management plans through systems-based planning, programming, and budgeting
- (ii) Prioritizing road works
- (iii) Developing 15-year rural road asset management budgets
- (iv) Developing annual programs and budgets
- (v) Valuing the rural road asset on an annual basis to ascertain if the road asset is falling into disrepair

### **d. Technical**

- (i) Materials
- (ii) Design principles of roads, bridges, and culverts for senior engineers
- (iii) Technical aspects relating to hydraulics, soil mechanics, structures, and surveying
- (iv) Design of roadside furniture, signage, and lineage
- (v) Specifications

### **e. Procurement of the Maintenance Contract**

- (i) Preparing standard bidding document for the maintenance contract for 5-year post-construction period and for various maintenance contracts beyond 5-year post-construction period with the development and incorporation of necessary state-specific modifications

**f. Social, Environmental, and Road Safety**

- (i) Community consultations
- (ii) Environmental management framework
- (iii) Institutional framework for the road safety audit
- (iv) Road safety aspects of road design and construction
- (v) Road safety audit identifying the safety issues, severity, and recommendations
- (vi) Community engagement in road inspections and reporting
- (vii) Gender equality and involvement of women in the road programs
- (viii) Emergency and disaster management of rural roads
- (ix) Road and bridge construction and maintenance—technical aspects of design and construction
- (x) Quality assurance and quality control
- (xi) Climate change implications

**3. Climate Change Implications**

**a. Laboratory Management**

- (i) RCTRC laboratory policies, practices, and research
- (ii) Storage of laboratory data and records
- (iii) Storing and maintaining laboratory equipment
- (iv) Identifying the equipment required for laboratories

**b. Managing Research**

- (i) Planning research
- (ii) Estimating time and costs of research
- (iii) Obtaining financial approval of research
- (iv) Programming and budgeting of research
- (v) Peer review of research
- (vi) Reporting research and publishing results

30. The consultant will manage a 1-day information dissemination seminar in each state at the start of the project assignment to alert the senior government officials and the RCTRC and RRNMU staff of the plans going forward, with the proposed timelines, staffing requirements, budget requirements, and responsibilities.

31. The consultant will arrange a 1-day workshop in each RCIP state at the end of each year to review the progress during the year to date, and to plan activities and to budget for the financial year to come.

32. The consultant will prepare an interim project report at the end of the 12th month. A draft final project report will be submitted at the 20th month, thereby allowing the NRIDA and ADB to make comments. The final project report with NRIDA and ADB comments will be submitted in the final month of the assignment.

33. **GIS Expert** is to be positioned in NRIDA to provide services, inputs, and support to the capacity-strengthening activities for the PMGSY program. Following are the specific tasks of the GIS Expert:

- (i) to assist the Project Director in gathering, analyzing, and integrating the spatial data from states and open source geospatial data sources, and to determine how best the information can be displayed using GIS-based decision-making platform;

- (ii) recommend improvements and innovative methods in the geomapping and governance tools, and procedures over time during implementation;
- (iii) to coordinate with states and Centre for Development of Advanced Computing (CDAC) in Pune on digitization of rural road network data to establish the national level web GIS platform and location-based technologies for PMGSY.
- (iv) to assist the Project Director in organizing and facilitating periodic project implementation assessment and planning sessions (quarterly, midyear, and year-end);
- (v) to assist the Project Director in the analysis of spatial data for geographic statistics to incorporate into documents and reports;
- (vi) to assist the Project Director in managing of geospatial database; and
- (vii) to assist the Project Director in providing technical guidance to all stakeholders when needed.

## D. Organizational Requirements

34. The consultant can be any competent organization experienced in developing training and research, especially associated with asset management, including human resource development.

## E. Deliverables

35. The consultant will be responsible for peer review, and compiling and cataloguing training course materials, whether designed by the consultant, the RCTRC staff, or by external training providers. All reports and training materials such as training courses will be in English and Hindi. One hard copy and one electronic copy of each report will be submitted to each RCIP participating state, and the NRIDA. One hard copy of the final report on RCTRCs, including on the training of staff in the new RRNMUs, will also be provided to the Department of External Affairs. Following is a summary of reporting requirements:

**Table 1: Reporting Requirements**

Reports	Timeline
<b>General Requirement</b>	
Inception Report	End of week 6
2-year Corporate Plan with annual training plans including funding plan	End of month 10
Develop a long-term (5-year) Training Plan	End of month 12
Interim Project Report	End of month 12
Update of Operations Manual consisting of policies, procedure, tools and guidelines, organizational structure, and roles and responsibilities of core staff and external training providers for both the RCTRC and the RRNMU	End of months 12 and 22
Develop an Operational Plan for relocating each of the ten new pilot organizations to their new building when they are ready to be occupied	3 months prior to each new building being ready for occupancy
Strategic Plan for future post Institutional Strengthening Consultant support, i.e., post 2 years	End of month 20
Update training manuals	End of month 21
Draft Final Project Report	End of month 22
Final Project Report	End of month 23
<b>Workshops</b>	
Information Dissemination Seminar/Workshop: 3 senior representatives from each RCIP state	Before end of month 1
Complete a 1-day workshop in each state, for staff from both the RRNMU	In March each year for



Reports	Timeline
and RCTRC, on annual programming and budgeting by end of November each year with the APB prepared by end of November each year (2 in total) including all logistic arrangements	workshop and APB
Joint workshop in New Delhi of representatives of each RCTRC	By end of month 15
Cross learning workshop for RRNMU, RCTRC, and other designated staff in the place to be firmed up by MORD/NRIDA including making all logistic arrangements	By the end of month 8

APB = annual programming and budgeting, MORD = Ministry of Rural Development, NRIDA = National Rural Infrastructure Development Agency, RCIP = Rural Connectivity Investment Program, RCTRC = Rural Connectivity Training and Research Center, RRNMU = Rural Road Network Management Unit.

Source: Asian Development Bank.

## F. Government Input

36. Space will be provided within the RCTRC temporary office to accommodate the office requirements of the consultant.

## G. Implementation Arrangements, Staffing, and Schedule

37. The Ministry of Rural Development, with technical and management support from the NRIDA, will be the executing agency (EA) for the consultant at the central level and will be responsible for the execution of the contract of the consultant. The governments of the five RCIP states through the SRRDAs will be the implementing agencies (IA) for the supervision of assignment at the state level. The consultant will interact with the head of the RCTRC in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.

## H. Indicative Staffing Requirements

38. Dedicated experts except the Team Leader will be positioned in the NRIDA office at 15 Bikhaji Cama Place, New Delhi to execute roles and responsibilities.

**Table 2: Roles and Responsibilities**

Position	Role and Responsibility	Indicative Person-months*
1 Organizational and HRD Expert – Team Leader (National) to be positioned in the NRIDA, New Delhi	<p>Manage the contract and relationships between the NRIDA and the consultant.</p> <p>Manage relationships in the participating states and MORD/NRIDA.</p> <p>Oversee, direct, and lead the consultant's team; work with the NRIDA and states to identify and prioritize organizational needs.</p> <p>Develop long-term (5-year) plans, annual programs, and budgets, and guide the rest of the team, the RCTRC directors, and the NRIDA director.</p> <p>Be responsible for all monitoring and reporting to MORD/NRIDA.</p> <p>Assist MORD, NRIDA in facilitating the periodic implementation status and planning sessions (quarterly, half yearly and yearly)</p>	24

Position		Role and Responsibility	Indicative Person-months*
2	Human Resource Development Expert – Training Manager (National)	<p>Develop the HRD and HRM strategies, long-term training plans, and corporate plans, and train the RCTRC directors and staff in the implementation of such strategies.</p> <p>Ensure the Student Management System and management information systems (management information systems) in general are kept up to date and all RCTRCs know how to use them.</p> <p>Organize the appropriate training course for the trainers.</p> <p>Develop the management training to be provided by internal or external training providers.</p>	15 (3 x 5 states)
3	Rural Road Asset Management Expert including PPB (National)	<p>Train appropriate RRNMU and RCTRC staff in all matters related to rural road asset management.</p> <p>Develop an Asset Management Plan for all states' RRNMUs.</p>	15 (3 x 5 states)
4	Expert in Planning, Programming, and Budgeting (National)	<p>Continue the detailed training provided by the CDTA consultant in gathering road condition data using handheld data loggers connected telephonically to the head office GIS database.</p> <p>Conduct prioritization using the road condition rating system.</p> <p>Prepare long-term plans, annual programs, and budgets.</p>	15 (3 x 5 states)
5	Expert for Training in GIS and Database Management (National)	Good inventory data are essential and these need to be stored on a GIS. The expert's role is to set up systems for the RNMUs in each state and to train the RRNMUs and RCTRCs in how to manage and operate the system.	15 (3 x 5 states)
6	Expert for Training in IT Management (National)	The RRNMU and RCTRC require digital storage of a lot of information and this will require database systems, which the consultant will set up and train local staff how to operate.	15 (3 x 5 states)
7	Expert for Training in Research and Laboratory Management (National)	<p>Establish management systems for research, including programming and budgeting, monitoring, and evaluation.</p> <p>Provide training in laboratory management.</p>	15 (3 x 5 states)
8	Manager for Technical Management (National)	<p>Manage training of external and internal candidates using internal and external training providers.</p> <p>Assist the RCTRC staff in managing the delivery of training programs and managing contracts with external training providers.</p> <p>Develop technical engineering curricula for both internal and external training providers.</p>	15 (3 x 5 states)
9	Resident Training and Research Consultant to be positioned in the RCTRC in the states of	Support the states in achieving self-sufficiency in managing the large state training organization and subsequently manage their affairs and improve performance in the future.	120 (24 x 5 states)

Position		Role and Responsibility	Indicative Person-months*
	Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal	Provide coordination and monitor the progress of the training activities by RCTRC to ensure compliance with the aims and objectives of the Institutional Strengthening Consultant's contract.  Monitor and report to the NRIDA director regarding the output and outcome of the Research Training Program in a monthly progress report.	
10	GIS Expert to be positioned in NRIDA	Provide services, inputs, and support for implementation and capacity strengthening activities of the PMGSY program.	24
<b>Total</b>			<b>261</b>

CDTA = capacity development technical assistance, GIS = geographic information systems, HRD = human resource development, HRM = human resource management, IT = information technology, MIS = management information system, MORD = Ministry of Rural Development, NRIDA = National Rural Infrastructure Development Agency, PMGSY = Pradhan Mantri Gram Sadak Yojana, PPB = planning, programming, and budgeting, RCTRC = rural connectivity training and research center, RRNMU = rural road network management unit, SRRDA = state rural road development authority.

Source: Asian Development Bank.

## I. Qualification Requirements for Key Personnel

39. The qualification requirements in these terms of reference (TOR) are preferred qualifications.

40. The qualifications described are to supplement the information already provided in the TOR that directly or indirectly define the level and range of expertise, qualifications, and experience to be possessed by the experts, and are, therefore, not an exhaustive list of requirements.

### 1. Team Leader – Organizational and HRD Expert (National)

41. He/she should be a senior-level educational manager from the public or private sector with a minimum of 20 years' experience, of which he/she should have been in a senior management position and involved in all aspects of governance of an academic institution. Experience in management of an academic institution in emerging market economies and/or remote areas is essential. The experience should include developing an academic institution from a bare minimum level. Experience with infrastructure training organizations would be highly regarded especially in the development of new organizations involved with total asset management. Experience with establishing and improving policies and procedures, developing management tools and guidelines, developing long-term corporate strategies and short- to medium-term corporate plans, annual programming and budgeting, and securing funding for an overhead-based organization are desirable requirements. Experience with conducting training needs assessments, developing training curricula and courses and associated training materials/modules, hands-on experience with delivering and implementing competency-based training programs, and monitoring and evaluating the RCTRCs are also desirable. One of the primary objectives of this role is to help the RCTRCs secure adequate funding from the state governments for implementing the training programs identified as being high priority.

42. The Team Leader must have a combination of experiences in both developed and

developing countries. Experience in Asia and especially India would be an advantage. He/she must have a successful experience (on time and on budget) in project management at senior levels, including leading large multidisciplinary teams, and experience in the delivery of consultancy assignments financed by one or more external financiers (ADB, Japan Bank for International Cooperation, World Bank, or other bilateral/multilateral funding agencies).

43. This position will be responsible for the provision of training for leaders and senior managers within the state rural infrastructure sectors, through either internal (consultant) staff or by external training providers such as from various business schools in India or abroad.

44. The position is based in the NRIDA, Bikhaji Cama Place, New Delhi but rotates to the five RCIP states regularly.

45. The Team Leader will also monitor and report to MORD/NRIDA the implementation status of RCTRC activities and the outputs and outcomes of research training programs.

## **2. Human Resource Development Expert – Training Manager (National)**

46. He/she should be a senior-level human resource management (HRM) expert with a minimum of 20 years' experience in preparing human resource development (HRD) plans based on organizational requirements and implementing them. Experience in managing HRD in an infrastructure or technical organization is essential. Experience with developing HRD plans for staff ranging from junior engineers to mid-level asset managers to senior leaders in the public sector is also considered highly desirable.

47. Experience with developing and delivering a wide range of training courses for internal and external staff is essential, including from external training providers. Experience with monitoring and evaluating the outcomes from training programs over a long term is highly desirable.

48. The HRD expert will be proficient in HRM, particularly in managing the procurement and contract management external training providers. The HRD expert will negotiate with a wide variety of external training providers, from technical to management and from within the respective state, to other areas of India, and to international training providers. The HRD expert will be proficient in organizing external training providers to come to the RCTRC to deliver training, send state-based trainees to other areas of India and overseas, and conduct training through internet-based providers such as holding webinars and MOOCs (massive open online courses).

49. Monitoring and evaluating the impacts of the HRD will be an important responsibility.

## **3. Rural Road Asset Management Expert (National)**

50. He/she should be a senior-level civil engineer with formal qualifications and experience in the total asset management of infrastructure. He/she should have a minimum of 20 years' professional experience, with experience working for a public sector infrastructure owner. Experience in developing long-term asset management strategies, including maintenance management policies and procedures such as planning programming and budgeting, is desirable.

51. Experience in developing and delivering training programs associated with infrastructure asset management would be desirable. Experience in rural road network management, including the whole network for both the maintenance of existing roads and the construction of new roads,

will be an advantage. Experience with contract management is highly desirable.

#### **4. Expert in Planning, Programming, and Budgeting (National)**

52. He/she should be a senior-level civil engineer with at least 10 years' experience in systematic prioritizing and ranking required road maintenance works to deliver the optimum outcomes for road users and the government road owners and managers.

53. He/she should be capable of building from first-principals the 15-year long-term plans and indicative budgets and be able to convince state government policy makers of the need for such expenditures so that governments can be prepared well in advance of the funding required and hence develop appropriate revenue-raising policies to pay for the large amount of additional maintenance. He/she needs to be proficient in valuing rural roads based on deterioration models and allowing for requisite maintenance to restore value.

#### **5. Expert for Training in GIS and Data Base Management (National)**

54. He/she should be a senior-level GIS professional with a minimum of at least 10 years' experience in geographic information systems technology and in training staff in its potential, use, and limitations. He/she may be called upon to provide assistance with procuring the GIS technology, including hardware, software, training, and managing contracts with any external providers of equipment, software, or training.

#### **6. Expert for Training in IT Management (National)**

55. The information technology (IT) training expert shall have at least 10 years recent experience in training in all aspects of managing IT hardware, software, and systems. Experience with training in databases for Asset Management Systems, Management Information Systems, Human Resource Management Systems including Student Management Systems, and Geographical Information Systems is highly desirable.

#### **7. Expert for Training in Research and Laboratory Management (National)**

56. He/she should be a mid-level civil engineer with a minimum of 10 years' experience in managing researches of all types related to road asset management, including traffic surveys, axle load surveys, bridge/culvert hydraulics and structures, construction materials, and managing material laboratories for soils and rock, concrete, and bitumen. He/she will be responsible for training the RCTRC staff, and prioritizing research and its dissemination to the public domain. He/she will prepare a manual on managing research and laboratory management and train the relevant RCTRC staff in its use, and monitor the outcomes.

#### **8. Manager for Technical Management (National)**

57. He/she should have a minimum of 10 years' experience in the management and delivery of training programs. An engineering graduate with postgraduate qualifications in education, commerce, or business is preferred. He/she will assist the RCTRC staff in preparing training delivery programs and help in their implementation. He/she will also assist in the evaluation of the training providers and provide feedback to SRRDA managers, and incorporate learnings into the RCTRC operations.

#### **9. Resident Training Research Consultant (National)**

58. He/She should be a civil engineer with a degree in engineering and a minimum of 10 years' experience in managing researches of all types related to road assessment. He/she is responsible for the training of the RCTRC staff.

59. The resident training consultant will be positioned in the RCTRC in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal. Throughout the project cycle, he/she will monitor and report to MORD/NRIDA regarding outputs and outcomes of the research training program through monthly progress reports.

#### **10. GIS Expert to be positioned in NRIDA (National)**

60. The candidate should hold a master's degree or equivalent in engineering or applied sciences such as civil engineering, applied geology, remote sensing, geography, computer science or related field. He/she should have at least 5 years of relevant experience in the field, preferably government works. He/she must have demonstrated experience in implementing geomapping systems and tools in a multifaceted program as well as in using management information systems (MIS); knowledge in GIS software, basic mapping, and cartographic concepts, mapping symbols and standards; and skills in MIS web development.

## **TERMS OF REFERENCE: Road Safety Expert**

### **A. Background of the Project**

1. The Second Rural Connectivity Investment Program will improve rural connectivity and accessibility in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal, facilitating safer and more efficient access to livelihood and socioeconomic opportunities for the rural communities. The program will construct rural roads to all-weather standard for the unconnected habitations and upgrade rural roads linking to the state's district centers for an aggregate length of 12,000 kilometers. For the investment in physical infrastructure to be effective and sustainable, the investment program will strengthen the institutional capacity of the implementing agencies in road safety and road maintenance.

2. Along with the increasing responsibility to develop and maintain the sustainability of rural road operation and maintenance, the states must mitigate the safety issues emerging from a faster and higher volume of rural traffic. Under the assistance of the Asian Development Bank (ADB) through the first Rural Connectivity Investment Program (RCIP), the Ministry of Rural Development (MORD) through the National Rural Road Development Agency (NRRDA) issued the Rural Road Safety Manual, "Promoting Safer Connectivity in Rural India," which was officially published for national implementation in June 2017. During the Second RCIP, road safety audit (RSA) will be mainstreamed as part of the rural road development process at the design, construction, and operation stages. The Rural Road Network Management Unit (RRNMU) established in all participating states will gradually take the key responsibility of ensuring rural road safety.

3. A team of national consultants will be engaged through a firm to provide road safety support for the investment program. The team consists of five individual consultants as the road safety experts, and one national consultant as the road safety advisor. The road safety experts will be engaged and assigned to each state to assist the respective state rural road development agency (SRRDA) in enhancing road safety on the subprojects under ADB financing. The road safety advisor will be assigned to support the National Rural Infrastructure Development Agency (NRIDA) at the central level to monitor the implementation of road safety measures by the SRRDAs.<sup>1</sup>

### **B. Objectives of Assignment**

4. The objectives of the consulting services are as follows:

- (i) To provide hands-on support to the project implementation unit (PIU) or RRNMU in each state in managing the implementation of the RSA for the rural roads developed under the investment program.
- (ii) To assist the SRRDAs in enhancing their knowledge to manage road safety aspects in rural roads so that by the time the consultant completes the assignment after 3 years, the SRRDAs through the RRNMUs can manage their affairs sustainably and continually improve their performance in the future.
- (iii) To provide advice, management, and monitoring support to the NRIDA and SRRDAs to effectively implement the road safety aspects in the investment program.

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<sup>1</sup> The National Rural Road Development Agency (NRRDA) was renamed the National Rural Infrastructure Development Agency (NRIDA) in May 2018.

5. To achieve these objectives, the consultant should ensure compliance with loan and project agreements and its covenants related to road safety issues, with a view to achieve agreed-upon project monitoring indicators on road safety as in the Design and Monitoring Framework (DMF) of the investment program in the stipulated time frame. The consultant will also be required to efficiently manage the road safety aspects through coordination with the Technical Support Consultant (TSC) and the Project Implementation Consultant (PIC) in each state, in full compliance with ADB guidelines and the applicable client's acts, rules, and regulations.

### **C. Detailed Scope of Work**

6. The five road safety experts will perform the following:

- (i) Acquaint themselves with the scope of work and relevant studies and guidelines regarding road safety on rural roads, such as the Rural Road Safety Manual, circulars or standards adopted by the NRIDA and SRRDAs, annual road safety reports submitted by the TSC on the ongoing projects, and the RSA inspection formats used for the ongoing projects.
- (ii) Engage with the RRNMUs in each state to prepare the RSA program and roll out the RSA with targets as stipulated in the DMF of each tranche.
- (iii) Prepare comments and suggestions to improve safety wherever a potential problem has been identified. The consultant shall also consider the benefits of implementing the RSA, such as how it can potentially reduce the overall cycle cost of transport projects while ensuring safety.
- (iv) Discuss and help the SRRDAs establish and implement the rural road crash (accident) data collection mechanism as per the format provided in the Rural Road Safety Manual, and conduct independent analysis of severe road accidents on any roads developed under the first RCIP and the Second RCIP, for either completed or under construction roads, if any, and recommend specific road safety countermeasures for review and endorsement by the SRRDA.
- (v) Assess the state-wise capacity building requirements on road safety, and engage with rural connectivity training and research centers (RCTRC) in conducting training on road safety and hands-on training on road safety inspection and RSA for PIU or RRNMU staff.
- (vi) In coordination with the TSC, facilitate cross-learning workshops for the state governments, and report on the progress and results achieved, issues encountered, lessons learned, and the work plan for the next year. Participating states can share best practices and experiences, and technical aspects can be discussed openly.
- (vii) Prepare half-yearly summary road safety monitoring reports, summarizing in concise matrix format the status of conducted road safety audits, inspections and follow-up checks, issues found, measures proposed, implementation status, and other important findings.
- (viii) Coordinate with the state governments to ensure that road safety mechanisms



and programs, through membership in the State Road Safety Council and District Road Safety Committees created as per provisions of the Road Safety and Transport Act, are followed under the investment program.

7. The road safety advisor will perform the following:

- (i) Provide advice and support to the NRIDA in the implementation and monitoring of road safety aspects in the PMGSY program.
- (ii) The NRIDA uses the online management, monitoring, and accounting system (OMMAS), a web-based system with centralized database for monitoring the overall progress and performance of rural road development under the PMGSY program. The advisor should prepare a system to record accidents and monitor treatments of the accident, which will be incorporated into the Road Safety Module to be developed within the OMMAS program. The proposed module should consist of (i) accident data recording, and (ii) accident data analysis.
- (iii) In coordination with the road safety expert in each state, prepare assessments and recommendations at the strategic level to improve safety on PMGSY roads. The consultant will consider the benefits of implementing the RSA in RCIP states, such as how road safety audits can potentially reduce the overall cycle cost of transport projects by saving lives and reducing the series of injuries.
- (iv) In coordination with the road safety expert in each state, monitor and evaluate countermeasure treatments recommended from RSA implementation. Monitoring helps to identify if safety has improved and which countermeasures are most effective to enhance future crash-saving predictions.

#### **D. Implementation Arrangements**

8. Under the overall guidance of the NRIDA, the consultant will work directly with the respective SRRDAs. The consulting services are expected to continue for 3 years with intermittent inputs of 24 person-months by each road safety expert, and 36 person-months by the road safety advisor (156 person-months total). The performance of the consultants would be reviewed at the end of each year based on definite measurable indicators and the contract may be terminated after giving 1-month notice if performance of the consultant is found unsatisfactory.

#### **E. Reporting Requirements and Deliverables**

9. The consultant will submit the following reports:

<b>No.</b>	<b>Report</b>	<b>Periodicity</b>	<b>SRRDAs</b>	<b>NRIDA/ADB</b>
1	Inception Report	To be submitted within 1 month from the commencement of services	2 hard copies 1 soft copy	1 hard copy 1 soft copy
2	State-wise RSA report	Quarterly	2 hard copies 1 soft copy	1 hard copy 1 soft copy
3	State-wise training needs assessment	Half-yearly	1 hard copy 1 soft copy	
4	Project Completion Report	Within 1 month of the completion of work	2 hard copies 1 soft copy	1 soft copy

ADB = Asian Development Bank, NRIDA = National Rural Infrastructure Development Agency, RSA = road safety audit, SRRDA = State Rural Road Development Authority.

10. The reports will summarize the work progress by the SRRDAs as performed during the reporting period, identifying the problems encountered, associated corrective actions, and their implementation.

11. The road safety advisor will be positioned in the NRIDA office at 15 Bhikaji Cama Place, New Delhi, with a suitable office, internet facilities, and other logistic arrangements.

#### **F. Consultant Qualifications**

12. **Road safety experts** (5 experts to be each deployed in Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal). The road safety expert should be a senior-level road engineer with a graduate degree or equivalent in civil engineering or related fields, preferably with 15 years of experience in the design of roads, including rural roads, out of which he/she should have at least 5 years of experience in road safety engineering, including conducting RSA and inspections on different types of roads, identification and treatment of black spots, development and implementation of road safety programs, and road safety monitoring and evaluation. The expert should have demonstrated knowledge of engineering road safety measures proved effective in India, especially targeting vulnerable road users in the mixed speed/traffic environments and on rural roads. Experience in externally funded infrastructure projects would be desirable.

13. **Road safety advisor** (1 expert to be deployed in the NRIDA office in New Delhi). The road safety advisor should be a senior level road engineer with a graduate degree or equivalent in civil engineering or related fields, preferably with 15 years of experience in the design of roads including rural roads, out of which he/she should have at least 5 years of experience in road safety engineering. Experience in management and coordination roles will be an advantage. Experience in information technology will be preferred. The expert should have demonstrated knowledge of engineering road safety measures proved effective in India, especially targeting vulnerable road users in the mixed speed/traffic environments and on rural roads. Experience in externally funded infrastructure projects would be desirable.

## Technical Bid Evaluation

Note: This is just a template for reporting to ADB on salient features of the Technical Bid Evaluation. This template may not be exhaustive and does not supersede the requirements of the Bidding Document and the full technical evaluation. In case of discrepancy between the Bidding Document and the template, the Bidding document will prevail.

Package No.	1					
Name of Road(s)	2	[List the names of all roads included in the contract package, specifying start and end points]				
District	3					
Estimated Cost (Rs. Lakhs)	Construction	4				
	Maintenance	5				
Total Estimated Cost (Rs. Lakhs)	6					
Construction period in years (Number)	7					
No. of bids downloaded	8					
No. of bids received	9					
Closing date for bid submission	10					
Bid Security Amount (Rs. Lakhs)	11					
Required Minimum Average Annual Construction Turnover	12					
Required Minimum Size of Contracts of Similar Size and Nature of two requirements)	13a (one contract)					
	13b (two contracts)					
Required Liquid Assets and/or Credit Facilities Available	14					
Required Minimum Bid Capacity	15					
Names of Bidders	16	[Insert name of bidder 1]	[Insert name of bidder 2]	[Insert name of bidder 3]	[Insert name of bidder 4]	[Insert name of bidder 5]
Amount of Bid Security Satisfied (Yes/No)	17					
Bid Validity of Bid Security Satisfied (Yes/No)	18					
Bid Submission Fee Paid (Yes/No)	19					
Submission of Affidavit for Correctness of Information (Yes/No)	20					
Single Entity (SE) or Joint Venture (JV)	21					
Letter of Intent or JV Agreement Provided (Yes/No)	22					
Nationality (Each Member of JV)	23					
Eligible for ADB-financed Contracts* (Yes/No)	24					
No Conflict of Interest Present (Yes/No)	25					
Government-owned Enterprise? (Yes/No)	26					
If Government-owned Enterprise: is it legally and financially autonomous, operate under commercial law, and not a dependent agency of the Purchaser? (Yes/No)	27					
Is Bidder eligible in accordance with ITB 3.3 (ADB Sanctions)? (Yes/No)	28					
Letter of Technical Bid duly signed by the Authorized Person? (Yes/No)	29					
Annual Construction Turnover during Last 5 years (Rs. Lakhs)	2007-08	30				
	2008-09	31				
	2009-10	32				
	2010-11	33				
	2011-12	34				
Minimum Annual Average Construction Turnover	Average Annual Construction Turnover over Last Five Years (Rs. Lakhs)	35				
	Satisfied the Requirement (Yes/No)	36				
Minimum Size of Contracts of Similar Nature	Actual Size (One Largest Contract)	37				
	OR Actual Size (Two Contract)	38				
	Satisfies the Requirement (Yes/No)	39				
Total Value of Existing Commitments, Works which are yet to be Completed & Work Awarded but not yet Started	40					
Requirement for Liquid Assets and/or Credit Facilities Satisfied (Yes/No)	41					
Minimum Key Equipment Requirement Satisfied (Yes/No)	42					
Minimum Key Personnel, Nos. & Required Qualification Satisfied (Yes/No)	Construction	43				
	Laboratory	44				
	Routine Maintenance	45				
Submission of Income Tax Permanent Account Number, Balance Sheet, Profit & Loss Statement, Auditors Report & Details of Liabilities (Yes/No)	46					
Submission of Information on Current Litigation (Yes/No)	47					
Submission of Proposed Methodology and Schedule (Yes/No)	48					
Submission of Affidavit for non Employment of Related Personnel of the Employer (Yes/No)	49					
Submission of Affidavit for non Employment of Retired (within 2 years) Department Official (Yes/No)	50					
Bid capacity (Rs. lakhs)	Max. Value of Civil Engineering works (A) in any one year in last 5 years	51				
	Existing commitments "B"	52				
	Bid capacity = (A x N x M) - B	53				
	Satisfies the requirement (Yes/No)	54				
Material Deviation, Omission or Reservation Found (Yes/No)	55					
Technically Qualified (Yes/No)	56					

[Draft template only]

*Note: The template is not exhaustive.**The actual document shall report on all key findings and aspects of evaluation*

**English translated copy of original Bid Evaluation and Sanction Proceeding**  
 (Original bid evaluation report has been prepared in Hindi language) [this does not apply if  
 the original report is prepared in English]

[Insert Name of the Evaluating Authority]

Analysis of Tenders invited for PMGSY, ADB [insert loan number]

(Date of Meeting: [insert date])

1. Package No: [insert]
2. District: [insert]
3. Block: [insert]
4. No/Date of Administrative Approval: [insert]
5. No/Date of Technical Sanction: [insert]
6. No/ Date of N.I.T.: [insert]
7. Date of Receipt of Tender: [insert]
8. Cost as per Tender: [insert]
9. Earnest Money: [insert]
10. No. of Tenders sold: [insert]  
 No. of Tenders downloaded: [insert]
11. Date of opening of Technical Bids: [insert]
12. Date of Opening to Financial Bids: [insert]  
 Place: [insert]

**13. Details of Tenders Received**

S.N.	Name and class of the contractor	Bid Capacity in Rs. Lakhs	Amount quoted by contractor	Comparison with the Engineer's estimate	Remarks
			Total: Construction: Maintenance:		

14. Whether Earnest Money found correct: [insert Yes/No]

15. The Contractors who downloaded the Tender documents through website whether produced the Bank Draft towards Cost of Tender Document [insert Yes/No]

16. On opening of the technical bids following contractors are found disqualified  
 Remaining contractors fulfill the essential requirements.

Name of the Contractor	Reason of Disqualification
	[reason for disqualification should be provided in sufficient detail]

17. The financial offers submitted by the contractors were examined and found [Describe actual findings. Wording in the default case can be “found substantially responsive i.e., conform to all the terms, conditions, and specifications of the bidding documents, without material deviation, omission or reservation”]. If the financial bid is not substantially responsive, describe the material deviation, omission or reservation found

In case of the non-responsive financial bid, describer actions taken

#### 18. Short Note regarding Financial Evaluation of Tenders Received

[Provide actual summary. Wording which can be used is: “For {describe the package}, {insert the number} contractors participated in the competition.

[Describe the findings of checking of substantially responsive bids by the Employer for any arithmetic errors, and actions taken if errors found; effect on bid prices]

The lowest bidder, {insert the name of the contractor} quoted Rs {insert the amount in figures and in words}. Indicate whether the amount was adjusted based on the checking for any arithmetical errors, or other specific conditions

For the lowest bidder:

{Provide check for aggregation. If the aggregation requirements are not met, record and check L2. If L2 meets the aggregation requirement, complete the documentation for L2, etc}.

{Provide comparison of item rates quoted for construction and total cost with the Engineers estimate, make a conclusion}

{If quotes for routine maintenance are invited: Provide comparison of rates quoted for the routine maintenance with the Engineers estimate, make conclusion},

{Provide assessment of whether the bid was found seriously unbalanced or front loaded; if found, describe the action taken}.

{Provide comparison with the work program – consistent or not; if not, describe the action taken }.

{Provide general conclusion: recommended for award or not}}

[insert the name and position of the head of the tender evaluation committee/team; and title of the evaluation committee/team]

#### 19. Analysis and Decision taken by the [Insert the Name of the Tender Sanction Authority]

[Describe the decision taken, and the basis for it].

[insert the name and position of each member of the Tender Sanction Authority]

**Form of certified summary sheet reporting on the main aspects of the bid evaluation and contract award**

[to be provided to ADB for all contracts, promptly upon award, refer FAM]

S.No.	District/PIU	Package No.	Name of Road	Length in km	Date of NIT	Date of opening of Tech. Bid	No. of bids received	No. of bids Technically qualified	Date of Financial bid opening	Name of winning contractor	Contractor's address	Date of the award of contract	Contract Amount (in Rs. lakhs)		Completion date (stipulated)	Name of other bidders to the contract	Result of Technical evaluation (Q/NQ)	Amount of bid (in Rs.)
													Items rate civil works amount	Maintenance amount				
1		2	3		4	5	6	7	8	9	10	11	12(a)	12(b)	13	14	15	16
1																		
2																		
3																		
4																		
5																		

**CERTIFIED BY:**  
Name, Position, Agency

### GENDER ACTION PLAN PROGRESS UPDATE TEMPLATE – TRANCHE 1

Activities	<b>Progress for the Reporting Period (MM/YYYY to MM/YYYY)</b> (This should include information on progress for the current quarter—qualitative and quantitative updates, including sex-disaggregated data)	<b>Cumulative Progress (MM/YYYY to MM/YYYY)</b> (This should include information on progress—qualitative and quantitative updates, including sex-disaggregated data, from the start of the implementation of the GAP to the previous quarter’s progress report.)	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
<b>Output 1. Rural roads in the investment program states improved</b>			
<b>1. Design Phase</b>			
1.1.1 Consider the specific needs of vulnerable users (elderly, women, children, and disabled) in the design and modification of roads.			
1.1.2 Involve women from the local communities in project areas in the identification of road alignment and decision making during the transect walk.			
1.1.3 Women are represented in Grievance Redress Committees (GRC).			
<b>2. Construction Phase</b>			
1.2.1 Hire women workers in road construction. Ensure equal wages for equal work.			
1.2.2 Ensure that contract documents prohibit the hiring of child labor.			
1.2.3 Ensure that affected female-headed households <sup>1</sup> are linked to national and state-sponsored government poverty alleviation programs.			

<sup>1</sup> Affected female-headed household: Affected household that is in the vulnerable category as defined by the Community Participation Framework.

Activities	<b>Progress for the Reporting Period (MM/YYYY to MM/YYYY)</b> (This should include information on progress for the current quarter—qualitative and quantitative updates, including sex-disaggregated data)	<b>Cumulative Progress (MM/YYYY to MM/YYYY)</b> (This should include information on progress—qualitative and quantitative updates, including sex-disaggregated data, from the start of the implementation of the GAP to the previous quarter's progress report.)	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
<b>3. Road Safety</b>			
1.3.1 Ensure the communities' participation in road safety awareness campaigns.			
<b>4. Project Monitoring</b>			
1.4.1 Collect sex-disaggregated data during preparation of the baseline census survey, subproject monitoring, and impact assessment reports.			
1.4.2 Gender Action Plan Monitoring and Reporting.			
<b>Output 2. Institutional capacity of PMGSY implementing agencies strengthened</b>			
2.1 Female PMSGY engineers trained in rural road developments through Rural Connectivity Training and Research Center operations.			

PMGSY = Pradhan Mantri Gramin Sadak Yojana.

**Comments/ Remarks:**

**Prepared by:** \_\_\_\_\_

**Approved by:** \_\_\_\_\_

**Date:** \_\_\_\_\_



## GENDER ACTION PLAN PROGRESS UPDATE TEMPLATE – TRANCHE 2

Activities	<b>Progress for the Reporting Period (MM/YYYY to MM/YYYY)</b> (This should include information on progress for the current quarter—qualitative and quantitative updates, including sex-disaggregated data)	<b>Cumulative Progress (MM/YYYY to MM/YYYY)</b> (This should include information on progress—qualitative and quantitative updates, including sex-disaggregated data, from the start of the implementation of the GAP to the previous quarter's progress report.)	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
<b>Output 1. Rural roads in Madhya Pradesh improved</b>			
<b>1. Design Phase</b>			
1.1.1 Consider the specific needs of vulnerable users (elderly, women, children, and disabled) in the design and modification of roads.			
1.1.2 Involve women from the local communities in project areas in the identification of road alignment and decision making during the transect walk.			
1.1.3 Women are represented in GRCs.			
<b>2. Construction Phase</b>			
1.2.1 Hire women workers in road construction. Ensure equal wages for equal work.			
1.2.2 Conduct public STD and HIV/AIDS prevention.			
<b>3. Project monitoring</b>			
1.3.1 Collect sex-disaggregated data during preparation of the baseline census survey, subproject monitoring, and impact assessment reports.			

Activities	<b>Progress for the Reporting Period (MM/YYYY to MM/YYYY)</b> (This should include information on progress for the current quarter—qualitative and quantitative updates, including sex-disaggregated data)	<b>Cumulative Progress (MM/YYYY to MM/YYYY)</b> (This should include information on progress—qualitative and quantitative updates, including sex-disaggregated data, from the start of the implementation of the GAP to the previous quarter's progress report.)	<b>Issues and Challenges</b> (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
1.3.2 GAP monitoring and reporting.			
<b>Output 2. Institutional capacity of PMGSY implementing agencies strengthened</b>			
2.1 Female PMSGY engineers trained in rural road development through rural connectivity training and research center operations.			
<b>Output 3. Operation and maintenance of PMGSY roads sustained</b>			
3.1 Ensure the communities' participation in road safety awareness campaigns.			

GAP = gender action plan, GRC = grievance redress committee, PMGSY = Pradhan Mantri Gramin Sadak Yojana, STD = sexually transmitted diseases.

**Comments/ Remarks:**

**Prepared by:** \_\_\_\_\_

**Approved by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

## DESIGN AND MONITORING FRAMEWORK FOR TRANCHE 1

Impact the Program is Aligned with			
Mobility and accessibility in India improved (India: Three Year Action Agenda, 2017–2018 to 2019–2020) <sup>a</sup>			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<b>Outcome</b> Rural connectivity in the investment program states improved	By 2022: a. Average travel time on PMGSY-I roads reduced by 30% (2017 baseline: 3.3 minutes per km) b. Average travel time on PMGSY-II roads reduced by 20% (2017 baseline: 2.5 minutes per km)	a–b. RRNMU annual report and annual socioeconomic impact report.	Extreme weather conditions derail project implementation.
<b>Outputs</b> 1. Rural roads in the investment program states improved	By 2021: 1a. At least 3,145.67 km of rural roads constructed to all weather standard under PMGSY-I (2017 baseline: 0 km) 1b. At least 3,108.59 km of rural roads upgraded under PMGSY-II (2017 baseline: 0 km) 1c. At least 1,600 habitations connected by rural roads under PMGSY-I (2017 baseline: 0) 1d. At least 15% of total kilometers in each investment program state used innovative approach methods (2017 baseline: 0%) 1e. Feasibility study for rural road innovation conducted (2017 baseline: not conducted) 1f. 100% of communities (at least 20% of participants are	1a–c. OMMAS           1d. TSC report           1e. TA consultant's report           1f. PIC report	Low response by contractors during the initial stage of procurement

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	women) consulted in the design process (2017 baseline: not applicable)		
2. Institutional capacity of PMGSY implementing agencies strengthened	By 2021: 2a. At least 2,000 PMGSY engineers have increased knowledge and skills on rural road development, road maintenance, and road safety through RCTRC operations. At least 15% of PMGSY engineers whose knowledge and skills have increased are women. (2017 baseline: 0)	2a. RCTRC annual report	
3. Operation and maintenance of PMGSY roads sustained	By 2021: 3a. State-specific road maintenance program prepared. (2017 baseline: not prepared) 3b. Road maintenance program executed by RRNMU for at least 10% of PMGSY roads that have completed the 5-year maintenance contract. (2017 baseline: not executed; 0% PMGSY roads) 3c. 55% of PMGSY-I roads and 60% of PMGSY-II roads under the investment program have road safety audits conducted in the first year; increased by 5% in the consecutive years. (2017 baseline: 0% PMGSY-I roads and 0% PMGSY-II roads) 3d. 100% of the recommendations from road safety audits incorporated into the road maintenance program by RRNMUs. (2017 baseline: not applicable) 3e. At least 15,000 students have increased understanding of road safety. At least 40% students participating in the	3a–b. RRNMU annual report  3c–e. PIC and TSC reports	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	road safety awareness sessions are girls. (2017 baseline:0)		
	3f. State-specific disaster risks and vulnerability reports with gender-segregated data prepared. (2017 baseline: not prepared)	3f. TA consultant's report	

### Key Activities with Milestones

#### 1. Rural roads in the investment program states improved

- 1.1 Select the PMGSY-I and PMGSY-II roads by state and approved by MORD's Empowered Committee by July 2017.
- 1.2 Mobilize PIC by May 2017 and TSC by January 2018.
- 1.3 Ensure that DPRs are cleared by TSC 1 month before submitting PFRs to ADB.
- 1.4 Award all civil works contracts of tranche 1 by June 2018.
- 1.5 Mobilize TA consultant (consulting firm) by June 2018.

#### 2. Institutional capacity of PMGSY implementing agencies strengthened

- 2.1 Mobilize institutional strengthening consultant by January 2018.
- 2.2 Roll out training program by March 2018.

#### 3. Operation and maintenance of PMGSY roads sustained

- 3.1 Mobilize individual consultant for road safety and rural road maintenance by March 2018.

### Inputs

ADB: \$250 million loan; \$500,000 technical assistance grant

Government: \$415.32 million

ADB = Asian Development Bank; DPR = detailed program report; km = kilometer, OMMAS = online management, monitoring, and accounting system; PFR = periodic financing request, PIC = program implementation consultant; PMGSY = Pradhan Mantri Gram Sadak Yojana (Prime Minister's Rural Road Program); PRI = panchayat raj institution; RCTRC = rural connectivity training and research center; RRNMU = rural road network management unit; TA = technical assistance; TSC = technical support consultant.

<sup>a</sup> Government of India, National Institution for Transforming India Aayog. 2017. *India: Three Year Action Agenda, 2017–18 to 2019–20*. New Delhi.

Source: Asian Development Bank.

## DESIGN AND MONITORING FRAMEWORK FOR TRANCHE 2

Impact the Program is Aligned with			
Mobility and accessibility in India improved (India: Three Year Action Agenda, 2017–2018 to 2019–2020) <sup>a</sup>			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
<b>Outcome</b> Rural connectivity in Madhya Pradesh improved	By 2023: a. Average travel time on PMGSY-II roads in Madhya Pradesh reduced by 20% (2017 baseline: 2.5 minutes per km)  b. Use of roads upgraded to PMGSY-II standard increased to 2.41 average daily million vehicle-kilometers in the first full year of operation (2017 baseline: 1.89 million vehicle-kilometers)	a.–b. RRNMU annual report and annual socioeconomic impact report	Extreme weather conditions beyond projections cause significant damage to the project roads
<b>Outputs</b> 1. Rural roads in Madhya Pradesh improved	By 2022: 1a. At least 2,800 km of rural roads upgraded to all-weather standards with climate resilient features in accordance with PMGSY-II guidelines <sup>b</sup> (2017 baseline: 0 km) 1b. At least 15% of total length constructed used innovative approaches <sup>c</sup> (2017 baseline: 0) 1c. At least 33% of workers hired in road construction works are women (2017 baseline: 0)	1a. OMMAS of PMGSY  1b.–c. TSC report	Low response by contractors during the initial stage of procurement
2. Institutional capacity of PMGSY implementing agencies strengthened	By 2022: 2a. At least 500 PMGSY engineers (at least 15% women) reported increased knowledge and skills on rural road development, road maintenance, and road safety (2017 baseline: 0)	2a. RCTRC annual report	
3. Safety of PMGSY roads sustained	By 2022: 3a. Road safety audits completed for 100% of project roads at design, construction and operational stages (2017 baseline: 0)	3a.–c. PIC and TSC reports	

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	3b. 100% of the recommendations from road safety audits implemented (2017 baseline: not applicable) 3c. At least 4,000 students (at least 40% girls) reported increased understanding on road safety (2017 baseline: 0) 3d. Road safety impact study on selected investment program roads conducted (2017 baseline: not conducted)	3d. Report on road safety impact study	
<b>Key Activities with Milestones</b> <b>1. Rural roads in Madhya Pradesh improved</b> 1.1 Select PMGSY-II roads in Madhya Pradesh and consult with communities along the selected roads, especially women, through transect walks by November 2017. <sup>d</sup> 1.2 Secure approval of the selected roads from MORD's Empowered Committee by January 2018. 1.3 Ensure that DPRs are cleared by TSC 1 month before submitting PFRs to ADB. 1.4 Award all civil works contracts by November 2018. <b>2. Institutional capacity of PMGSY implementing agencies strengthened</b> 2.1 Roll out training program by August 2018. <b>3. Safety of PMGSY roads sustained</b> 3.1 Conduct road safety audit at design stage by January 2018, and at construction and operation stages by December 2022. 3.2 Conduct safety awareness sessions for schools and rural communities by December 2022. 3.3 Conduct road safety impact study on selected roads by December 2022.			
<b>Inputs</b> ADB: \$110 million (loan) Government: \$193 million			

ADB = Asian Development Bank, DPR = detailed program report, km = kilometer, MORD = Ministry of Rural Development, OMMAS = online management, monitoring, and accounting system, PFR = periodic financing request, PIC = program implementation consultant, PMGSY = Pradhan Mantri Gram Sadak Yojana (Prime Minister's Rural Road Program), RCTRC = rural connectivity training and research center, RRNMU = rural road network management unit, TSC = technical support consultant.

<sup>a</sup> Government of India, National Institution for Transforming India Aayog. 2017. [India: Three Year Action Agenda, 2017–18 to 2019–20](#). New Delhi.

<sup>b</sup> The rural road design will include climate change adaptation measures, such as increased capacity of side and cross drains, and slope protection.

<sup>c</sup> Including the use of asphalt cold-mixing method, chemical for waterproofing of subbase course, plastic waste and paneled concrete pavement.

<sup>d</sup> Based on the gender action plan, 20% of participants in the transect walk are women.

Source: Asian Development Bank.