



Periodic Financing Request Report

Project Number: 40423-053
MFF Number: 0069
October 2015

India: Rural Connectivity Investment Program (Tranche 3)

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 8 October 2015)

Currency Unit – Indian rupee/s (Re/Rs)

Re1.00 = \$0.0154

\$1.00 = Rs 64.96

ABBREVIATIONS

ADB	–	Asian Development Bank
CPF	–	community participation framework
DPR	–	detailed project report
EARF	–	environmental assessment and review framework
ECOP	–	environmental code of practice
EMP	–	environmental management plan
FAM	–	facility administration manual
FFA	–	framework financing agreement
GAP	–	gender action plan
IEE	–	initial environmental examination
km	–	kilometer
LIBOR	–	London interbank offered rate
MFF	–	multitranchise financing facility
MORD	–	Ministry of Rural Development
NCB	–	national competitive bidding
NRRDA	–	National Rural Road Development Agency
PIC	–	project implementation consultant
PIU	–	project implementation unit
PMGSY	–	Pradhan Mantri Gram Sadak Yojana (Prime Minister's Rural Roads Program)
RCTRC	–	Rural Connectivity Training and Research Center
RRNMU	–	Rural Road Network Management Unit
SC	–	Scheduled Caste
SPS	–	Safeguard Policy Statement
SRRDA	–	State Rural Road Development Agency
SSTC	–	second stage training consultant
ST	–	Scheduled Tribe
TSC	–	technical support consultant

NOTE

In this report, "\$" refers to US dollars.

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1. Status of Compliance with Framework Financing Agreement and Loan Covenants for Project 1 and Project 2
2. Climate Change: Project Adaptation Action Report

TRANCHE AT A GLANCE

1. Basic Data		Project Number: 40423-053	
Project Name	Rural Connectivity Investment Program - Tranche 3	Department /Division	SARD/SATC
Country	India	Executing Agency	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 Roads Department (Government of Assam), Rural Development Department (Government of Odisha)
Borrower	India		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✔ Transport	Road transport (non-urban)		273.00
		Total	273.00
3. Strategic Agenda	Subcomponents	Climate Change Information	
Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive	Adaptation (\$ million)	28.25
		Climate Change impact on the Project	Medium
4. Drivers of Change	Components	Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development	Effective gender mainstreaming (EGM)	✔
Private sector development (PSD)	Public sector goods and services essential for private sector development		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	No	Rural	High
6. Risk Categorization:		Complex	
7. Safeguard Categorization		Environment: B Involuntary Resettlement: C Indigenous Peoples: C	
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		273.00	
Sovereign MFF-Tranche (Loan): Ordinary capital resources		273.00	
Cofinancing		0.00	
None		0.00	
Counterpart		233.89	
Government		233.89	
Total		506.89	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		Yes	

TRANCHE AT A GLANCE

Date of Receipt by ADB of PFR: 15 May 2015

Tranche Number: 3

10. Country Operations Business Plan

CPS

COBP

<http://www.adb.org/documents/india-country-partnership-strategy-2013-2017>

<http://www.adb.org/documents/india-country-operations-business-plan-2013-2015>

11. Tranche Summary

The Rural Connectivity Investment Program supports the government's objectives under the PMGSY in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal (the investment program states). The investment program will improve and sustain the connectivity of selected rural communities in the investment program states to markets, district headquarters, and other centers of economic activities.

Impact and Outcome: The impact will be improved access to markets, district headquarters, and other centers of socio-economic activities aligned with India's Five Year Plan, 2012-2017. The outcome will be improved and sustained connectivity of selected rural communities in the investment program states.

Outputs: (i) Selected rural roads are constructed to all-weather standard, (ii) quality of design of RCIP roads is improved, (iii) maintenance of RCIP roads is improved and sustained, (iv) road safety measures are incorporated into the design, (v) institutional capacity strengthened, and (vi) effective project management provided.

Implementation Arrangements: 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 Roads Department (Government of Assam) and Rural Development Department (Government of Odisha) will be the executing agencies.

Project Readiness: Detailed design for the civil works has been prepared for all project roads. For the procurement of civil works, advance contracting activities based on the provision in the FFA have been started in all investment program states except West Bengal, where procurement activity is still under preparation. As of 31 May 2015, about 54% of the civil works contracts have been awarded. Mobilization of contractors has been started in the states of Assam, Chhattisgarh, Madhya Pradesh, and Odisha. Environmental and social safeguards have been assessed in accordance with ADB and government requirements. No environment or forest clearance is required. No land acquisition is envisaged.

12. Significant Developments in the MFF and Previous Tranches

Project 1 was for \$252 million and financed (i) the construction of 3,461 km of rural roads in the investment program states, (ii) consultancy services to provide support for subprojects under the investment program, (iii) capacity building for the implementing agencies to establish the Rural Road Network Management Units (RRNMUs) and Rural Connectivity Training and Research Centers (RCTRCs), and (iv) establishment of the RRNMU and RCTRC facilities. The loan was approved on 22 August 2012, declared effective on 5 June 2013, and will close on 31 December 2017.

Project 2 was for \$275 million and financed (i) the construction of 3,693 km of all-weather rural roads in the investment program states, and (ii) part of RRNMU and RCTRC equipment. The loan was approved on 25 November 2013, declared effective on 31 March 2014, and will close on 31 December 2017.

13. Milestones

Estimated Approval

Estimated Effectiveness

Estimated Completion^a

30 October 2015

30 December 2015

31 December 2017

14. Linked Documents

	Required Document	Disclosure Date
(i) Environment	IEE - Initial Environment Examination	
Weblink:	http://www.adb.org/projects/documents/rctrc-and-rrnm-bldgs-assam-chhattisgarh-madhyapradesh-assam-odisha-iee	9 June 2015
	http://www.adb.org/projects/documents/rural-connectivity-investment-program-p3-assam-roads-iee	9 June 2015
	http://www.adb.org/projects/documents/rural-connectivity-investment-program-p3-west-bengal-iee	9 June 2015
	http://www.adb.org/projects/documents/rural-connectivity-investment-program-p3-madhyapradesh-iee	9 June 2015
	http://www.adb.org/projects/documents/rural-connectivity-investment-program-p3-odisha-roads-iee	9 June 2015
	http://www.adb.org/projects/documents/rural-connectivity-investment-program-p3-chhattisgarh-roads-iee	9 June 2015
(ii) Involuntary resettlement		
Weblink:		
(iii) Indigenous peoples		
Weblink:		

^a For Tranches, this refers to the financial closing date.

I. BACKGROUND

1. The absence of all-weather road connectivity is a serious problem in India's rural areas, making these communities inaccessible for up to 90 days a year. Poor road infrastructure affects economic growth, agricultural productivity, and employment in these areas, and therefore has a strong link to poverty. The Government of India is addressing this problem through the implementation of a nationwide rural road investment program—the Prime Minister's Rural Roads Program (PMGSY)—aimed at providing all-weather road connectivity to currently unconnected eligible habitations in India's rural areas. Since it was started in 2000, this flagship program has constructed 426,629 kilometers (km) of rural roads, connecting 156,206 habitations in India to a greater transportation network. The Asian Development Bank (ADB) country partnership strategy (CPS), 2013–2017 for India¹ is closely aligned with the priorities of India's Twelfth Five Year Plan, 2012–2017.² The CPS reconfirms continuing ADB assistance for the development of rural roads, which is critical for rural development as they provide access to markets, health, education, and administrative services.

2. The Rural Connectivity Investment Program supports the government's objectives under the PMGSY in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal (the investment program states). The investment program will improve and sustain the connectivity of selected rural communities in the investment program states to markets, district headquarters, and other centers of economic activities.

3. The framework financing agreement (FFA) for the investment program was signed by ADB and the government on 17 May 2012. Subsequently, on 12 July 2012, ADB's Board of Directors approved the provision of loans under a multitranche financing facility (MFF) in an aggregate amount equivalent to \$800 million. The investment program comprises a series of projects to be implemented from 2012 to 2017, and specific capacity enhancement measures.

4. Project 1 was for \$252 million and financed (i) the construction of 3,461 km of rural roads in the investment program states, (ii) consultancy services to provide support for subprojects under the investment program, (iii) capacity building for the implementing agencies to establish the Rural Road Network Management Units (RRNMUs) and Rural Connectivity Training and Research Centers (RCTRCs), and (iv) establishment of the RRNMU and RCTRC facilities. The loan was approved on 22 August 2012, declared effective on 5 June 2013, and will close on 31 December 2017.³

5. Project 2 was for \$275 million and financed (i) the construction of 3,693 km of all-weather rural roads in the investment program states, and (ii) part of RRNMU and RCTRC equipment. The loan was approved on 25 November 2013, declared effective on 31 March 2014, and will close on 31 December 2017.⁴

6. ADB received the third periodic financing request from the government on 15 May 2015 in the amount of \$273 million. This report has been prepared to provide ADB Management with the project team's assessment of the MFF implementation and the relevant features of the proposed project 3.

¹ ADB. 2013. *Country Partnership Strategy: India, 2013-2017*. Manila.

² Government of India, Planning Commission. 2013. *Twelfth Five Year Plan, 2012-2017*. Delhi.

³ ADB. 2012. *Periodic Financing Request Report: Rural Connectivity Investment Program (Tranche 1) in India*. Manila. (Loan 2881-IND)

⁴ ADB. 2013. *Periodic Financing Request Report: Rural Connectivity Investment Program (Tranche 2) in India*. Manila. (Loan 3065-IND)

II. ASSESSMENT OF IMPLEMENTATION

7. Project 1 is *on track*. As of 9 March 2015, 528 of 531 (99.4%) packages worth \$225.6 million have been awarded,⁵ and a cumulative disbursement of \$117.18 million has been achieved. In terms of the delivery of project outputs, 1,849 km (52%) of all-weather rural roads have been completed, connecting 614 habitations in the investment program states. Procurement of the pilot RRNMU and RCTRC buildings is ongoing. In terms of consulting services, the capacity building consultant under technical assistance,⁶ project implementation consultants (PICs), and the technical support consultant (TSC) have been recruited and mobilized. The recruitment process for the second stage training consultant (SSTC) was started in March 2015.⁷ The loan closing date has been extended from 15 December 2015 to 31 December 2017. All project activities will be completed on or before the new loan closing date.

8. Project 2 is also *on track*. As of 9 March 2015, 591 of 730 (81%) packages worth \$201.6 million have been awarded, and a cumulative disbursement of \$45.2 million has been achieved. In terms of the delivery of project outputs, 596 km (16%) of all-weather rural roads have been completed, connecting 235 habitations in the investment program states. Procurement of equipment for the pilot RRNMUs and RCTRCs is ongoing in the investment program states. All project activities will be completed on or before the loan closing date of 31 December 2017.

9. Safeguard requirements for projects 1 and 2 have been met satisfactorily. Procedures laid out in the community participation framework (CPF) are being followed, and no outstanding claims exist regarding land donation or physical relocation. Environmental monitoring activities and compilation of on-site monitoring checklists have been performed in accordance with the environmental assessment and review framework (EARF). Overall, the government and the investment program states are compliant with the loan covenants and undertakings set out in the loan and project agreements and FFA on procurement, implementation arrangements, and safeguards. The social due diligence report provides more details on the implementation status of the CPF requirements, and the annual environmental monitoring report details environmental safeguards. Both are disclosed on the ADB website.

III. PERIODIC FINANCING REQUEST

A. Impact and Outcome

10. The impact will be improved access to markets, district headquarters, and other centers of socio-economic activities aligned with India's Five Year Plan, 2012-2017. The outcome will be improved and sustained connectivity of selected rural communities in the investment program states.

B. Outputs

11. Project 3 will have six outputs: (i) selected rural roads are constructed to all-weather standard, (ii) the quality of design of investment program roads is improved, (iii) maintenance of investment program roads is improved and sustained, (iv) road safety measures are

⁵ ADB share, which is 80% of civil works.

⁶ Attached to ADB. 2012. *Periodic Financing Request Report: Rural Connectivity Investment Program (Tranche 1) in India*. Manila. (Loan 2881-IND)

⁷ SSTC will assist the RCTRCs during the roll out of the training and its certification of the PIU staff, panchayat raj institutes staff, design consultants and contractors in the investment program states.

incorporated into the design, (v) institutional capacity is strengthened, and (vi) effective project management is provided.

12. **Road infrastructure development component.** By the end of 2017, project 3 will construct 6,124 km of all-weather rural roads⁸ and connect 1,945 habitations in the investment program states.⁹ As intended for the investment program, project 3 will continue the use of new construction technologies and local materials.¹⁰ The all-weather standard will be adopted to increase the resilience of communities against the impact of climate changes. All roads constructed will include a 5-year performance-based maintenance contract.

13. **Institutional strengthening component.** By the end of 2017, project 3 will construct 25 RRNMUs in the investment program states: six RRNMUs in Assam, four in Chhattisgarh, six in Madhya Pradesh, five in Odisha, and four in West Bengal. RCTRCs will carry out training and its certification of at least 4,000 project implementation unit (PIU) staff and 700 *Panchayati Raj Institution* (PRI), design consultant, and contractor staff.

C. Investment and Financing Plans

14. The tranche is estimated to cost \$506.89 million equivalent (Table 1).

Table 1: Tranche Investment Plan
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1. Road infrastructure development	475.69
2. Institutional strengthening	25.00
Subtotal (A)	500.69
B. Financing Charges During Implementation^c	6.20
Total (A+B)	506.89

^a Includes taxes and duties of \$14.5 million to be financed from government resources through cash contribution.

^b In 2015 prices.

^c Includes interest and commitment charges. Interest during construction for the Asian Development Bank (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 (for LIBOR-based loans only).

Source: Asian Development Bank estimates.

15. The government has requested a loan of \$273 million from ADB's ordinary capital resources to help finance the project. The loan will use a sector modality, and have a 20-year term, including a grace period of 5 years, straight-line repayment method, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per annum, and such other terms and conditions set forth in the draft loan and project agreements.¹¹

⁸ The list of roads is accessible in Attachment A of the Updated Facility Administration Manual.

⁹ Includes new construction and upgrading to the all-weather standard. Adopted design standards are in Attachment G of the Updated Facility Administration Manual.

¹⁰ Such as cold-mix bitumen emulsion, interlocking concrete blocks, and eco-friendly jute geotextile and vetiver grass for soil stabilization and water conservation.

¹¹ Based on this, the maturity premium payable to ADB is nil.

16. The financing plan is in Table 2.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	273.00	53.86
Government	233.89	46.14
Total	506.89	100.00

Source: Asian Development Bank estimates.

D. Implementation Arrangements

17. The implementation arrangements are summarized in Table 3 and described in detail in the updated facility administration manual (FAM).¹²

Table 3: Implementation Arrangements

Aspects	Arrangements
Implementation period	January 2016–December 2017
Estimated completion date	31 December 2017; Loan closing date: 30 June 2018
Management	
(i) Oversight body	Coordination committee (chair: joint secretary, MORD; members: senior officials representing MORD, NRRDA, Department of External Affairs, and the state governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal)
(ii) Executing agencies	National level: MORD State level: The Governments of Assam (through Public Works Department), Chhattisgarh, Madhya Pradesh, West Bengal (through the respective Departments of <i>Panchayat</i> (local assembly) and Rural Development), and Odisha (through the Departments of Rural Development)
(iii) Key implementing agencies	State Road Board in Assam; State Rural Road Agency in Odisha, State Rural Development Agency in West Bengal, and Rural Road Development Authority in Madhya Pradesh and Chhattisgarh
(iv) Implementation units	PIUs established at the district level (53 in Assam, 50 in Chhattisgarh, 69 in Madhya Pradesh, 60 in Odisha, and 32 in West Bengal)
Procurement	National competitive bidding Works (roads): 1,177 contracts \$500.69 million Works (building): 25 contracts
Retroactive financing and advance contracting	Civil works for up to about \$54.6 million
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.

ADB = Asian Development Bank, MORD = Ministry of Rural Development, NRRDA = National Rural Road Development Agency, PIU = project implementation unit.

Source: Asian Development Bank estimates.

E. Project Readiness

18. Detailed design for the civil works has been prepared for all project roads. For the procurement of civil works, advance contracting activities based on the provision in the FFA have been started in all investment program states except West Bengal, where procurement activity is still under preparation. As of 31 May 2015, about 54% of the civil works contracts have been awarded. Mobilization of contractors has been started in the states of Assam,

¹² Updated Facility Administration Manual (accessible from the list of appendixes as Appendix 5).

Chhattisgarh, Madhya Pradesh, and Odisha. Environmental and social safeguards have been assessed in accordance with ADB and government requirements. No environment or forest clearance is required. No land acquisition is envisaged.

F. Advance Contracting and Retroactive Financing

19. The FFA allows advance contracting of civil works subject to agreed procedures. It also allows retroactive financing of the expenditures incurred toward civil works eligible under advance contracting, provided that the expenditures are incurred for a period of 12 months prior to the signing of the related loan agreement, and that they do not exceed an amount equivalent to 20% of the individual loan. The government requested retroactive financing for project 3. The government has been informed that the approval of advance action does not commit ADB to finance project 3.

IV. DUE DILIGENCE

A. Technical

20. The roads have been selected based on PMGSY guidelines, and the designs have been prepared to be in line with the applicable standard of the Indian Road Congress.¹³ The road design has also taken into account site information and local community aspirations gathered during the transect walks, as an innovative approach to promote social inclusiveness and community participation in the rural road development process. A road safety audit—based on a representative sample of 10% of the roads—was conducted in each state during the design and project preparatory stage.

B. Economic and Financial

21. Economic analysis was conducted on the representative sample sections from each state considering vehicle operating cost savings for motorized vehicles, travel time savings for passengers of motorized vehicles, value of equivalent energy savings for slow-moving vehicle users, and increased travel costs during the rainy season. Considering the additional benefits provided by the all-weather roads—health, education, agriculture, poverty reduction, employment and income, housing facilities, and moveable assets—which are not included in the analysis, a discount rate of 10% is considered an acceptable rate of return for economic viability. The analysis indicated that the investment program is economically viable overall, with an economic internal rate of return of 14.3%–17.0% at state level in the investment program states. Sensitivity analysis indicated that, with a 10% increase in capital costs or a 10% decrease in benefits, the investment program remains economically viable in all investment program states. Several additional benefits are derived from the all-year accessibility to the villages, such as increased crop diversification and pattern; reduced spoilage; increased land value; and improved educational opportunities and access to health facilities. These are not included in the economic analysis but would increase the economic rate of return if considered.

22. The maintenance of roads under the PMGSY is funded by excise tax on high-speed diesel oil. The sustainability of roads constructed under the project is ensured through (i) the provision of 5 years of post-construction road maintenance included in the civil work contracts financed by the investment program states; and (ii) adequate funding provided by the

¹³ The Indian Road Congress is the national body responsible for sharing knowledge on all subjects dealing with transportation.

government after the initial 5 years, to be managed by the RRNMUs, to ensure programmed maintenance activities and adequate maintenance financing are in place.

C. Governance

23. **Institutional.** The investment program states have established institutions equivalent to state rural road development agencies (SRRDAs),¹⁴ and assign PIUs to manage the PMGSY. Since the start of the PMGSY in 2000, these investment program states have developed adequate implementation experience, qualifications, and capacity for rural road development. The state governments will utilize PICs in the implementation of the safeguard frameworks and the application of road safety measures. The Ministry of Rural Development (MORD) and the National Rural Road Development Agency (NRRDA) will be supported by the TSC for overall due diligence, training, and monitoring of compliance.

24. **Financial management.** The fund flow from the central to state governments will follow the pattern of grants-in-aid under the centrally sponsored schemes of the government, and its relevant financial rules will apply. The financial management risk is moderate.¹⁵ The fund released by MORD was inadequate to cover the expenditure incurred during a certain billing period, which slightly delayed progress by contractors. MORD will ensure the release of adequate funds based on the estimate and past utilization of funds. All states use an online management, monitoring, and accounting system for project accounting and reporting. Additional staff, as recommended under projects 1 and 2, are in place.

25. **Procurement.** All procurement of civil works financed by ADB will be done in accordance with ADB's Procurement Guidelines (2015, as amended from time to time). For the project roads, each state will follow national competitive bidding (NCB) with the standard PMGSY bidding document (improved as needed in agreement with ADB) and the e-procurement system, which was also approved by ADB for the project.¹⁶ For buildings, each state will also follow NCB with the bidding document approved by ADB.

26. **Consulting services.** Project 3 has no provision for financing consulting services. The service of the TSC will continue to be financed under project 1 to conduct the safeguard due diligence activities, impact and compliance monitoring, and other activities under the investment program according to the terms of reference. Similarly, the SSTC will be recruited under project 1 to support the RCTRC in rolling out the training program and its certification for the PIU, PRI, design consultant, and contractor staff.

27. **Anticorruption.** ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the central and state governments. The specific policy requirements and supplementary measures are presented in the updated FAM.¹⁷

D. Poverty, Social, and Gender Dimensions

28. **Poverty reduction and social impacts.** Project 3 is expected to connect 1,945 habitations, affecting an estimated 8,800 rural residents. The investment program states

¹⁴ The functions of SRRDAs are performed by the State Road Board in Assam, State Rural Roads Agency in Odisha, State Rural Development Agency in West Bengal, and Rural Road Development Authority in Madhya Pradesh and Chhattisgarh.

¹⁵ A financial management assessment carried out in 2011 has been updated. Further details are in the FAM.

¹⁶ Approval of an e-procurement system for NCB in all investment program states was granted by ADB in 2009–2011.

¹⁷ Facility Administration Manual (accessible from the list of appendixes as Appendix 5)

are among the poorest in India, with rural poverty rates ranging from 45% in Chhattisgarh to 23% in West Bengal.¹⁸ In Madhya Pradesh, Odisha, and Assam, about 33%–36% of rural households live below the poverty line. In the investment program states, half of the rural households are self-employed in agriculture. According to the baseline survey conducted at the onset of the program, journey patterns are mostly characterized by trips to the workplace and markets, and the key goods being transported are agriculture produce, construction material, and livestock.

29. The findings of the socioeconomic impact assessment conducted for project 1 in each state indicate that the project improved accessibility and contributed to economic development for the population along the project roads. Immediate benefits included significant travel time savings to the workplace (a reduction of 30%–40%); change toward increased use of motorized vehicles; an improvement in the availability, frequency, and quality of public transportation; and a marginal increase in household monthly income (5%). Moreover, most of the people surveyed (60%–70%) indicated an improvement in road safety knowledge and signage as a result of the project. Project 3 is expected to lead to similar positive impacts, which in the long term will contribute to improving basic access to markets and employment as well as administrative, health, and educational facilities. More details are in the updated summary poverty reduction and social strategy for project 3 (Appendix 8).

30. **Gender dimensions.** The initial gender analysis highlighted the benefits of all-weather roads on women's access and education services. Consultations with women confirmed their support for greater connectivity and need to access secondary education facilities, health services, and markets. These expectations were shared during project 3 transect walk activities, which involved over 11,330 women across the five investment program states, representing 26% of total participants. Moreover, experience in the implementation of projects 1 and 2 shows that the project can create income-generating opportunities for women. Under the ongoing tranches, 8,700 women were employed in construction activities, representing 25%–43% of the workforce depending on the state.

31. Project 3 is classified effective gender mainstreaming and a gender action plan (GAP) has been prepared, taking into account the lessons learned from the implementation of projects 1 and 2. It was decided not to include some of the activities¹⁹ of the MFF-wide GAP because they were difficult to monitor during the lifetime of the project roads or no longer furthering gender equality purposes.²⁰ Gender-specific project activities include (i) women's participation in construction activities (33% of the construction workforce); (ii) women's participation in road design (20% of transect walk participants); (iii) women's participation in grievance redress committees (30% of members); and (iv) schoolgirls' participation in road awareness campaigns (40% of participants). The GAP for project 3 is presented in the updated FAM.

32. **HIV/AIDS and human trafficking.** The social due diligence of ongoing projects reveals that the risk of the project to increase the spread of HIV/AIDS and human trafficking is very low. Labor needs are overall low, and local labor is usually preferred. Construction activities do not usually require setting up a construction camp. HIV/AIDS awareness activities have been conducted selectively during the implementation of projects 1 and 2. Awareness sessions were

¹⁸ Government of India, Planning Commission. 2013. *Poverty Estimates for 2011–2012*. New Delhi.

¹⁹ These are road maintenance and professional female staff in RRNMUs and RCTRCs.

²⁰ More information is in the summary poverty reduction and social strategy (accessible from the list of appendixes as Appendix 8)

conducted across the investment program states. The same approach will be undertaken in project 3. Moreover, the executing agencies will ensure that all civil works comply with applicable labor laws and core labor standards, including the prohibition of child labor, nondiscrimination, and equal pay for equal work.

E. Safeguards

33. **Environmental safeguards.** The project roads, RCTRCs, and RRNMUs in the investment program states under project 3 are classified environment category B in accordance with ADB's Safeguard Policy Statement (SPS, 2009). The EARF prepared under project 1 was found to be adequate and was followed to guide subproject selection for project 3. In line with the EARF, state level initial environmental examinations (IEEs)—based on a representative sample of 10% of the roads and one IEE covering RCTRCs and pilot RRNMUs in all the investment program states—have been prepared based on environment code of practice (ECOP) checklists completed for all roads and a screening checklist for buildings. The six IEEs were disclosed on the ADB website on 9 June 2015. The same checklist will be applied for the 25 RRNMU buildings that will be designed and appraised during the implementation of project 3. A climate change vulnerability assessment for each state was performed and integrated in the IEE reports. In accordance with the findings of the IEE reports, predicted environmental impacts are minimal, temporary, and reversible since they are mainly related to occupational health and safety and minor issues of dust, noise, and water pollution that occur mostly during construction, with some potential issues of road safety and air pollution resulting from increased traffic. Mitigation measures are integrated into construction works through the incorporation of a standard environmental management plan (EMP) in the bidding documents and the provision of road-specific EMPs with the detailed project reports (DPRs), based on information in the ECOP checklist. Preparation of the ECOP checklist requires site transect walks and public consultations. Therefore, concerned community members have been consulted for each road under the project. A grievance redress mechanism to address the concerns of relevant stakeholders will be implemented following a similar approach to that of the projects 1 and 2.

34. For project 3, the same institutional arrangement as in projects 1 and 2 will be followed for environmental safeguards. The TSC will continue to monitor safeguard activities on behalf of the NRRDA and ensure that the SRRDA safeguard officers are maintained, all project roads conform with the environment category B threshold, review environmental checklists, and conduct EMP compliance inspections. At the SRRDA level, the PIC and PIUs will continue to ensure that all DPRs contain responsive road-specific EMPs and comply with statutory requirements, and that adequate resources are provided in the bidding documents to implement needed environmental measures. The PIC and PIUs will continue to maintain monitoring checklists during various stages of project implementation, as in earlier projects.

35. **Involuntary resettlement.** Project 3 is categorized C for resettlement impacts. Road improvement will be conducted in the existing right-of-way and impacts are marginal, with minor widening and realignment in a few cases requiring narrow strips of land to be made available. The voluntary land donation system has been used under the PMGSY and other rural development schemes across India and has proved effective. It was refined with the guidelines of the state-specific CPFs to comply with the SPS. The CPFs are disclosed on the ADB website.

36. The social due diligence for project 3 confirmed that the communities and affected persons were consulted about the project roads. In accordance with PMGSY and CPF guidelines, transect walks were conducted for all project roads, involving 43,657 participants. During the transect walks and subsequent consultations, affected persons were made aware

that they had the option to refuse land donation and as a result, some of the roads initially screened were dropped from the project. Census surveys were conducted and identified 2,675 affected persons, among whom 823 are considered vulnerable. Vulnerable affected individuals who do not already benefit from state or national government-sponsored poverty alleviation schemes will be linked to these programs by the project.

37. The surveys revealed that no physical relocation would result from the project, as impacts identified were minor—affecting 5% or less of an individual's plot of land and in rare instances, external sections of privately owned structures (i.e., fences, stairs, and verandahs), which the panchayats will support in rebuilding. No affected person has fallen under the poverty line as a result of the donations. Memorandums of understanding with each affected individual have been secured by the PIUs and verified by a third party. A grievance redress committee has also been set up for each project road. For more information, state-specific social compliance reports for the project 3 roads have been disclosed on the ADB website.

38. Like the pilot RRNMU and RCTRC buildings under project 1, the RRNMU buildings under project 3 will be constructed on government lands. To ensure the land and building requirements comply with the SPS, a compliance checklist has been developed. The PIC will check the selected sites in accordance with the checklist, and the TSC will confirm compliance prior to the award of contracts. This process will be reflected in the annual social monitoring report.

39. **Indigenous peoples.** Project 3 is classified category C for impacts on indigenous peoples in accordance with the SPS. Through the census survey, Scheduled Tribes (STs) and Scheduled Castes (SCs) 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 STs and SCs in the areas. Moreover, the CPFs call for proactive measures to link any affected family categorized as vulnerable, which includes STs and SCs, to the national and state-sponsored poverty alleviation and livelihood enhancement schemes.

F. Risks and Mitigating Measures

40. Major risks and mitigating measures are summarized in Table 4. All risks are low when the mitigating measures are applied, and the integrated benefits and impacts are expected to outweigh the costs.

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigating Measures
Delay in initial procurement of civil works packages resulting from nonresponsive bids.	Advance action for procurement has been used. The state governments have sufficient capacity and experience in repackaging subprojects or any other measures to attract bidders, including the use of an e-procurement system.
Inadequate road maintenance after the completion of 5-year maintenance contracts.	RRNMUs are expected to be in operation within the implementation period of project 3, and continuously rolled out by the state governments to ensure a systematic and prioritized road maintenance program is in place and sufficiently funded from central government resources.

RRNMU = Rural Road Network Management Unit.

Source: Asian Development Bank.

G. Risk Categorization

41. Project 3 is categorized *complex* as the loan amount is more than \$200 million. Otherwise, all remaining criteria for a low-risk project have been met. These are (i) ADB's experience in the road sector in India has a sound record; (ii) the executing agency capacity, in terms of externally financed project administration, is reasonable; and (iii) all safeguard categorizations are other than A.

V. ASSURANCES

42. The government and the Rural Connectivity Investment Program states have assured ADB that implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.

43. The government and the Rural Connectivity Investment Program states have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement and project agreements.

VI. RECOMMENDATION

44. On the basis of the approval by ADB's Board of Directors for the provision of loans under the multitranche financing facility in an aggregate principal amount not exceeding \$800,000,000 to India for the Rural Connectivity Investment Program, it is recommended that the President approve the proposed tranche as described in para. 15 and such other terms and conditions as are substantially in accordance with those set forth in the draft loan and project agreements for the proposed tranche.

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Impact the Project is aligned with:

Improved access to markets, district headquarters, and other centers of socio-economic activities (India's 12th Five Year Plan, 2012-2017)¹

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Improved and sustained connectivity of selected rural communities in the investment program states	By 2017 a. Estimated 1,320,000 average daily vehicle-km in the first full year of operation. b. All project roads are covered with 5-year performance-based maintenance contracts.	a-b. Impact monitoring and surveys by TSC b. OMMAS	Inadequate maintenance after the completion of the 5-year maintenance contract.
Outputs 1. Selected rural roads are constructed to all-weather standard	By 2017 1a. About 6,124 km of PMGSY sanctioned rural roads in Assam (486.98 km), Chhattisgarh (1,055.94 km), Madhya Pradesh (1,377.86 km), Odisha (2,565.81 km), and West Bengal (637.57 km), are constructed/upgraded to all-weather standards. 1b. At least 33% of construction workers are women 1c. The project roads are accessible for full 12 months per year.	1a. OMMAS 1b. GAP monitoring report 1c. Impact monitoring and surveys by TSC	Delay in initial procurement of civil work packages due to non-responsive bids.
2. Quality of design of RCIP roads is improved	By 2017 2a. All DPRs for Project 3 follow the standardized DPR template, and the quality control checklist is attached to DPRs. 2b. Communities along Project 3 roads (at least 20% women) are consulted in the design process.	2a. PIC and TSC reports; National/State Quality Reports 2b. Community design briefs as included in the DPRs	
3. Maintenance of RCIP roads is improved and sustained	By 2017 3a. At least 25 RRNMUs are fully operational (6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha, and 4 in West Bengal). 3b. Budget for maintenance for	3a. Annual reports by RRNMUs and RCTRCs and certified by NRRDA. 3b. Budget report.	

¹ Government of India, Planning Commission. 2013. *Twelfth Five Year Plan, 2012-2017*. Delhi.

	each project road is at least 5% of construction cost.		
4. Road safety measures are incorporated into the design	<p>By 2017</p> <p>4a. At least 10% of Project 3 designs in all RCIP states undergo RSAs, with emphasis on vulnerable road users.</p> <p>4b. In 30 districts of RRNMU at least 50% of designs and 30% of existing rural road network undergo RSAs, with emphasis on vulnerable road users.</p> <p>4c. At least 50% of schools in the target habitations receive road safety awareness sessions.</p> <p>4d. At least 40% of students participating in the road safety awareness sessions are women.</p> <p>4e. Average 'Safety Risk Rating' of the RSA reports should not be more than 2 on the sample roads.</p>	<p>4a-e. Summary RSA reports by PICs, TSC, and RRNMUs</p> <p>4a-e. Annual reports on road safety works completed and response reports by SRRDAs.</p>	
5. Institutional capacity strengthened	<p>By 2017</p> <p>5a. Five RCTRCs are established and fully operational.</p> <p>5b. Training and certification of at least 4,000 PIU staff and 700 PRI, design consultant and contractors staff completed.</p>	5a-b. Government circulars, budget allocations, and RCTRC's training certification records.	
6. Effective project management provided	<p>By 2017</p> <p>6a. Project 3 is approved as scheduled, and completed on time and within budget.</p> <p>6b. All RCIP performance targets and indicators are systematically monitored and achieved.</p>	6a-b. OMMAS and PIC/TSC reports.	

Key Activities with Milestones

1. Output 1: Selected rural roads are constructed to all-weather standard

- 1.1 Approve state-wise road lists and detailed designs by NRRDA before the PFR for Project 3 submission (March 2015)
- 1.2 Contractors implement contracts according to schedule and design (throughout implementation period)

2. Output 2: Quality of design of RCIP roads is improved

- 2.1 Undertake quality control check during detailed designs (by TSC) based on standardized DPR template (March 2015)

3. Output 3: Maintenance of RCIP roads is improved and sustained

- 3.1 All RRNMU staff are appointed (June 2017)

4. Output 4: Road safety measures are incorporated into the design

- 4.1 Conduct systematic RSAs on sample DPRs under Project 3 (by PICs in 2014) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2015 and 2016; by RRNMUs: in 2017 in 5 districts)

5. Output 5: Institutional capacity strengthened

- 5.1 Hire and engage RCTRC (fully staffed and equipped) in the investment program states (December 2015)
- 5.2 Large scale training started (April 2016)

6. Output 6: Effective project management provided

- 6.1 Hire and engage SRRDAs, PIUs, TSC and PICs and procure equipment (throughout Project 3)
- 6.2 SSTC in place (December 2015)
- 6.3 Start procurement of civil works before Project 3 approval
- 6.4 Construction supervision by PIUs (throughout Project 3).
- 6.5 Conduct baseline surveys by TSC (April 2015)
- 6.6 Conduct internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 3 implementation)
- 6.7 Undertake impact monitoring by TSC (on completion of Project 3 roads in December 2017) and by NRRDA (on completion of RCIP, by 2018)

Inputs

ADB: \$ 273 million (loan)
Government: \$ 233.89 million

Assumptions for Partner Financing

Not applicable

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project implementation unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = *Pradhan Mantri Gram Sadak Yojana*, PRI=*Panchayati Raj Institution*, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.
Source: Asian Development Bank.

LOAN NUMBER _____-IND

LOAN AGREEMENT
(Ordinary Operations)

(Rural Connectivity Investment Program – Project 3)

between

INDIA

and

ASIAN DEVELOPMENT BANK

DATED _____

LOAN AGREEMENT (Ordinary Operations)

LOAN AGREEMENT dated _____ between INDIA, acting by its President ("Borrower") and ASIAN DEVELOPMENT BANK ("ADB").

WHEREAS

(A) by a framework financing agreement dated 17 May 2012 between the Borrower and ADB, ADB has agreed to provide a multitranche financing facility to the Borrower for purposes of financing projects under the Rural Connectivity Investment Program.

(B) by a periodic financing request dated 14 May 2015, the Borrower has applied to ADB for a loan for the purposes of the Project described in Schedule 1 to this Loan Agreement (the "Project");

(C) the Project will be carried out by (i) the Borrower's Ministry of Rural Development ("MORD"); (ii) the State of Assam, (iii) the State of Chhattisgarh, (iv) the State of Madhya Pradesh, (v) the State of Odisha, and (vi) the State of West Bengal, and for this purpose the Borrower will make available to each of them the proceeds of the loan provided for herein upon terms and conditions mutually agreeable to ADB and the Borrower; and

(D) ADB has agreed to make a loan to the Borrower from ADB's ordinary capital resources upon the terms and conditions set forth herein and in the Project Agreements of even date herewith between ADB on the one part and MORD and each State (as hereinafter defined) on the other part.

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Loan Regulations; Definitions

Section 1.01. All the provisions of the Ordinary Operations Loan Regulations Applicable to LIBOR-Based Loans Made from ADB's Ordinary Capital Resources, dated 1 July 2001 ("Loan Regulations"), are hereby made applicable to this Loan Agreement with the same force and effect as if they were fully set forth herein, subject, however, to the following modifications:

(a) Section 3.03 is deleted and the following is substituted therefor:

Commitment Charge; Credit. (a) The Borrower shall pay a commitment charge on the unwithdrawn amount of the Loan at the rate and on the terms specified in the Loan Agreement.

(b) ADB shall provide to the Borrower a credit at the rate specified in the Loan Agreement, which credit shall remain fixed for the term of the Loan. ADB shall apply the credit against the interest payable by the Borrower.

(b) Section 3.06 is deleted and the following is substituted therefor:

Rebate. (a) Following any announcement by ADB that the Fixed Spread applicable to new Loans shall be reduced, ADB shall provide a Rebate to any Borrower with an outstanding Loan on which a higher Fixed Spread is applicable. The amount of the Rebate shall be determined by multiplying (i) the difference between the Fixed Spread applicable to the outstanding Loan and the Fixed Spread that will be applied to new Loans (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the lower Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB achieving savings, ADB shall provide a Rebate to the Borrower. The amount of the Rebate shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall apply the amount of the Rebate against the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

(c) Section 3.07 is deleted and the following is substituted therefor:

Surcharge. (a) Following any announcement by ADB that the Fixed Spread applicable to new Loans shall be increased, any Borrower with an outstanding Loan on which a lower Fixed Spread is applicable shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the difference between the Fixed Spread that will be applied to new Loans and the Fixed Spread applicable to the outstanding Loan (expressed as a percentage per annum), by (ii) the principal amount of the outstanding Loan on which the Borrower shall pay interest for all interest periods commencing on and after the effective date of the higher Fixed Spread that will be applied to new Loans.

(b) Following any announcement by ADB that its Funding Cost Margin calculations with respect to any Loan Currency (or Approved Currency) in any Semester resulted in ADB incurring additional costs, the Borrower shall pay ADB a Surcharge. The amount of the Surcharge shall be determined by multiplying (i) the Funding Cost Margin (expressed as a percentage per annum) by (ii) the principal amount of the Loan on which the Borrower shall pay interest for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated. ADB shall add the amount of the Surcharge to the interest payable by the Borrower for the Interest Period commencing immediately after the Semester for which the Funding Cost Margin was calculated.

Section 1.02. Wherever used in this Loan Agreement, the several terms defined in the Loan Regulations have the respective meanings therein set forth unless modified herein or the context otherwise requires. Additional terms used in this Loan Agreement have the following meanings:

- (a) "Assam" means the State of Assam;
- (b) "Chhattisgarh" means the State of Chhattisgarh;
- (c) "CPF" means each and any agreed Community Participation Framework applicable for a State or each and any Community Participation Framework for a Subproject, as the case may be;
- (d) "EARF" means the environmental assessment and review framework for the Project, including any update thereto, prepared and submitted by the Borrower through the Project Executing Agencies and cleared by ADB;
- (e) "ECOP" means the agreed Environmental Code of Practice for each State or its preparation for each Subproject or bridges longer than 50 meters, as the case may be;
- (f) "EMP" means each and any environmental management plan for the Project, including any update thereto, prepared and submitted by the Borrower through the relevant Project Executing Agency and cleared by ADB;
- (g) "EMR" means each report prepared and submitted by the Borrower through the relevant Project Executing Agency to ADB that describes progress with implementation of, and compliance with, the EMPs, including any corrective and preventative actions;
- (h) "Environmental Safeguards" means the principles and requirements set forth in Chapter V, Appendix I and Appendix 4 (as applicable) of the SPS;
- (i) "Facility" means the multitranche financing facility provided by ADB to the Borrower for purposes of financing projects under the Investment Program;

(j) “FAM” means the updated Facility administration manual for the Investment Program dated August 2015 and agreed between the Borrower and ADB, as updated from time to time in accordance with the respective administrative procedures of the Borrower and ADB;

(k) “FFA” means the framework financing agreement dated 17 May 2012 between ADB and the Borrower with respect to the Facility;

(l) “Financing Arrangements” means, in reference to Section 3.01 of this Loan Agreement, the arrangements between the Borrower and the States as per current policy of the Borrower, and acceptable to ADB;

(m) “GAP” means gender action plan prepared for the Facility and for each tranche thereunder and approved by the Borrower and set out in the FAM;

(n) “Government Contribution” means the amounts which the Borrower, MORD and the States have agreed to make available from their own resources for the purposes of the Project;

(o) “IA” means the implementing agency to be responsible for implementation of the Subprojects under this Project, which shall be state rural road development agencies, namely, in respect of Assam, the State Road Board; in respect of Chhattisgarh, the Chhattisgarh Rural Roads Development Authority; in respect of Madhya Pradesh, the Madhya Pradesh Rural Roads Development Authority; in respect of Odisha, the Odisha State Rural Roads Agency; and in respect of West Bengal, the West Bengal State Rural Development Agency;

(p) “IEE” means the initial environmental examination for the Project including any update thereto, prepared and submitted by the Borrower through the relevant Project Executing Agency pursuant to the requirements set forth in the EARF and cleared by ADB;

(q) “Investment Program” means the Rural Connectivity Investment Program;

(r) “Loan Disbursement Handbook” means ADB’s Loan Disbursement Handbook (2015, as amended from time to time);

(s) “Madhya Pradesh” means the State of Madhya Pradesh;

(t) “Non-Road Subproject” means a subproject under the Project that (i) meets the selection criteria set forth in Schedule 4 to the FFA, and (ii) involves the construction or development or equipping of RRNMUs or RCTRCs, as the case may be;

(u) “NRRDA” means the National Rural Roads Development Agency, which is an agency of MORD established to operationalize and manage the PMGSY at central level, or any legal successor thereto;

(v) “Odisha” means the State of Odisha;

(w) "Panchayat and Rural Development Department" means the Panchayat and Rural Development Department of any or all of Chhattisgarh, Madhya Pradesh and West Bengal, as the context may require, or any legal successor thereto acceptable to ADB;

(x) "Panchayati Raj Institution" means an institution of self-government constituted for rural areas in a State under Article 243-B of the Constitution of India; the three levels of Panchayati Raj Institution comprise gram panchayat at a village level, intermediate panchayat at a block level, and zilla panchayat/parishad at a district level;

(y) "PFR" means, for the purpose of this Loan Agreement, the periodic financing request dated 14 May 2015;

(z) "PIC" means the Project Implementation Consultants engaged by the States and financed by the Borrower;

(aa) "PIUs" means the Project Implementation Units established by each State in accordance with the PMGSY Guidelines;

(bb) "PMGSY" means Pradhan Mantri Gram Sadak Yojana or the Prime Minister's Rural Roads Program;

(cc) "PMGSY Guidelines" means the PMGSY Guidelines issued by MORD, as revised and issued in November 2004, as amended from time to time, and includes the Operations Manual issued in February 2005, and other instructions or notifications as may be issued under the stated guidelines;

(dd) "Procurement Guidelines" means ADB's Procurement Guidelines (2015, as amended from time to time);

(ee) "Procurement Plan" means the procurement plan for the Project agreed between the Borrower and ADB, as updated from time to time in accordance with the Procurement Guidelines and other arrangements agreed with ADB;

(ff) "Project Agreements" means the agreements of even date herewith between ADB and each of the Project Executing Agencies;

(gg) "Project Executing Agency" for the purposes of, and within the meaning of, the Loan Regulations means each of the entities indicated as follows, or any legal successors thereto acceptable to ADB: (i) MORD at the central level including through NRRDA; (ii) Assam through its Public Works Roads Department; (iii) Chhattisgarh through its Panchayat and Rural Development Department; (iv) Madhya Pradesh through its Panchayat and Rural Development Department; (v) Odisha through its Rural Development Department; and (vi) West Bengal through its Panchayat and Rural Development Department;

(hh) "Project Facilities" means the water supply, sewerage, solid waste management, drainage and urban transport infrastructure facilities to be constructed under the Project;

(ii) "RCTRCs" means the rural connectivity training and research centers established under the Investment Program;

(jj) "Road Subproject" means a subproject under the Project that (i) meets the selection criteria set forth in Schedule 4 to the FFA, and (ii) involves the construction of PMGSY roads to an all-weather standard;

(kk) "RRNMUs" means the Rural Road Network Management Units established under the Investment Program;

(ll) "Safeguards Monitoring Report" means each EMR or SMR;

(mm) "Scheduled Tribe" means such tribes or tribal communities or parts of groups within tribes or tribal communities as are deemed under Article 342 of the Constitution of India to be Scheduled Tribes in the State;

(nn) "SMR" means each report prepared and submitted by the Borrower through the relevant Project Executing Agency to ADB that describes progress with implementation of, and compliance with, the CPF, including any corrective and preventative actions;

(oo) "SPS" means ADB's Safeguard Policy Statement (2009);

(pp) "State" means any or all of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal, as the context may require;

(qq) "State AIDS Control Society" means the governmental agency established in each State to promote AIDS awareness and control and prevention measures;

(rr) "Subproject" means any Road Subproject or Non-Road Subproject;

(ss) "TSC" means the technical support consultant to be engaged by NRRDA to assist the IAs in, among other things, implementing road safety measures, conduct of maintenance for PMGSY roads, and monitoring compliance with Safeguard Requirements and Project performance, as set out in the terms of reference attached to the FAM;

(tt) "West Bengal" means the State of West Bengal;

(uu) "Works" means construction or civil works to be financed out of the proceeds of the Loan, including services such as drilling or mapping, and project related services that are provided as part of a single responsibility or turnkey contract; and

(vv) "Zilla Panchayat" means the Panchayat Raj Institution at district level as defined under Article 243-B of the Constitution of India, also known as Zilla Parishad in some States.

ARTICLE II

The Loan

Section 2.01. (a) ADB agrees to lend to the Borrower from ADB's

ordinary capital resources an amount of two hundred seventy-three million Dollar (\$273,000,000) as such amount may be converted from time to time through a Currency Conversion in accordance with the provisions of Section 2.06 of this Loan Agreement.

(b) The Loan has a principal repayment period of 15 years, and a grace period as defined in subsection (c) hereinafter.

(c) The term "grace period" as used in subsection (b) hereinabove means the period prior to the first Principal Payment Date in accordance with the amortization schedule set forth in Schedule 2 to this Loan Agreement.

Section 2.02. The Borrower shall pay to ADB interest on the principal amount of the Loan withdrawn and outstanding from time to time at a rate for each Interest Period equal to the sum of:

- (a) LIBOR; and
- (b) 0.60% as provided by Section 3.02 of the Loan Regulations; less a credit of 0.10% as provided by Section 3.03 of the Loan Regulations.

Section 2.03. The Borrower shall pay a commitment charge of 0.15% per annum. Such charge shall accrue on the full amount of the Loan (less amounts withdrawn from time to time), commencing 60 days after the date of this Loan Agreement.

Section 2.04. Interest and other charges on the Loan shall be payable semiannually on 15 March and 15 September in each year.

Section 2.05. The Borrower shall repay the principal amount of the Loan withdrawn from the Loan Account in accordance with the provisions of Schedule 2 to this Loan Agreement.

Section 2.06. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management:

- (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, whether withdrawn and outstanding or unwithdrawn, to an Approved Currency;
- (ii) a change of the interest rate basis applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding from a Floating Rate to a Fixed Rate, or vice versa; and
- (iii) the setting of limits on the Floating Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on said Floating Rate.

(b) Any conversion requested pursuant to subsection (a) hereinabove that is accepted by ADB shall be considered a "Conversion", as defined in Section 2.01(6) of the Loan Regulations, and shall be effected in accordance with the provisions of Article V of the Loan Regulations and the Conversion Guidelines.

ARTICLE III

Use of Proceeds of the Loan

Section 3.01. The Borrower shall (i) make the proceeds of the Loan available to MORD and the States upon terms and conditions mutually agreeable to ADB and the Borrower, and (ii) cause MORD and the States to apply such proceeds to the financing of expenditures on the Project in accordance with the provisions of this Loan Agreement and the Project Agreements.

Section 3.02. The proceeds of the Loan shall be allocated and withdrawn in accordance with the provisions of Schedule 3 to this Loan Agreement, as such Schedule may be amended from time to time by agreement between the Borrower and ADB.

Section 3.03. Except as ADB may otherwise agree, the Borrower shall procure, or cause to be procured, the items of expenditure to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to this Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 3.04. Except as ADB may otherwise agree, the Borrower shall cause all items of expenditure financed out of the proceeds of the Loan to be used exclusively in the carrying out of the Project.

Section 3.05. The Loan Closing Date for the purposes of Section 9.02 of the Loan Regulations shall be 30 June 2018 or such other date as may from time to time be agreed between the Borrower and ADB.

ARTICLE IV

Particular Covenants

Section 4.01. (a) The Borrower shall cause MORD and the States to carry out the Project with due diligence and efficiency and in conformity with sound applicable technical, financial, business, and rural roads development and maintenance practices.

(b) In the carrying out of the Project and operation of the Project facilities, the Borrower shall perform, or cause to be performed by the Project Executing Agencies, all obligations set forth in Schedule 5 to this Loan Agreement.

Section 4.02. The Borrower shall make available to MORD and the States promptly as needed, the funds, facilities, services, land and other resources, as required, in addition to the proceeds of the Loan and the Government Contribution for the carrying out of the Project.

Section 4.03. The Borrower shall ensure or cause the States to ensure that the activities of its departments and agencies with respect to the carrying out of the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.

Section 4.04. The Borrower shall enable ADB's representatives to inspect the Project, the Works, and any relevant records and documents.

Section 4.05. (a) The Borrower shall or shall cause MORD to (i) maintain separate accounts and records for the Project; (ii) prepare annual financial statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements 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 financial statements, use of the Loan proceeds and use of statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the project that were identified in the course of the audit, if any); and (v) furnish to ADB, no later than 6 months after the end of each related fiscal year, 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.

(b) ADB shall disclose the annual audited financial statements for the Project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

Section 4.06. Insofar as it relates to the Project, the Borrower shall take all actions which shall be necessary on its part to enable the Project Executing Agencies to perform their respective obligations under the Project Agreements, and shall not take or permit any action which would interfere with the performance of such obligations.

Section 4.07. (a) Insofar as it relates to the Project, the Borrower shall exercise its rights under the Financing Arrangements in such a manner as to protect the interests of the Borrower and ADB and to accomplish the purposes of the Loan.

(b) Insofar as it relates to the Project, no rights or obligations under the Financing Arrangements shall be assigned, amended, abrogated or waived without prior notice to ADB.

ARTICLE V

Suspension; Acceleration of Maturity

Section 5.01. The following is specified as an additional event for suspension of the right of the Borrower to make withdrawals from the Loan Account for the purposes of Section 9.01(l) of the Loan Regulations: the PMGSY Guidelines or any provision thereof shall have been repealed, suspended or amended in any manner in so far as it relates to the Project, which in the reasonable opinion of ADB shall or may adversely affect the carrying out of the Project.

Section 5.02. The following is specified as an additional event for acceleration of maturity for the purposes of Section 9.07(a) (iv) of the Loan Regulations: the event specified in Section 5.01 of this Loan Agreement shall have occurred.

ARTICLE VI

Effectiveness

Section 6.01. A date 90 days after the date of this Loan Agreement is specified for the effectiveness of this Loan Agreement for the purposes of Section 10.04 of the Loan Regulations.

ARTICLE VII

Miscellaneous

Section 7.01. The Secretary, Additional Secretary, Joint Secretary, Director, or Deputy Secretary, in the Department of Economic Affairs of the Ministry of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 12.02 of the Loan Regulations.

Section 7.02. The following addresses are specified for the purposes of Section 12.01 of the Loan Regulations:

For the Borrower

The Secretary to the Government of India
Department of Economic Affairs
Ministry of Finance
North Block
New Delhi – 110001
India

Facsimile Numbers:

(91-11) 2309-2511.

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2340.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Loan Agreement to be signed in their respective names as of the day and year first above written and to be delivered at the principal office of ADB.

INDIA

By _____
[Name and designation]

ASIAN DEVELOPMENT BANK

By _____
[Name and designation]

SCHEDULE 1

Description of the Project

1. The objective of the Investment Program is to improve connectivity of selected rural communities in the States to markets, district headquarters and other centers of economic activity.
2. As a part of the Investment Program, the Project aims to construct and maintain about 6,128 km of all-weather rural roads and strengthen rural connectivity training and research centers and rural road network management units in the States.
3. The Project shall comprise the following components:
 - (a) Road Infrastructure Development: This comprises construction to an all-weather standard of rural roads that are part of the PMGSY, covering about 6,128 km in total (comprising about 487km in Assam, 1,056km in Chhattisgarh, 1,381km in Madhya Pradesh, 2,566km in Odisha and 638km in West Bengal).
 - (b) Institutional Strengthening: This comprises construction of 25 RRNMU buildings - 6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha, and 4 in West Bengal. This component also includes training and certification of at least 4,000 PIU staff and 700 Panchayati Raj Institutions, design consultant and contractor staff by RCTRCs in the States.
4. The Project is expected to be completed by 31 December 2017.

SCHEDULE 2

Amortization Schedule

(Rural Connectivity Investment Program – Project 3)

1. The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date (Installment Share). If the proceeds of the Loan shall have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by ADB by multiplying: (a) the total principal amount of the Loan withdrawn and outstanding as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayment amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

Sequence	Date Payment Due	Installment Share (Expressed as a %)
1	15 March 2021	3.333333
2	15 September 2021	3.333333
3	15 March 2022	3.333333
4	15 September 2022	3.333333
5	15 March 2023	3.333333
6	15 September 2023	3.333333
7	15 March 2024	3.333333
8	15 September 2024	3.333333
9	15 March 2025	3.333333
10	15 September 2025	3.333333
11	15 March 2026	3.333333
12	15 September 2026	3.333333
13	15 March 2027	3.333333
14	15 September 2027	3.333333
15	15 March 2028	3.333333
16	15 September 2028	3.333333
17	15 March 2029	3.333333
18	15 September 2029	3.333333
19	15 March 2030	3.333333
20	15 September 2030	3.333333
21	15 March 2031	3.333333
22	15 September 2031	3.333333
23	15 March 2032	3.333333
24	15 September 2032	3.333333
25	15 March 2033	3.333333
26	15 September 2033	3.333333
27	15 March 2034	3.333333
28	15 September 2034	3.333333

Schedule 2

Sequence	Date Payment	Installment Share
	Due	(Expressed as a %)
29	15 March 2035	3.333333
30	15 September 2035	3.333343
	Total	100.000000

2. If the proceeds of the Loan shall not have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

(a) To the extent that any proceeds of the Loan shall have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the amount withdrawn and outstanding as of such date in accordance with paragraph 1 of this Schedule.

(b) Any withdrawal made after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by ADB by multiplying the amount of each such withdrawal by a fraction, the numerator of which shall be the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date (the Original Installment Share) and the denominator of which shall be the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such repayment amounts to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. Withdrawals made within two calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the withdrawn principal amount of the Loan to an Approved Currency, the amount so converted in said Approved Currency that shall be repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by ADB by multiplying such amount in its currency of denomination immediately prior to said Conversion by either: (i) the exchange rate that reflects the amounts of principal in said Approved Currency payable by ADB under the Currency Hedge Transaction relating to said Conversion; or (ii) if ADB so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.

5. If the principal amount of the Loan withdrawn and outstanding from time to time shall be denominated in more than one Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.

SCHEDULE 3

Allocation and Withdrawal of Loan Proceeds

General

1. The table attached to this Schedule sets forth the Categories of items of expenditure to be financed out of the proceeds of the Loan and the allocation of the Loan proceeds to each such Category ("Table"). (Reference to "Category" in this Schedule is to a Category or Subcategory of the Table).

Basis for Withdrawal from the Loan Account

2. Except as ADB may otherwise agree, the proceeds of the Loan shall be disbursed on the basis of the withdrawal percentage for each item of expenditure set forth in the Table.

Reallocation

3. Notwithstanding the allocation of Loan proceeds and the withdrawal percentages set forth in the Table,

(a) if the amount of the Loan allocated to any Category appears to be insufficient to finance all agreed expenditures in that Category, ADB may, in consultation with and by notice to the Borrower: (i) reallocate to such Category, to the extent required to meet the estimated shortfall, amounts of the Loan which have been allocated to another Category but, in the opinion of ADB, are not needed to meet other expenditures, and (ii) if such reallocation cannot fully meet the estimated shortfall, reduce the withdrawal percentage applicable to such expenditures in order that further withdrawals under such Category may continue until all expenditures thereunder shall have been made; and

(b) if the amount of the Loan allocated to any Category appears to exceed all agreed expenditures in that Category, ADB may, in consultation with and by notice to the Borrower, reallocate such excess amount to any other Category.

Disbursement Procedures

4. Except as ADB may otherwise agree, the Loan proceeds shall be disbursed in accordance with the Loan Disbursement Handbook and detailed arrangements agreed upon between ADB and the Borrower.

Retroactive Financing

5. Withdrawals from the Loan Account may be made for reimbursement of eligible expenditures incurred under the Project before the Effective Date, but not earlier than 12 months before the date of this Loan Agreement in connection with Works, subject to a maximum amount equivalent to 20% of the Loan amount.

TABLE

ALLOCATION AND WITHDRAWAL OF LOAN PROCEEDS (Rural Connectivity Investment Program – Project 3)				
Number	Item	Total Amount Allocated for ADB Financing (\$)		Basis for Withdrawal from the Loan Account
		Category	Subcategory	
1	Works	273,000,000		
1A	Assam		27,290,000	54% of total expenditure claimed
1B	Chhattisgarh		39,030,000	54% of total expenditure claimed
1C	Madhya Pradesh		51,720,000	54% of total expenditure claimed
1D	Odisha		109,550,000	54% of total expenditure claimed
1E	West Bengal		28,760,000	54% of total expenditure claimed
1F	RRNMU Buildings		16,650,000	66.6% of total expenditure claimed
	Total	273,000,000		

SCHEDULE 4

Procurement of Works

General

1. The procurement of Works shall be subject to and governed by the Procurement Guidelines.
2. All terms used in this Schedule and not otherwise defined in this Loan Agreement have the meanings provided in the Procurement Guidelines.

Works

3. Except as ADB may otherwise agree, Works shall only be procured on the basis of the method of procurement set forth below:
 - (a) National Competitive Bidding.
4. The method of procurement is subject to, among other things, the detailed arrangements and threshold values set forth in the Procurement Plan. The Borrower may only modify the method of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the Procurement Plan.

National Competitive Bidding

5. The Borrower shall cause MORD and the relevant State to, and ADB shall, ensure that any procurement activity under national competitive bidding is consistent with the Procurement Guidelines. The PMGSY standard bidding document, and procurement procedures each of such standard bidding document and procurement procedures as amended by agreement by ADB, and used for national competitive bidding under Rural Roads Sector II Investment Program [Loan No. 2248 (Assam, Odisha and West Bengal), Loan No. 2414 (Odisha), Loan No. 2445 (Assam and West Bengal), Loan No. 2535 (Assam, Odisha and West Bengal), and Loan No. 2651 (Chhattisgarh, Madhya Pradesh, Odisha and West Bengal)], as further described in the FAM, shall apply to the Road Subprojects financed under the proceeds of the Loans under the Facility. Any modifications or clarifications to such procedures agreed between the Borrower and ADB shall be set out in the Procurement Plan. Any subsequent change to the agreed modifications and clarifications shall be submitted to ADB together with justification, for ADB's prior approval and incorporation in the Procurement Plan and use under national competitive bidding, and shall become effective only after concurrence of such change by the Borrower and ADB.

Procurement Reviews

6. The Borrower shall cause MORD and the States to allow ADB to carry out procurement audits during Project implementation as part of its regular review process.

Conditions for Award of Contract

7. The Borrower shall cause MORD and the States to ensure that no Works contract is awarded until the relevant Project Executing Agency has incorporated the relevant provisions from the EMP into the Works contract.
8. The Borrower shall cause MORD and the States to ensure that no Works contract is awarded by the relevant Project Executing Agency for a Subproject until a CPF for the Subproject has been prepared.
9. The Borrower shall cause MORD and the States to ensure that no Works contracts are awarded by the relevant Project Executing Agency until the requirements described in paragraphs 22 (subparagraph (a)), 26, 27 (subparagraphs (a) through (c)), and 33 of Schedule 5 to this Loan Agreement have been complied with.

Industrial or Intellectual Property Rights

10. (a) Each Project Executing Agency shall ensure that all Works procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim of any third party.
- (b) Each Project Executing Agency shall ensure that all contracts for the procurement of Works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.

SCHEDULE 5

Execution of Project

Execution and Implementation Arrangements

1. The Borrower and the Project Executing Agencies shall ensure that the Project is implemented in accordance with the detailed arrangements set forth in the FAM. Any subsequent change to the FAM shall become effective only after approval of such change by the Borrower and ADB. In the event of any discrepancy between the FAM and this Loan Agreement, the provisions of this Loan Agreement shall prevail. The Borrower shall ensure that the Project Executing Agencies undertake all activities as included in this Loan Agreement.
2. The Project Executing Agencies shall ensure that the IAs employ sufficient staff for the duration of the Project with adequate and relevant expertise in the field of project management, financial management, engineering, construction supervision, procurement, construction, road maintenance and safety, and environmental and social safeguards implementation. The Project Executing Agencies shall keep the IAs equipped with the necessary office space, facilities, equipment, support staff and management information systems, and cover the costs of social impact mitigation, utility relocation, and road maintenance through annual budget allocations. The Project Executing Agencies shall normally (i) maintain assignment of the same persons to key positions in the IAs for at least three consecutive years, (ii) not leave key positions vacant for more than 30 days, and (iii) not transfer more than one key staff within a 6-month period.
3. Each Project Executing Agency shall assist the related IA in obtaining approvals and clearances for timely Project execution under the PMGSY Guidelines and other applicable laws and regulations of the Borrower and that relevant State.
4. The Borrower and the Project Executing Agencies shall ensure that towards smooth implementation of the Project, grievances if any from stakeholders relating to any Subproject implementation or use of funds under the Project are addressed effectively and efficiently, in accordance with procedures set out in the CPF and reflected in the FAM.

Counterpart Support

5. Each Project Executing Agency shall provide, as necessary, respective counterpart, staff, land, facilities, and counterpart funding required for timely and effective implementation of the Project including, without limitation, any funds required (a) to meet any shortfall between cost and revenues for the operation and maintenance of the facilities created or rehabilitated under the Project, (b) to mitigate unforeseen environmental and social impacts, (c) to meet additional costs arising from utility relocation, design changes, price escalation in construction costs and/or unforeseen circumstances, and (d) for maintenance of the road facilities to be constructed and/or upgraded under the Project. The Borrower and/or the relevant Project Executing Agency shall make the resources thus required available on an annual basis for each fiscal year.
6. Each Project Executing Agency shall ensure that the PICs continue to assist with the implementation of the provisions of the CPF and the EARF, IEE and EMPs for all Subprojects under the Facility along with road safety and road maintenance tasks, and that

the PICs shall include, as a minimum, specialists in road maintenance, road safety, social safeguards, gender and environmental safeguards.

Project Implementation Units

7. Each Project Executing Agency shall ensure that the PIUs and the RRNMUs shall implement the Subprojects and carry out necessary coordination with the concerned departments in the State and Panchayats to ensure the smooth implementation of the Subprojects.

Road Maintenance and RRNMUs

8. In accordance with the PMGSY Guidelines, each Project Executing Agency shall provide adequate and timely funding for proper maintenance of the PMGSY roads. Any increases in the actual amounts to be provided shall be met by the respective State through its respective additional budget allocations, or other alternative sources of financing.

9. Except as ADB may otherwise agree, each Project Executing Agency shall require the respective IA (through the PIUs) to ensure proper maintenance of the PMGSY roads until these roads are transferred to the designated Zilla Panchayats in accordance with the PMGSY Guidelines. Each Project Executing Agency shall also allocate the requisite funds to the relevant functionaries at either the Zilla Panchayat or the PIUs, as the case may be, for such maintenance in accordance with the requirements of the PMGSY Guidelines.

10. Each Project Executing Agency shall ensure that either Zilla Panchayat or the PIU, as the case may be, shall ensure further maintenance of roads after completion of the initial 5-year maintenance period under the related contracts.

Road Safety

11. Each Project Executing Agency shall incorporate on a representative sample basis road safety audits accompanied by road safety awareness sessions in the Subproject design process, during construction, and on existing roads and shall ensure that recommendations of the road safety audits are reviewed and promptly incorporated in the design and implemented on existing roads, as appropriate. In this regard each Project Executing Agency shall also create and maintain database on road safety measures as undertaken.

12. Each Project Executing Agency shall ensure that concerned staff of the PIU, participates in road safety audits and develops capacities to conduct the process in-house or to manage the process effectively.

Environment

13. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that the preparation, design, construction, implementation, operation and decommissioning of each Subproject comply with (a) all applicable laws and regulations of the Borrower and of the relevant State relating to environment, health, and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all

measures and requirements set forth in the relevant IEE and EMP, and any corrective or preventative actions set forth in an EMR.

14. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency monitors the implementation of Subprojects through to the completion of each Subproject and report to NRRDA and ADB on the results of such monitoring.

15. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency shall require the respective IA to ensure that the preparation, design, construction, implementation, operation and decommissioning of each Subproject comply with (a) all applicable laws and regulations of the Borrower and of the relevant State relating to environment, health, and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the relevant IEE and EMP, and any corrective or preventative actions set forth in an EMR. No construction work shall be undertaken on sections of Subprojects that pass through a forest reserve unless clearance from appropriate authorities is obtained under applicable laws and regulations of the Borrower and each State, and no Subproject shall be located within an environmentally sensitive area such as a wildlife sanctuary, national park, or other areas with significant ecological functions that are declared as national parks, sanctuaries, or national/international cultural heritage. In accordance with the EARF each Project Executing Agency shall require the IA to prepare ECOP checklists for each and every road and bridges longer than 50 meters, based on which Subproject specific EMPs and the IEEs shall be prepared.

Community Participation Framework

16. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that the IAs implement the provisions of the CPF for all Subprojects as agreed upon with ADB and in conformity with all relevant applicable laws and regulations of the Borrower and each State.

17. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that subsequent to award of Works contract under any Subproject, no section or part thereof under the works contract shall be handed over to the contractor unless the applicable provisions of the CPF have been complied with.

18. In case of any significant or related impacts on Scheduled Tribes under any Subproject, the mitigation shall follow the requirements as set out in the CPF and reflected in the FAM as agreed by ADB. 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 Borrower and the related State pertaining to land transfer shall be followed.

19. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that in accordance with CPF identified vulnerable affected persons are "linked with" (i.e., assisted with availing of) relevant government-sponsored poverty alleviation and employment generation schemes and that this is monitored and reported in the SMR.

Land Availability

20. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that the IAs shall not exercise eminent domain or related mechanisms that may be deemed to be compulsory acquisition of land for the purpose of carrying out activities under the Project and that road construction will take place on the available right of way or donated land, in accordance with procedures set out in the CPF and reflected in the FAM, and that all additional RRNMUs will be on land over which any Project Executing Agency, IA or the Borrower have all applicable rights.

21. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that the IAs shall, subject to compliance with the relevant provisions of the CPF and any corrective or preventative actions set forth in a SMR, and in accordance with all relevant applicable laws and regulations of the Borrower and each State, make available the land and rights to land free from any encumbrances, clear the utilities, trees and any other obstruction from such land, required for commencement of construction activities in accordance with the schedule agreed under the related Works contract.

22. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that (a) the IAs shall (i) carry out the community consultation process for all Subprojects in accordance with the PMGSY Guidelines as supplemented by the CPF; (ii) ensure that no affected person will be physically displaced due to voluntary donation; (iii) disseminate the information on process of land transfer/availability as the case may be, support/assistance provisions and grievance procedures to the Project-affected communities in a timely manner so that all related issues are resolved before awarding or while implementing Works contracts; (iv) ensure that in case of voluntary land donations/transfer, these are undertaken in a transparent manner and under proper documentation, in accordance with procedures set out in the CPF and reflected in the FAM, and avoid any kind of coercion or forced donations/transfer;; (v) ensure that no land owner shall donate more than 5% of his or her land; and (b) the details of land made available in accordance with the procedures prescribed in the PMGSY Guidelines are reflected in the local land records in a timely manner.

Social Impacts

23. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures social safeguards compliance through implementing Subprojects in accordance with the PMGSY Guidelines and the CPF.

Labor Standards

24. The Borrower shall cause MORD and the States to ensure that Works contracts under the Project follow all applicable labor laws of the Borrower and relevant State and that these further include provisions to the effect that contractors; (a) carry out HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; and (b) follow and implement all statutory provisions on labor (including not employing or using children as labor, equal pay for work), health, safety, welfare, sanitation, and working conditions. Such contracts shall also include causes for termination in case of any breach of the stated provisions by the contractors.

Gender and Development

25. The Borrower shall cause MORD and the States to ensure that (a) the GAP is implemented in accordance with its terms; (b) adequate resources are allocated for implementation of the GAP; and (c) progress on implementation of the GAP, including progress toward achieving key gender output targets, are regularly monitored and reported to ADB.

Human and Financial Resources to Implement Safeguards Requirements

26. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that all necessary budgetary and human resources to prepare, in respect of the relevant State, the CPF and EARF, and to fully implement, in respect of the relevant State, the CPFs and EMPs.

Bidding Documents and Execution of Civil Works Contracts

27. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that all bidding documents and contracts for Works contain provisions that require contractors to:

- (a) comply with the measures and requirements relevant to the contractor set forth in the IEEs, EMPs and CPF (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a Safeguards Monitoring Report;
- (b) make available a budget for all such environmental and social measures;
- (c) provide the Project Executing Agency with a written notice of any unanticipated environmental, social impacts that arise during construction, implementation or operation of the Project that were not considered in the IEEs, ECOPs, EMPs, and CPFs;
- (d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction;
- (e) fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction; and
- (g) assist as necessary in resolving grievances which arise during construction activities.

28. Subject to compliance with the requirements of the CPF, EARF and respective state-level IEE, the Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency shall (i) include a standard EMP into the bidding documents; and (ii) prepare and provide with the detailed project report a Subproject specific EMP, to enable the contractor to estimate and include the cost required for implementing the EMP in its bid.

29. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that any changes to the land alignment or any environmental or social impacts arising following or during the preparation of detailed designs of related Subproject roads or during implementation shall be subject to prior approval by ADB or related Project Executing Agency, as the case may be, in accordance with the Subproject selection criteria and procedures included in Schedule 4 to the FFA.

Safeguards Monitoring and Reporting

30. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures the following:

- (a) submit annual Safeguards Monitoring Reports to NRRDA, ensure that copies thereof are promptly provided to ADB for disclosure on the ADB website, and disclose relevant information from such reports to affected persons promptly upon submission;
- (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the IEEs, EMPs, and CPFs, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and
- (c) report any breach of compliance with the measures and requirements set forth in the EARF, IEEs, EMPs and CPFs promptly after becoming aware of the breach.

Prohibited List of Investments

31. The Borrower shall cause MORD and the States to ensure that the relevant Project Executing Agency ensures that no proceeds of the Loans are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.

Development Coordination

32. The Borrower, States and the Project Executing Agencies shall keep ADB informed of discussions with other multilateral, bilateral and national aid agencies that may have implications for the implementation of the Project. The Borrower and the Project Executing Agencies shall provide ADB with an opportunity to comment on any resulting policy reform and/or investment proposals, and shall take into account ADB's views before finalizing and implementing any such proposals.

Governance and Anticorruption

33. The Borrower, MORD, the States and the Project Executing Agencies shall (a) comply with ADB's Anticorruption Policy (1998, as amended to date), (b) ensure that anticorruption provisions acceptable to ADB, the Borrower, the States and the Project Executing Agencies are included in all bidding documents and contracts financed by ADB in connection with the Project, including provisions specifying the right of ADB to review and

examine the records and accounts of the States and Project Executing Agencies, IAs and all contractors, suppliers, consultants, and other service providers as they relate to the Project and as included in the FAM; (c) shall allow and assist ADB's representatives to carry out random spot checks on the work in progress and utilization of funds for the Project; (d) acknowledge that ADB reserves the right to investigate directly or through its agents any alleged corrupt, fraudulent, collusive or coercive practice relating to the Project; and (e) cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation, and as included in the FAM.

34. The Project Executing Agencies shall announce the Project and business opportunities associated with the Project on the PMGSY website. The website shall disclose the following information in relation to Goods and Works procured for the Project and Subprojects: (a) the list of participating bidders, (b) the name of the winning bidder, (c) the amount of the contracts awarded, and (d) the Goods and Works procured.

35. The Project Executing Agencies through the independent quality monitors under PMGSY shall conduct periodic inspections and random spot checks of contractors' Project related activities, bills and supporting documents.

Monitoring and Reporting

36. Towards establishing and maintaining a systematic overall project performance management system, in form and substance acceptable to ADB (PPMS), to be used throughout the life of the Project, MORD, through NRRDA, shall maintain the online monitoring, management and accounting system (OMMAS) as improved for consistency with requirements of PPMS. NRRDA, with the support of TSC, shall establish, within 3 months following the Effective Date, a baseline for performance indicators to be used for monitoring implementation of the Project. It shall conduct annual evaluation surveys for each Project, in accordance with the PPMS, to evaluate the scope, implementation arrangements, progress, and achievement of the outcomes and outputs. Further details of performance monitoring and evaluating are described in the FAM.

37. Each Project Executing Agency through the respective IA, shall maintain and implement a PPMS in respect of that State (State PPMS). Each Project Executing Agency through the respective IA shall undertake periodic Subproject performance review under the Project, in accordance with the State PPMS, to evaluate the scope, implementation arrangements, progress and achievements of objectives of the Project.

38. Without limiting the generality of Section 2.08 of the Project Agreements, each State through the respective IA shall submit to MORD the monthly progress reports on the implementation of the Subprojects under the Project. Based on these reports, MORD through NRRDA shall prepare and provide ADB with quarterly progress reports on the implementation of the Subprojects under the Project within 45 days of the close of each quarter.

39. Without limiting the generality of Section 2.08(c) of the Project Agreements and Section 7.04(d) of the Loan Regulations, MORD/NRRDA shall through the Borrower submit to ADB a project completion report within 3 months of physical completion of the Project. The report shall include a detailed evaluation of the Project, covering the design, costs, contractors' performance, social and economic impact, economic rate of return, implementation of social and environmental safeguard measures and other details relating to Project, as may be requested by ADB.

0. ADB, the Borrower and Project Executing Agencies shall meet regularly as required to discuss Project progress and any changes to implementation arrangements or remedial measures required to be undertaken towards achieving overall Project objectives.

Undertakings

41. The Borrower and the Project Executing Agencies shall, as applicable, ensure compliance with the undertakings set forth in Schedule 6 of the FFA.

LOAN NUMBER _____-IND

PROJECT AGREEMENT

(Rural Connectivity Investment Program – Project 3)

between

ASIAN DEVELOPMENT BANK

and

MINISTRY OF RURAL DEVELOPMENT

and

STATE OF ASSAM

DATED _____

PROJECT AGREEMENT

PROJECT AGREEMENT dated _____ between ASIAN DEVELOPMENT BANK ("ADB") and MINISTRY OF RURAL DEVELOPMENT, acting by the President of India ("MORD"), and STATE OF ASSAM, acting by its Governor (the "State").

WHEREAS

(A) by a Loan Agreement of even date herewith between India ("Borrower") and ADB, ADB has agreed to make to the Borrower a loan of two hundred seventy-three million Dollars (\$273,000,000) on the terms and conditions set forth in the Loan Agreement, but only on the condition that a portion of the proceeds of the loan be made available to MORD and the State as stated in the Loan Agreement and that MORD and the State agree to undertake certain obligations towards ADB set forth herein; and

(B) MORD and the State, in consideration of ADB entering into the Loan Agreement with the Borrower, have agreed to undertake the obligations set forth herein;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Wherever used in this Project Agreement, unless the context otherwise requires, the several terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth, except that for purposes of this Project Agreement the term "the Project" means that portion of the Project, as described in Schedule 1 to the Loan Agreement, which shall occur in the territory of the State.

ARTICLE II

Particular Covenants

Section 2.01. (a) MORD and the State shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, MORD and the State shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to it.

Section 2.02. MORD and the State shall make available, promptly as needed, and on terms and conditions mutually acceptable to ADB and the Borrower, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 2.03. (a) In the carrying out of the Project, MORD and the State shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions mutually satisfactory to ADB and the Borrower.

(b) Except as ADB and the Borrower may otherwise agree, MORD and the State shall procure all items of expenditures to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 2.04. MORD and the State shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods mutually acceptable to ADB and the Borrower. MORD and the State shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 2.05. (a) MORD and the State shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.

(b) Without limiting the generality of the foregoing, MORD and the State as appropriate undertakes to insure, or cause to be insured, the Goods to be procured, including imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.

Section 2.06. MORD and the State shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.07. (a) ADB, MORD and the State shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) MORD and the State shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement or the Financing Arrangements, or the accomplishment of the purposes of the Loan.

(c) ADB, MORD and the State shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, MORD, the State and the Loan.

Section 2.08. (a) In so far as it relates to the Project, MORD and the State shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such in so far as it relates to the Project proceeds; (iii) the Project; (iv) the administration, operations and Project specific financial status of the State and financial status of MORD ; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, MORD and the State shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.

(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, MORD and the State shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by MORD and the State of their respective obligations under this Project Agreement and the accomplishment of the purposes of the Loan.

Section 2.09. (a) The State shall (i) maintain separate accounts and records for the Project; (ii) prepare annual financial statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project 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 financial statements, use of the Loan proceeds and use of statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project 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.

(b) ADB shall disclose the annual audited financial statements for the Project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

(c) The State shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and its financial affairs where they relate to the Project with the auditors appointed by the State pursuant to subsection (a)(iii) hereinabove, and shall 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 State, unless the State shall otherwise agree.

Section 2.10. In so far as it relates to the Project, MORD and the State shall enable ADB's representatives to inspect the Project, the Goods and Works and any relevant records and documents.

Section 2.11. (a) MORD and the State shall, promptly as required, take all action within their powers to maintain their respective status, to carry on their operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of their operations.

(b) In so far as it relates to the Project, MORD and the State shall at all times conduct their respective operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.

(c) In so far as it relates to the Project, MORD and the State shall at all times operate and maintain their respective plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 2.12. Except as ADB may otherwise agree, MORD and the State shall not sell, lease or otherwise dispose of any of their respective assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.

Section 2.13. Except as ADB may otherwise agree, MORD and the State shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.

Section 2.14. Except as ADB may otherwise agree, MORD and the State shall duly perform all their respective obligations under the Financing Arrangements, and shall not take, or concur in, any action which would have the effect of assigning, amending, abrogating or waiving any rights or obligations of the parties under the Financing Arrangements.

Section 2.15. MORD shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of the PMGSY Guidelines, which, if implemented, could affect the Project or the operation of the Project facilities. MORD shall afford ADB an adequate opportunity to comment on such proposal.

ARTICLE III

Effective Date; Termination

Section 3.01. This Project Agreement shall come into force and effect on the date on which the Loan Agreement comes into force and effect. ADB shall promptly notify MORD and the State of such date.

Section 3.02. All the provisions of this Project Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the Loan Agreement.

ARTICLE IV

Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2340.

For MORD

Ministry of Rural Development
Krishi Bhawan
New Delhi - 110001
India

Facsimile Number:

(91-11) 23388207.

For the State

Commissioner and Special Secretary cum CEO
Public Works Roads Department
Assam Sachivalaya
Dispur, Guwahati- 781006.
Assam

Facsimile Number:

0091-361- 2237246.

Section 4.02. (a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement by or on behalf of (i) MORD may be taken or executed by its Joint Secretary or by such other person or persons as he or she shall so designate in writing notified to ADB; and (ii) the State may be taken or executed by its Commissioner and Special Secretary cum CEO, Public Works Roads Department or by such other person or persons as he or she shall so designate in writing notified to ADB.

(b) MORD and the State shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.

Section 4.03. No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Project Agreement to be signed in their respective names as of the day and year first above written, and to be delivered at the principal office of ADB.

ASIAN DEVELOPMENT BANK

By _____
[Name and Designation]

MINISTRY OF RURAL DEVELOPMENT

By _____
[Name and Designation]

STATE OF ASSAM

By _____
[Name and Designation]

LOAN NUMBER _____-IND

PROJECT AGREEMENT

(Rural Connectivity Investment Program – Project 3)

between

ASIAN DEVELOPMENT BANK

and

MINISTRY OF RURAL DEVELOPMENT

and

STATE OF CHHATTISGARH

DATED _____

PROJECT AGREEMENT

PROJECT AGREEMENT dated _____ between ASIAN DEVELOPMENT BANK ("ADB") and MINISTRY OF RURAL DEVELOPMENT, acting by the President of India ("MORD"), and STATE OF CHHATTISGARH, acting by its Governor (the "State").

WHEREAS

(A) by a Loan Agreement of even date herewith between India ("Borrower") and ADB, ADB has agreed to make to the Borrower a loan of two hundred seventy-three million Dollars (\$273,000,000) on the terms and conditions set forth in the Loan Agreement, but only on the condition that a portion of the proceeds of the loan be made available to MORD and the State as stated in the Loan Agreement and that MORD and the State agree to undertake certain obligations towards ADB set forth herein; and

(B) MORD and the State, in consideration of ADB entering into the Loan Agreement with the Borrower, have agreed to undertake the obligations set forth herein;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Wherever used in this Project Agreement, unless the context otherwise requires, the several terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth, except that for purposes of this Project Agreement the term "the Project" means that portion of the Project, as described in Schedule 1 to the Loan Agreement, which shall occur in the territory of the State.

ARTICLE II

Particular Covenants

Section 2.01. (a) MORD and the State shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, MORD and the State shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to it.

Section 2.02. MORD and the State shall make available, promptly as needed, and on terms and conditions mutually acceptable to ADB and the Borrower, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 2.03. (a) In the carrying out of the Project, MORD and the State shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions mutually satisfactory to ADB and the Borrower.

(b) Except as ADB and the Borrower may otherwise agree, MORD and the State shall procure all items of expenditures to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 2.04. MORD and the State shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods mutually acceptable to ADB and the Borrower. MORD and the State shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 2.05. (a) MORD and the State shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.

(b) Without limiting the generality of the foregoing, MORD and the State as appropriate undertakes to insure, or cause to be insured, the Goods to be procured, including imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.

Section 2.06. MORD and the State shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.07. (a) ADB, MORD and the State shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) MORD and the State shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement or the Financing Arrangements, or the accomplishment of the purposes of the Loan.

(c) ADB, MORD and the State shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, MORD, the State and the Loan.

Section 2.08. (a) In so far as it relates to the Project, MORD and the State shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such in so far as it relates to the Project proceeds; (iii) the Project; (iv) the administration, operations and Project specific financial status of the State and financial status of MORD ; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, MORD and the State shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.

(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, MORD and the State shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by MORD and the State of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.

Section 2.09. (a) The State shall (i) maintain separate accounts and records for the Project; (ii) prepare annual financial statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project 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 financial statements, use of the Loan proceeds and use of statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project 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.

(b) ADB shall disclose the annual audited financial statements for the Project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

(c) The State shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and its financial affairs where they relate to the Project with the auditors appointed by the State pursuant to subsection (a)(iii) hereinabove, and shall 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 State, unless the State shall otherwise agree.

Section 2.10. In so far as it relates to the Project, MORD and the State shall enable ADB's representatives to inspect the Project, the Goods and Works and any relevant records and documents.

Section 2.11. (a) MORD and the State shall, promptly as required, take all action within its powers to maintain their respective status, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its operations.

(b) In so far as it relates to the Project, MORD and the State shall at all times conduct their respective operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.

(c) In so far as it relates to the Project, MORD and the State shall at all times operate and maintain their respective plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 2.12. Except as ADB may otherwise agree, MORD and the State shall not sell, lease or otherwise dispose of any of their respective assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.

Section 2.13. Except as ADB may otherwise agree, MORD and the State shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.

Section 2.14. Except as ADB may otherwise agree, MORD and the State shall duly perform all their respective obligations under the Financing Arrangements, and shall not take, or concur in, any action which would have the effect of assigning, amending, abrogating or waiving any rights or obligations of the parties under the Financing Arrangements.

Section 2.15. MORD shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of the PMGSY Guidelines, which, if implemented, could affect the Project or the operation of the Project facilities. MORD shall afford ADB an adequate opportunity to comment on such proposal.

ARTICLE III

Effective Date; Termination

Section 3.01. This Project Agreement shall come into force and effect on the date on which the Loan Agreement comes into force and effect. ADB shall promptly notify MORD and the State of such date.

Section 3.02. All the provisions of this Project Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the Loan Agreement.

ARTICLE IV

Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2340.

For MORD

Ministry of Rural Development
Krishi Bhawan
New Delhi - 110001
India

Facsimile Number:

(91-11) 23388207.

For the State

Additional Chief Secretary
Panchayat and Rural Development Department
Mahanadi Bhawan, Mantralaya

New Raipur
Chhattisgarh

Facsimile Number:

0091-771-2424919.

Section 4.02. (a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement by or on behalf of (i) MORD may be taken or executed by its Joint Secretary or by such other person or persons as he or she shall so designate in writing notified to ADB; and (ii) the State may be taken or executed by its Additional Chief Secretary, Panchayat and Rural Development Department or by such other person or persons as he or she shall so designate in writing notified to ADB.

(b) MORD and the State shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.

Section 4.03. No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Project Agreement to be signed in their respective names as of the day and year first above written, and to be delivered at the principal office of ADB.

ASIAN DEVELOPMENT BANK

By _____
[Name and Designation]

MINISTRY OF RURAL DEVELOPMENT

By _____
[Name and Designation]

STATE OF CHHATTISGARH

By _____
[Name and Designation]

LOAN NUMBER _____-IND

PROJECT AGREEMENT

(Rural Connectivity Investment Program – Project 3)

between

ASIAN DEVELOPMENT BANK

and

MINISTRY OF RURAL DEVELOPMENT

and

STATE OF MADHYA PRADESH

DATED _____

PROJECT AGREEMENT

PROJECT AGREEMENT dated _____ between ASIAN DEVELOPMENT BANK ("ADB") and MINISTRY OF RURAL DEVELOPMENT, acting by the President of India ("MORD"), and STATE OF MADHYA PRADESH, acting by its Governor (the "State").

WHEREAS

(A) by a Loan Agreement of even date herewith between India ("Borrower") and ADB, ADB has agreed to make to the Borrower a loan of two hundred seventy-three million Dollars (\$273,000,000) on the terms and conditions set forth in the Loan Agreement, but only on the condition that a portion of the proceeds of the loan be made available to MORD and the State as stated in the Loan Agreement and that MORD and the State agree to undertake certain obligations towards ADB set forth herein; and

(B) MORD and the State, in consideration of ADB entering into the Loan Agreement with the Borrower, have agreed to undertake the obligations set forth herein;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Wherever used in this Project Agreement, unless the context otherwise requires, the several terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth, except that for purposes of this Project Agreement the term "the Project" means that portion of the Project, as described in Schedule 1 to the Loan Agreement, which shall occur in the territory of the State.

ARTICLE II

Particular Covenants

Section 2.01. (a) MORD and the State shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, MORD and the State shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to it.

Section 2.02. MORD and the State shall make available, promptly as needed, and on terms and conditions mutually acceptable to ADB and the Borrower, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 2.03. (a) In the carrying out of the Project, MORD and the State shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions mutually satisfactory to ADB and the Borrower.

(b) Except as ADB and the Borrower may otherwise agree, MORD and the State shall procure all items of expenditures to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 2.04. MORD and the State shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods mutually acceptable to ADB and the Borrower. MORD and the State shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 2.05. (a) MORD and the State shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.

(b) Without limiting the generality of the foregoing, MORD and the State as appropriate undertakes to insure, or cause to be insured, the Goods to be procured, including imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.

Section 2.06. MORD and the State shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.07. (a) ADB, MORD and the State shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) MORD and the State shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement or the Financing Arrangements, or the accomplishment of the purposes of the Loan.

(c) ADB, MORD and the State shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, MORD, the State and the Loan.

Section 2.08. (a) In so far as it relates to the Project, MORD and the State shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such in so far as it relates to the Project proceeds; (iii) the Project; (iv) the administration, operations and Project specific financial status of the State and financial status of MORD ; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, MORD and the State shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.

(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, MORD and the State shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by MORD and the State of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.

Section 2.09. (a) The State shall (i) maintain separate accounts and records for the Project; (ii) prepare annual financial statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project 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 financial statements, use of the Loan proceeds and use of statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project 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.

(b) ADB shall disclose the annual audited financial statements for the Project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

(c) The State shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and its financial affairs where they relate to the Project with the auditors appointed by the State pursuant to subsection (a)(iii) hereinabove, and shall 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 State, unless the State shall otherwise agree.

Section 2.10. In so far as it relates to the Project, MORD and the State shall enable ADB's representatives to inspect the Project, the Goods and Works and any relevant records and documents.

Section 2.11. (a) MORD and the State shall, promptly as required, take all action within its powers to maintain their respective status, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its operations.

(b) In so far as it relates to the Project, MORD and the State shall at all times conduct their respective operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.

(c) In so far as it relates to the Project, MORD and the State shall at all times operate and maintain their respective plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 2.12. Except as ADB may otherwise agree, MORD and the State shall not sell, lease or otherwise dispose of any of their respective assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.

Section 2.13. Except as ADB may otherwise agree, MORD and the State shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.

Section 2.14. Except as ADB may otherwise agree, MORD and the State shall duly perform all their respective obligations under the Financing Arrangements, and shall not take, or concur in, any action which would have the effect of assigning, amending, abrogating or waiving any rights or obligations of the parties under the Financing Arrangements.

Section 2.15. MORD shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of the PMGSY Guidelines, which, if implemented, could affect the Project or the operation of the Project facilities. MORD shall afford ADB an adequate opportunity to comment on such proposal.

ARTICLE III

Effective Date; Termination

Section 3.01. This Project Agreement shall come into force and effect on the date on which the Loan Agreement comes into force and effect. ADB shall promptly notify MORD and the State of such date.

Section 3.02. All the provisions of this Project Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the Loan Agreement.

ARTICLE IV

Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2340.

For MORD

Ministry of Rural Development
Krishi Bhawan
New Delhi - 110001
India

Facsimile Number:

(91-11) 23388207.

For the State

Additional Chief Secretary
Panchayat and Rural Development Department
2nd Floor, B-Wing, Vindiyachal Bhawan
Bhopal – 462004
Madhya Pradesh

Facsimile Number:

0091-755-2551114.

Section 4.02. (a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement by or on behalf of (i) MORD may be taken or executed by its Joint Secretary or by such other person or persons as he or she shall so designate in writing notified to ADB; and (ii) the State may be taken or executed by its Additional Chief Secretary, Panchayat and Rural Development Department or by such other person or persons as he or she shall so designate in writing notified to ADB.

(b) MORD and the State shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.

Section 4.03. No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Project Agreement to be signed

in their respective names as of the day and year first above written, and to be delivered at the principal office of ADB.

ASIAN DEVELOPMENT BANK

By _____
[Name and Designation]

MINISTRY OF RURAL DEVELOPMENT

By _____
[Name and Designation]

STATE OF MADHYA PRADESH

By _____
[Name and Designation]

LOAN NUMBER _____-IND

PROJECT AGREEMENT

(Rural Connectivity Investment Program – Project 3)

between

ASIAN DEVELOPMENT BANK

and

MINISTRY OF RURAL DEVELOPMENT

and

STATE OF ODISHA

DATED _____

PROJECT AGREEMENT

PROJECT AGREEMENT dated _____ between ASIAN DEVELOPMENT BANK ("ADB") and MINISTRY OF RURAL DEVELOPMENT, acting by the President of India ("MORD"), and STATE OF ODISHA, acting by its Governor (the "State").

WHEREAS

(A) by a Loan Agreement of even date herewith between India ("Borrower") and ADB, ADB has agreed to make to the Borrower a loan of two hundred seventy-three million Dollars (\$273,000,000) on the terms and conditions set forth in the Loan Agreement, but only on the condition that a portion of the proceeds of the loan be made available to MORD and the State as stated in the Loan Agreement and that MORD and the State agree to undertake certain obligations towards ADB set forth herein; and

(B) MORD and the State, in consideration of ADB entering into the Loan Agreement with the Borrower, have agreed to undertake the obligations set forth herein;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Wherever used in this Project Agreement, unless the context otherwise requires, the several terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth, except that for purposes of this Project Agreement the term "the Project" means that portion of the Project, as described in Schedule 1 to the Loan Agreement, which shall occur in the territory of the State.

ARTICLE II

Particular Covenants

Section 2.01. (a) MORD and the State shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, MORD and the State shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to it.

Section 2.02. MORD and the State shall make available, promptly as needed, and on terms and conditions mutually acceptable to ADB and the Borrower, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 2.03. (a) In the carrying out of the Project, MORD and the State shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions mutually satisfactory to ADB and the Borrower.

(b) Except as ADB and the Borrower may otherwise agree, MORD and the State shall procure all items of expenditures to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 2.04. MORD and the State shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods mutually acceptable to ADB and the Borrower. MORD and the State shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 2.05. (a) MORD and the State shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.

(b) Without limiting the generality of the foregoing, MORD and the State as appropriate undertakes to insure, or cause to be insured, the Goods to be procured, including imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.

Section 2.06. MORD and the State shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.07. (a) ADB, MORD and the State shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) MORD and the State shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement or the Financing Arrangements, or the accomplishment of the purposes of the Loan.

(c) ADB, MORD and the State shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, MORD, the State and the Loan.

Section 2.08. (a) In so far as it relates to the Project, MORD and the State shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such in so far as it relates to the Project proceeds; (iii) the Project; (iv) the administration, operations and Project specific financial status of the State and financial status of MORD ; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, MORD and the State shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.

(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, MORD and the State shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by MORD and the State of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.

Section 2.09. (a) The State shall (i) maintain separate accounts and records for the Project; (ii) prepare annual financial statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project 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 financial statements, use of the Loan proceeds and use of statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project 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.

(b) ADB shall disclose the annual audited financial statements for the Project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

(c) The State shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and its financial affairs where they relate to the Project with the auditors appointed by the State pursuant to subsection (a)(iii) hereinabove, and shall 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 State, unless the State shall otherwise agree.

Section 2.10. In so far as it relates to the Project, MORD and the State shall enable ADB's representatives to inspect the Project, the Goods and Works and any relevant records and documents.

Section 2.11. (a) MORD and the State shall, promptly as required, take all action within its powers to maintain their respective status, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its operations.

(b) In so far as it relates to the Project, MORD and the State shall at all times conduct their respective operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.

(c) In so far as it relates to the Project, MORD and the State shall at all times operate and maintain their respective plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 2.12. Except as ADB may otherwise agree, MORD and the State shall not sell, lease or otherwise dispose of any of their respective assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.

Section 2.13. Except as ADB may otherwise agree, MORD and the State shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.

Section 2.14. Except as ADB may otherwise agree, MORD and the State shall duly perform all their respective obligations under the Financing Arrangements, and shall not take, or concur in, any action which would have the effect of assigning, amending, abrogating or waiving any rights or obligations of the parties under the Financing Arrangements.

Section 2.15. MORD shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of the PMGSY Guidelines, which, if implemented, could affect the Project or the operation of the Project facilities. MORD shall afford ADB an adequate opportunity to comment on such proposal.

ARTICLE III

Effective Date; Termination

Section 3.01. This Project Agreement shall come into force and effect on the date on which the Loan Agreement comes into force and effect. ADB shall promptly notify MORD and the State of such date.

Section 3.02. All the provisions of this Project Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the Loan Agreement.

ARTICLE IV

Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2340.

For MORD

Ministry of Rural Development
Krishi Bhawan
New Delhi - 110001
India

Facsimile Number:

(91-11) 23388207.

For the State

Principal Secretary
Rural Development Department
Sachivalaya Marg
Bhubaneswar – 751001
Odisha

Facsimile Number:

0091-674-2531690.

Section 4.02. (a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement by or on behalf of (i) MORD may be taken or executed by its Joint Secretary or by such other person or persons as he or she shall so designate in writing notified to ADB; and (ii) the State may be taken or executed by its Principal Secretary, Rural Development Department or by such other person or persons as he or she shall so designate in writing notified to ADB.

(b) MORD and the State shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.

Section 4.03. No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Project Agreement to be signed in their respective names as of the day and year first above written, and to be delivered at the principal office of ADB.

ASIAN DEVELOPMENT BANK

By _____
[Name and Designation]

MINISTRY OF RURAL DEVELOPMENT

By _____
[Name and Designation]

STATE OF ODISHA

By _____
[Name and Designation]

LOAN NUMBER _____-IND

PROJECT AGREEMENT

(Rural Connectivity Investment Program – Project 3)

between

ASIAN DEVELOPMENT BANK

and

MINISTRY OF RURAL DEVELOPMENT

and

STATE OF WEST BENGAL

DATED _____

PROJECT AGREEMENT

PROJECT AGREEMENT dated _____ between ASIAN DEVELOPMENT BANK ("ADB") and MINISTRY OF RURAL DEVELOPMENT, acting by the President of India ("MORD"), and STATE OF WEST BENGAL, acting by its Governor (the "State").

WHEREAS

(A) by a Loan Agreement of even date herewith between India ("Borrower") and ADB, ADB has agreed to make to the Borrower a loan of two hundred seventy-three million Dollars (\$273,000,000) on the terms and conditions set forth in the Loan Agreement, but only on the condition that a portion of the proceeds of the loan be made available to MORD and the State as stated in the Loan Agreement and that MORD and the State agree to undertake certain obligations towards ADB set forth herein; and

(B) MORD and the State, in consideration of ADB entering into the Loan Agreement with the Borrower, have agreed to undertake the obligations set forth herein;

NOW THEREFORE the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Wherever used in this Project Agreement, unless the context otherwise requires, the several terms defined in the Loan Agreement and in the Loan Regulations (as so defined) have the respective meanings therein set forth, except that for purposes of this Project Agreement the term "the Project" means that portion of the Project, as described in Schedule 1 to the Loan Agreement, which shall occur in the territory of the State.

ARTICLE II

Particular Covenants

Section 2.01. (a) MORD and the State shall carry out the Project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and development practices.

(b) In the carrying out of the Project and operation of the Project facilities, MORD and the State shall perform all obligations set forth in the Loan Agreement to the extent that they are applicable to it.

Section 2.02. MORD and the State shall make available, promptly as needed, and on terms and conditions mutually acceptable to ADB and the Borrower, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.

Section 2.03. (a) In the carrying out of the Project, MORD and the State shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions mutually satisfactory to ADB and the Borrower.

(b) Except as ADB and the Borrower may otherwise agree, MORD and the State shall procure all items of expenditures to be financed out of the proceeds of the Loan in accordance with the provisions of Schedule 4 to the Loan Agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the Borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.

Section 2.04. MORD and the State shall carry out the Project in accordance with plans, design standards, specifications, work schedules and construction methods mutually acceptable to ADB and the Borrower. MORD and the State shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such detail as ADB shall reasonably request.

Section 2.05. (a) MORD and the State shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of Project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.

(b) Without limiting the generality of the foregoing, MORD and the State as appropriate undertakes to insure, or cause to be insured, the Goods to be procured, including imported for the Project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such Goods.

Section 2.06. MORD and the State shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.

Section 2.07. (a) ADB, MORD and the State shall cooperate fully to ensure that the purposes of the Loan will be accomplished.

(b) MORD and the State shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement or the Financing Arrangements, or the accomplishment of the purposes of the Loan.

(c) ADB, MORD and the State shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the Project, MORD, the State and the Loan.

Section 2.08. (a) In so far as it relates to the Project, MORD and the State shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the Loan and the expenditure of the proceeds thereof; (ii) the items of expenditure financed out of such in so far as it relates to the Project proceeds; (iii) the Project; (iv) the administration, operations and Project specific financial status of the State and financial status of MORD ; and (v) any other matters relating to the purposes of the Loan.

(b) Without limiting the generality of the foregoing, MORD and the State shall furnish to ADB quarterly reports on the execution of the Project and on the operation and management of the Project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.

(c) Promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, MORD and the State shall prepare and furnish to ADB a report, in such form and in such detail as ADB shall reasonably request, on the execution and initial operation of the Project, including its cost, the performance by MORD and the State of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.

Section 2.09. (a) The State shall (i) maintain separate accounts and records for the Project; (ii) prepare annual financial statements for the Project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the Project 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 financial statements, use of the Loan proceeds and use of statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the Project 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.

(b) ADB shall disclose the annual audited financial statements for the Project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website.

(c) The State shall enable ADB, upon ADB's request, to discuss the financial statements for the Project and its financial affairs where they relate to the Project with the auditors appointed by the State pursuant to subsection (a)(iii) hereinabove, and shall 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 State, unless the State shall otherwise agree.

Section 2.10. In so far as it relates to the Project, MORD and the State shall enable ADB's representatives to inspect the Project, the Goods and Works and any relevant records and documents.

Section 2.11. (a) MORD and the State shall, promptly as required, take all action within its powers to maintain their respective status, to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of its operations.

(b) In so far as it relates to the Project, MORD and the State shall at all times conduct their respective operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.

(c) In so far as it relates to the Project, MORD and the State shall at all times operate and maintain their respective plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, development, operational and maintenance practices.

Section 2.12. Except as ADB may otherwise agree, MORD and the State shall not sell, lease or otherwise dispose of any of their respective assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this Project Agreement.

Section 2.13. Except as ADB may otherwise agree, MORD and the State shall apply the proceeds of the Loan to the financing of expenditures on the Project in accordance with the provisions of the Loan Agreement and this Project Agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the Project.

Section 2.14. Except as ADB may otherwise agree, MORD and the State shall duly perform all their respective obligations under the Financing Arrangements, and shall not take, or concur in, any action which would have the effect of assigning, amending, abrogating or waiving any rights or obligations of the parties under the Financing Arrangements.

Section 2.15. MORD shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of the PMGSY Guidelines, which, if implemented, could affect the Project or the operation of the Project facilities. MORD shall afford ADB an adequate opportunity to comment on such proposal.

ARTICLE III

Effective Date; Termination

Section 3.01. This Project Agreement shall come into force and effect on the date on which the Loan Agreement comes into force and effect. ADB shall promptly notify MORD and the State of such date.

Section 3.02. All the provisions of this Project Agreement shall continue in full force and effect notwithstanding any cancellation or suspension under the Loan Agreement.

ARTICLE IV

Miscellaneous

Section 4.01. Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request. The addresses so specified are:

For ADB

Asian Development Bank
6 ADB Avenue
Mandaluyong City
1550 Metro Manila
Philippines

Facsimile Numbers:

(632) 636-2444
(632) 636-2340.

For MORD

Ministry of Rural Development
Krishi Bhawan
New Delhi - 110001
India

Facsimile Number:

(91-11) 23388207.

For the State

Principal Secretary and CEO
West Bengal State Rural Development Agency
Dept. of Panchayats & Rural Development
HC-7, Sector-III, Salt Lake
Kolkata-700106
West Bengal

Facsimile Number:

0091-33-23340061.

Section 4.02. (a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement by or on behalf of (i) MORD may be taken or executed by its Joint Secretary or by such other person or persons as he or she shall so designate in writing notified to ADB; and (ii) the State may be taken or executed by its Principal Secretary and CEO, West Bengal State Rural Development Agency or by such other person or persons as he or she shall so designate in writing notified to ADB.

(b) MORD and the State shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.

Section 4.03. No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.

IN WITNESS WHEREOF the parties hereto, acting through their representatives thereunto duly authorized, have caused this Project Agreement to be signed in their respective names as of the day and year first above written, and to be delivered at the principal office of ADB.

ASIAN DEVELOPMENT BANK

By _____
[Name and Designation]

MINISTRY OF RURAL DEVELOPMENT

By _____
[Name and Designation]

STATE OF WEST BENGAL

By _____
[Name and Designation]



Ajay S. Singh,
Director (ADB-II)
Tel: 91-11-2309 3744
E-mail: diradb2-dea@nic.in

D. O. No. 3/4/2009-ADB-II

GOVERNMENT OF INDIA
MINISTRY OF FINANCE
DEPARTMENT OF ECONOMIC AFFAIRS
NORTH BLOCK NEW DELHI

Dated, the 14th May, 2015

Subject: Rural Connectivity Investment Program (RCIP) - Periodic Financing Request # 3 - regarding

Dear *Mr Kim,*


This has reference to Framework Financing Agreement (FFA) for the Rural Connectivity Investment Program (RCIP) dated 17th May, 2012, between Asian Development Bank (ADB) and INDIA. Expressions defined in the FFA shall have the same meanings herein.

2. Pursuant to the provisions of the FFA, INDIA requests ADB to process this Periodic Financing Request (PFR) for a tranche, in the form of a loan from its Ordinary Capital Resources (OCR). The proposed financing amounts, terms, conditions, and financing plan are specified in Attachment hereto. Descriptions of the investment project for which financing is hereby requested are also set out in Attachment hereto.

3. ADB is requested to process the said PFR-3 for the purposes of carrying out a part of the Rural Connectivity Investment Program (RCIP) in accordance with the provisions of the FFA, the loan agreement and project agreement, and supplementary documents to be agreed between ADB and INDIA.

With regards,

Yours sincerely,


(Ajay S. Singh)

Mr. Hun Kim,
Director General, South Asia Regional Department,
Asian Development Bank, 6 ADB Avenue,
Mandaluyong City, 1550 Metro Manila,
Philippines.



राष्ट्रीय ग्रामीण सड़क विकास एजेंसी
(ग्रामीण विकास मंत्रालय, भारत सरकार)

National Rural Roads Development Agency
(Ministry of Rural Development, Govt. of India)

5th Floor, 15-NBCC Tower, Bhikaji Cama Place, New Delhi-110 066

Dr. I.K.Pateriya
Director (Technical)

Tel No: 26179557

Fax No: 26179555

E mail: ik.pateriya@nic.in

No. P-17029/08/2013-P-I

Dated: 8 April 2015

To

✓ **Shri Ajay Shanker Singh,**
Director (MI),
Department of Economic Affairs,
Ministry of Finance, North Block
New Delhi

**Sub: Rural Connectivity Investment Program — Submission of Periodic
Financing Request 3 for US\$ 273.00 M**

Sir,

Periodic Financing Request for Tranche 3 for USD 273.00 M under Rural Connectivity Investment Program for financing the sub projects in the States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal under Multitranchise Financing Facility for USD 800.00 M has been prepared for processing by Asian Development Bank. Multitranchise Financing Facility will finance three tranches under the Facility. Loan for Tranche 1 for USD 252 M (Loan No. 2881-IND) and Loan for Tranche 2 for USD 275 M (Loan No. 3065-IND) has already been approved by Asian Development Bank. The Fact Finding Mission of ADB has made the assessment of the readiness of these States from 25 February 2015 – 9 March 2015. Safeguard Reports has already approved by Asian Development Bank.

2. Periodic Financing Request 3 along with the attachments and CD containing the 14 Safeguard reports is enclosed. It is requested that it may please be forwarded to Director General, Transport and Communication Division, South Asia Department, ADB, Philippines.

Pl. put up.
Mr. Rai
10/4/2015

2

3. This is being issued with the approval of Joint Secretary (RC), Ministry of Rural Development.

Yours Faithfully,


(I. K. Pateriya)

- Encl: i) Periodic Financing Request 3
ii) Design and Monitoring Framework, Procurement Plan and Road List for the States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal
iii) Social Safeguard and IEE Reports for the sub projects and building of RCTRC and RRNMU for the States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal, Due Diligence Report of Social Safeguard and Environment for Loan No. 2881-IND and 3065-IND (total 14 reports)
iv) CD containing the 14 safeguard reports

Copy forward to:

Shri Y S Dwivedi, Director (RC), Ministry of Rural Development, New Delhi.

Director (Technical)

Project Description The components proposed for financing under the requested PFR include Road Connectivity and Institutional Strengthening. The Design and Monitoring Framework for Tranche 3 is in Annex 1). The procurement plan with indicative list of the subprojects intended for financing under the loan is provided in Annex 2.

A. Road Connectivity component

This comprises construction of rural roads that are part of the PMGSY to provide connectivity to all habitations of population of 500 persons (250 or more in hilly or desert areas, or scheduled tribe areas) or more with all-weather roads. Subprojects covering about 6127.66 km in total (486.984 km in Assam, 1055.94 km in Chhattisgarh, 1381.36 km in Madhya Pradesh, 2565.81 km in Odisha, and 637.58 km in West Bengal) are proposed to be taken up in the PFR 3.

B. Institutional Strengthening component

This component will support: (i) establishment of 25 Rural Road Network Management Unit (RRNMU) in the participating states (6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha and 4 in West Bengal), and (ii) training and certifications of at least 4000 PIU staff, 300 panchayati raj institutes, 100 design consultants and 300 contractors.

Cost Estimates and Financing Plan The total cost of the Tranche 3 is estimated at US\$ 518.30 million, inclusive of taxes, duties and interest and other charges on the loan during construction.

Component-wise Cost Estimate^a of the Project 3 of the Investment Program

No.	Project Component ^b	Total Cost US\$ million	ADB Financing		Government Financing	
			US\$ million	Percent (%)	US\$ million	Percent (%)
A. Investment Costs						
A1. Road Infrastructure Development						
1	Civil Works					
	Assam	50.54	27.29	54.00	23.25	46.00
	Chhattisgarh	72.28	39.03	54.00	33.25	46.00
	Madhya Pradesh	96.05	51.87	54.00	44.18	46.00
	Odisha	202.87	109.55	54.00	93.32	46.00
	West Bengal	53.25	28.76	54.00	24.50	46.00
2	Civil Works (utility shifting)	0.48	0.00	0.00	0.48	100.00
3	Social Mitigation	0.48	0.00	0.00	0.48	100.00
	Subtotal (A1)	475.95	256.50		219.45	
A2. Institutional Development						
4	Civil Works (RRNMU buildings)	25.00	13.50	54.00	11.50	46.00
	Subtotal (A2)	25.00	13.50		11.50	
	Subtotal (A)	500.95	270.00		230.95	
B. Financial Charges During Implementation ^d						
7	Interest during Construction	5.50	0.00	0.00	5.50	100.00
8	Commitment Charges	0.70	0.00	0.00	0.70	100.00
	Subtotal (B)	6.20			6.20	
C. Contingency ^e						
9	Contingency	11.15	3.00	26.90	8.14	73.10
	Subtotal (C)	11.15	3.00		8.14	
	Total Project Cost (A+B+C)	518.30	273.00		245.30	
	% Total Project Cost			52.67		47.33

RRNMU=Rural Road Network Management Unit.

^aIncludes taxes and duties of \$14.5 million to be financed from government resources; exchange rate used.^bIn mid-2013 prices.^cIncludes interest and commitment charges. Interest during construction for the ADB loan is computed at the 5-year forward London interbank offered rate plus a spread of 0.4% and a maturity based premium of 0.10%. Commitment charges for an ADB loan are 0.15% per year on the undisbursed loan amount.^dThere is no price escalation for 1 year construction period. Contingency is assumed to be around 2% of civil works.

Source: Asian Development Bank estimates.

Loan Amount and Terms	The request is for a loan of \$ 273.00 million from the ordinary capital resources of the Asian Development Bank (ADB) provided under ADB's London interbank offered rate (LIBOR)-based lending facility, with a 25-year term including a grace period of 5 years, an interest rate determined in accordance with ADB's LIBOR-based lending facility, and such other terms and conditions as agreed in the FFA, and further supplemented under the Loan and Project Agreements.
Period of Loan Utilization	The project is expected to be completed by 31 st December 2017. No disbursements from the loan account will be requested after June 2018.
Advance Contracting	Advance contracting is requested for civil works, goods and consulting services as per the provisions of the FFA.
Retroactive Financing	Retroactive financing is requested for the eligible expenditures in civil works (for which advance contracting is requested above) not exceeding the amount of 20% of the loan amount, incurred before loan effectiveness, but not earlier than 12 months before signing of the legal agreement.
Implementation Arrangements	The Executing Agencies will be the Ministry of Rural Development (MoRD) at the center and the governments of the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal at the state level. The Implementing Agencies at state level will be Public Works Roads Department, Government of Assam, Chhattisgarh Rural Road Development Agency, Government of Chhattisgarh, Madhya Pradesh Rural Road Development Agency, Government of Madhya Pradesh, Rural Development Department, Government of Odisha and West Bengal State Rural Development Agency, Government of West Bengal.
Procurement and Consulting Services	<p>The procurement plan is attached as <u>Annex 2</u>.</p> <p>Civil Works will be procured using national competitive bidding procedure. The Standard PMGSY Bidding Document and procedure developed by NRRDA for procurement of civil works based on item rates, amended as needed and agreed with ADB, will be used for all national competitive bidding contracts for construction of roads under the loan. Bidding documents have been developed and approved by ADB for the procurement of RRNMU and RCTRC building works and goods (ICB, NCB and shopping) for the equipment of RCTRCs and RRNMUs.</p> <p>The service of the national Technical Support Consultant (TSC) will continue to be financed from the loan proceeds under Loan 2881-IND. TSC has already been engaged by MORD (through NRRDA). TSC will continue providing technical support to the MORD/NRRDA and state governments under the same contract up to 31 December 2017.</p>

Project Implementation Consultant (PIC) has been engaged under Tranche 2 (Loan No. 3065-IND) and financed by Government of India to assist MORD/NRRDA and state governments in complying the administrative requirements inherent to ADB-assisted projects, and provide additional support in operation, monitoring, evaluation and risk management.

A Second-Stage Training Consultant is being recruited and financed under Tranche 1 (Loan No. 2881-IND) to assist the RCTRCs in the roll out of training programs and certification of at least 4000 PIU staff, 300 panchayati raj institutes, 100 design consultants and 300 contractors.

Confirmation of Continuing Validity of and Adherence to Provisions of FFA, Previous Agreements, and the Design and Monitoring Framework

INDIA confirms that the provisions of the FFA and the loan and project agreements will be adhered to in the submission of this PFR and in the implementation of the related loan.

Readiness of the Project for Implementation

Advance action to procure civil works contracts for subprojects intended for financing under requested loan has been taken. TSC and PICs are in place in the States of Assam, Chhattisgarh, Madhya Pradesh and Odisha. The State of West Bengal has started the procurement process for engaging the PIC.

Safeguards

Required safeguard documents are provided in Annex 3.

Annexes:

1. Design and Monitoring Framework Project 3
2. Procurement plan with indicative list of sub-projects
3. Safeguard Documents

Assam

- (i) Social Safeguard Compliance Report for Tranche 3
- (ii) Initial Environmental Examination Report for Tranche 3

Chhattisgarh

- (iii) Social Safeguard Compliance Report for Tranche 3
- (iv) Initial Environmental Examination Report for Tranche 3

Madhya Pradesh

- (v) Social Safeguard Compliance Report for Tranche 3
- (vi) Initial Environmental Examination Report for Tranche 3

Odisha

- (vii) Social Safeguard Compliance Report for Tranche 3
- (viii) Initial Environmental Examination Report for Tranche 3

West Bengal

- (ix) Social Safeguard Compliance Report for Tranche 3
- (x) Initial Environmental Examination Report for Tranche 3

(xi) Social Safeguard Compliance Report for RCTRC and RRNMU Buildings in Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal for Batch-I (Loan 2881-IND) and Batch-III.

(xii) Initial Environmental Examination Report for RCTRC and RRNMU Buildings in Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal for Batch-I (Loan 2881-IND) and Batch-III.

(xiii) Due Diligence Report on Social Safeguard for Tranche 1 (Loan 2881) and Tranche 2 (Loan 3065).

(xiv) Environmental Due Diligence Report of RCIP Tranche 1 and Tranche 2.

NP

7/04

AD (Project 1)

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Improved and sustained connectivity of selected rural communities in five RCIP states to markets, district headquarters, and other centers of socio-economic activity.	By the end of the RCIP (2017): About 4,200 rural habitations are newly connected to district headquarters and other centers of socio-economic activities by all-weather RCIP roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumption Continuous allocation of central and state government funds for post construction road maintenance
Outcome Improved and sustained accessibility of selected communities in five RCIP states.	By the end of Project 3 (2017): Estimated 1,320,000 average daily vehicle-km in the first full year of operation. By the end of Project 3 (2017): The project roads are accessible for full 12 months per year in 2017.	For both indicators: impact monitoring and surveys by TSC	Assumption Timely availability of counterpart funds for maintenance
Outputs 1. Selected rural roads are constructed to all-weather standard	By the end of the Project 3 (2017): About 6,127.66 km of PMGSY sanctioned rural roads in Assam (486.98 km), Chhattisgarh (1,055.94 km), Madhya Pradesh (1,381.36 km), Odisha (2,565.81 km), and West Bengal (637.57 km), are constructed/upgraded to all-weather standards. 33% of construction workers are women.	OMMAS	Risk Delay in initial procurement of civil work packages due to non-responsive bids.
2. Quality of design of RCIP roads is improved	By the end of Project 3 (2017): All DPRs for Project 3 follows the standardized DPR template, and the quality control checklist is attached to DPRs. Communities along Project 3 roads (at least 20% women) are consulted in the design	Reports from PIC and TSC. National and State Quality Monitoring reports. Community design briefs as included in the DPRs	

DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	process.		
3. Maintenance of RCIP roads is improved and sustainable	<p>By the end of Project 3 (2017): At least 25 RRNMUs are fully operational(6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha, and 4 in West Bengal).</p> <p>The budget for maintenance for each project road is at least 5% of construction cost.</p>	<p>Annual reports by RRNMUs and RCTRCs and certified by NRRDA.</p> <p>Budget report.</p>	<p>Assumption</p> <p>Timely availability of counterpart funds for maintenance</p>
4. Road safety measures are incorporated into the design	<p>In the course of preparation of Project 3 (2014): At least 10% of Project 3 designs in all RCIP states undergo RSAs, with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017) in 30 districts of RRNMU: As least 50% of designs and 30% of existing rural road network undergo RSAs with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017): At least 50% of schools in the target habitations receive road safety awareness sessions.</p> <p>By the end of Project 3 (2017): Average 'Safety Risk Rating' of the RSA reports done by PIC or RRNMU should not be more than 2 on the sample roads.</p>	<p>Summary RSA reports by PICs, TSC, and RRNMUs Response reports by SRRDAs</p> <p>Summary RSA reports by PICs, TSC, and RRNMUs</p> <p>Annual reports on road safety works completed and response reports by SRRDAs</p>	<p>Assumption</p> <p>State governments provide adequate budget for road safety improvements</p>

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
5. Qualification and skills of PMGSY engineers, technicians, PRI staff concerned, design consultants, and contractors in the investment program states are improved and maintained.	By the end of Project 3 (2017): Five RCTRCs are established and fully operational, and training and certification of at least 4000 PIU staff and 700, PRI staff, design consultants and contractors completed.	Government circulars and budget allocations RCTRC's training certification records.	
6. Effective project management provided	Project 3 is approved as scheduled, and completed on time and within budget. All RCIP performance targets and indicators are systematically monitored and achieved.	OMMAS OMMAS PIC reports TSC reports	
Activities with Milestones 1. Selected rural roads are constructed to all-weather standard 1.1 Approve state-wise road lists and detailed designs by NRRDA before PFR3 submission (March 2015) 2. Quality of design of RCIP roads is improved 2.1 Undertake quality control check during detailed designs (by TSC) based on standardized DPR template 3. Maintenance of RCIP roads is improved and sustainable 3.1 Twenty-five RRNMUs are fully operated by December 2017. 4. Road safety measures are incorporated into the lifecycle of RCIP roads 4.1 Conduct systematic RSAs on sample DPRs under Project 3 (by PICs in 2014) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2015 and 2016; by RRNMUs: in 2017 in 5 districts). 5. Institutional capacity strengthened 5.1 RCTRC (fully staffed and equipped) in place in the RCIP states by December 2016. 5.2 Large scale training started: April 2016. 6. Effective project management provided 6.1 SRRDAs, PIUs, TSC and PICs in place with full staffing and equipment: throughout Project 3. 6.2 SSTC in place: December 2015. 6.3 Start procurement of civil works before Project 3 approval. 6.3 Construction supervision by PIUs (throughout Project 3).			Inputs ADB: \$273.00 million (ordinary capital resources loan) Government: \$245.30million

DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
6.4 Conduct baseline surveys by TSC in April 2015. 6.5 Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 3 implementation). 6.6 Impact monitoring by TSC (on completion of Project 3 roads in December 2017) and by NRRDA (on completion of RCIP, by 2018).			

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project management unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = Pradhan Mantri Gram SadakYojana, PRI=Panchayati Raj Institution, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.

Source: Asian Development Bank

PROCUREMENT PLAN

Basic Data

Project Name: Rural Connectivity Investment Program	
Project Number: tbd	Approval Number: tbd
Country: INDIA	Executing Agency: Ministry of Rural Development, State Governments of Assam, Chhattisgarh, Odisha, Madhya Pradesh, West Bengal
Project Procurement Classification: B	Implementing Agency: Assam State Road Board, Chhattisgarh State Rural Road Development Agency, Odisha State Rural Road Agency, Madhya Pradesh State Rural Road Development Authority, West Bengal State Rural Development Agency
Procurement Risk: Low	
Project Financing Amount: \$273 million ADB Financing: \$273 million Cofinancing (ADB Administered): - Non-ADB Financing: -	Project Closing Date: 31 December 2017
Date of First Procurement Plan :	Date of this Procurement Plan: March 2015

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

I. 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 (roads)	Between US\$100,000 and \$US 39,999,999	Prior review of SBD; for each state under each project: prior review for 1 st NCBs, post-review for succeeding NCBs; prior review for the 1 st three Technical Bid Evaluation Reports and Financial Bid Evaluation Reports of the same contracts, post-review for succeeding reports.
National Competitive Bidding (NCB) (RRNMU and RCTRC facilities)		Prior review of SBD; for each state under each project: prior review for the 1 st Technical Bid Evaluation Reports and Financial Bid Evaluation Reports of the same contracts, post-review for succeeding reports.
National Competitive Bidding for Goods	Between US\$100,000 and \$US 2,999,999	Prior review of SBD; for each state under each project: prior review for the 1 st Technical Bid Evaluation Reports and Financial Bid Evaluation Reports of the same contracts, postreview for succeeding reports.
Shopping for Works	Up to \$100,000	
Shopping for Goods	Up to \$100,000	

Consulting Services	
Method	Comments
Quality and Cost Based Selection (QCBS)	Being adopted for the engagement of the consultant.

II. 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 ⁶	General Description	Estimated Value	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments

III. 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
QCBS-01	Second-stage Training Consultant for RCTRC	\$1.75 million	QCBS	Prior	Q2 2015	FTP	Assignment : National Quality-Cost Ratio: 90:10

IV. 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 ⁶	General Description	Estimated Value	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure ⁷	Advertisement Date (quarter/year)	Comments ⁸
various	Civil works for NCB Roads	\$475.95 million	around 1178	NCB	Post (Sample)	1S2E	tbd	
various	Civil works	\$25 million	25	NCB	Post	1S2E	tbd	

	for RRNMUs			(Sample)			
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Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal ⁹	Comments ¹⁰
-	-	-	-	-	-	-	-	-

B. Indicative List of Packages Required Under the Project

The list of roads is attached as appendix to this Procurement Plan.

(i)	State of Assam	-	486.984 km
(ii)	State of Chhattisgarh	-	1055.94 km
(iii)	State of Madhya Pradesh	-	1381.36 km
(iv)	State of Odisha	-	2565.81 km
(v)	State of West Bengal	-	637.574 km

Attachment to Procurement Plan: Details of Roads Proposed under Project 3

A. Road Infrastructure Development Component

State: ASSAM

No	Division/ District	Block	Road Name	Length (Km)
1	Baksa	Baksa	Santapara to Sutiapara	2.000
2	Baksa	Dhamdhama	Nayabasti MV School to Simlabari	4.150
3	Baksa	Gobardhana	Mayangpara to Barangabari	3.000
4	Baksa	Goreswar	T01 to Magurmari ChRN road to Magurmari	2.000
5	Baksa	Goreswar	T01 to Ramgaon (Ramgaon to Bhergaon)	2.000
6	Baksa	Goreswar	T01 to Jalthagpara (Jalthanpara to Nidhowa)	2.000
7	Baksa	Nagrijiuli	Singrabari Road	2.550
	Sub Total			17.45
8	Barpeta	Bajali	Bhogpur to Sarupeta (Sarupeta Tanglapara rd)	1.910
9	Barpeta	Chakchaka	Kamargaon to Dwartara	2.010
10	Barpeta	Mondia	Kamalpur to Chanmari	2.030
	Sub Total			6.17
11	Bongaigaon	Boitamari	Ghilaguri- II to Ravapara	2.000
12	Bongaigaon	Boitamari	Katasbari to Kanarabeel	1.230
13	Bongaigaon	Dangtol	Borsangaon to Dosimapara	2.350
14	Bongaigaon	Dangtol	Dholagaon to Noagaon	2.100
15	Bongaigaon	Dangtol	Chipansila to Chipansila hill road	1.000
16	Bongaigaon	Dangtol	Bongaigaon to Mechapara	2.000
17	Bongaigaon	Dangtol	Fulkumari to Bhitir Chengmari	1.560
18	Bongaigaon	Dangtol	Fulkumari (Dhantola) to Ghakpara	2.610
19	Bongaigaon	Dangtol	Ulubari to Jogipara	1.030
20	Bongaigaon	Manikpur	Patiladoha Monakuchi to Baobari	1.322
21	Bongaigaon	Srijangram	Borghola III to Chakrabhum (Chakrabhum to Borghola road -Dharampur Boorghola road)	0.520
22	Bongaigaon	Srijangram	Borghola II (Kamarpara-II) to Khamarpara-I	3.200
23	Bongaigaon	Srijangram	Amguri (Khamarpara-II to Khamarpara-II (Sastar)	3.200
24	Bongaigaon	Srijangram	Bhuyanpara, Chakrabhum	2.670
25	Bongaigaon	Srijangram	Kerkhabari-I to Kerkhabari-II	1.100
26	Bongaigaon	Srijangram	Thakuranipara Kharagaon to Kaimari Loharpara	1.000
27	Bongaigaon	Srijangram	Charipunia-II to Charipunia -I	2.100
28	Bongaigaon	Tapattari	Bechimari to Tinkonia Part-I (up to Khoragaon)	2.500
29	Bongaigaon	Tapattari	Kabaitari to Mohanapur	1.550
	Sub Total			34.682
30	Cachar	Borkhola	S J Road to SK road	1.123
31	Cachar	Kalain	Bhairavpur VI to Natanpur	1.250
32	Cachar	Katigora	Chandinagar to Leverputa (Harinagar baiyerper east Sobodh nagar to Haritkar Sadirkhal)	4.481
33	Cachar	Katigora	T04 to Harinagar IV (Sadirkhal khelma II to Haritkar I)	3.407
34	Cachar	Katigora	Hariangar III to Saidpur (Haritkar I to	2.122

No	Division/ District	Block	Road Name	Length (Km)
			Salimbad)	
35	Cachar	Narsingpur	T02 to Bishnupur FV	2.500
36	Cachar	Rajabazar	Kankpur I to Pachim Diksa (Chatradayal to Harinagar Via Nutan Chandra Paschim Diksa)	8.100
37	Cachar	Rajabazar	T06 to Harinagar	2.381
38	Cachar	Tapang	Kwarpar to Sahapur (Chibita Bichita III to Chibita Bichita I)	5.005
	Sub Total			31.564
39	Darrang	Pachim Mangaldai	Bezpara no1 to NH 52	0.800
40	Darrang	Pachim Mangaldai	Bezpara no2 to MPK road	0.840
41	Darrang	Pachim Mangaldai	NA Howly to NH 52 (Dhula Chapai Road)	1.900
42	Darrang	Pachim Mangaldai	Ganakpara to MPK road	2.000
43	Darrang	Pachim Mangaldai	Hengerajhar to Kanaichuba	1.755
	Sub Total			6.65
44	Dhubri	Agomoni	NH31 to Choto Dighaltari	1.750
	Sub Total			1.75
45	Goalpara	Balijana	Rajapara to Tisimpur	1.500
46	Goalpara	Balijana	Birubari to Keotpara	1.500
47	Goalpara	Balijana	Solmari to Matia	2.200
48	Goalpara	Balijana	Goalpara (Mission) to Dwarka Rabhapara-II	2.500
49	Goalpara	Balijana	Gojapara (MES) to Mojai Rabhapara	2.500
50	Goalpara	Kuchdhowa	NH 37 to Dighli	1.500
51	Goalpara	Kuchdhowa	Mowamari to Bandarsree II	2.000
52	Goalpara	Kuchdhowa	Lela to Guwabari	4.600
53	Goalpara	Kuchdhowa	Dabli Barpathar to Barmatia	1.500
54	Goalpara	Kuchdhowa	Lela to Bandarsree	1.000
55	Goalpara	Kuchdhowa	GD road to Mandalgram (Khara-I)	2.500
56	Goalpara	Kuchdhowa	NH 37 ti Charaimari	1.500
57	Goalpara	Matia	Sri Surjagiri to Lalabori	2.000
58	Goalpara	Matia	Bamunpara to Ganakpara	2.000
59	Goalpara	Rongjuli	Adokgiri NEC to Kothakuthi	1.200
60	Goalpara	Rongjuli	Adokgiri NEC to Chekowari no 1	1.600
	Sub Total			31.89
61	Kamrup	Bihdia Jajikona	Sutargaon to Dhulara (T04 to Dhulara)	2.000
62	Kamrup	Bongaon	Bamunigaon to Nijbogai	1.600
63	Kamrup	Kamalpur	Barmaroi to Dauduar	1.000
64	Kamrup	Rampur	T02 to Abhipara (Abhipara road)	1.200
65	Kamrup	Rangia	NH 31(Bhatkuchi) to Kekohati (Bhatkuchi Borkhata Dhamdhama Road)	2.000
	Sub Total			7.93
66	Karbi Anglong	Bokajan	T05 to Mentisso (Mentisogaon to NEC road)	3.081
67	Karbi Anglong	Bokajan	T04 (Sainilangso quarry road) to Kania bey	7.414
68	Karbi Anglong	Chinthong	3rd Km of BH road to Barpathar	1.500
69	Karbi Anglong	Chinthong	T07 to Mousalding (17th KM of UKT road to Mousolding)	11.950

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No	Division/ District	Block	Road Name	Length (Km)
70	Karbi Anglong	Nilip	Santilangso to Chatiana (Langhup Teron Gaon)	5.177
71	Karbi Anglong	Rongkhang	77th KM of SH35 to Langparpan	4.500
	Sub Total			33.189
72	Karimganj	North Karimganj	NH 151 to Suprakandi (Fakirabazar to KL road via Nayabazar)	1.000
73	Karimganj	North Karimganj	T03 to Nayagram (Maizgram to Shyama Prasad pur)	3.516
74	Karimganj	Patherkandi	T07 to Durlovpur Pt-V (Kanaibazar Sonatola road to Durlovpur via Satghori)	1.410
75	Karimganj	R K Nagar	L029 to Chunarigul (RK Nagar to Dolugang)	2.388
76	Karimganj	South Karimganj	T01 to Nagpanchak (Telekhalepar to Jatkapan)	2.001
77	Karimganj	South Karimganj	T05 to Moujkuri Pt-I (Kaliganj Khagail road to Mourkarni)	1.309
	Sub Total			11.624
78	Kokrajhar	Dotma	17 to Beltari (Batabari to Beltari)	2.473
79	Kokrajhar	Dotma	108 to Ouguri (Mahendrapur to Ouguri)	3.780
80	Kokrajhar	Dotoma	NH-31 C to Kalaigaon	2.800
81	Kokrajhar	Dotoma	Maoriagaon to Umanagar	2.550
82	Kokrajhar	Dotoma	36 to Binnyachara (Chakapara to Binnyachara)	4.000
83	Kokrajhar	Gosaigaon	SH-1 to Padmapukur (Dhuburi Kachugaon road)	2.250
84	Kokrajhar	Gosaigaon	2 to Boalkumari (Aminkata to Boalkumari)	2.880
85	Kokrajhar	Gosaigaon	74 to Serfanguri (Oxiguri to Sherfanguri)	2.100
86	Kokrajhar	Hatidhura	Mallikapur -II to Kerlingpur	2.520
87	Kokrajhar	Hatidhura	46 to Anandapur ((Milikapur to Anandapur)	2.800
88	Kokrajhar	Hatidhura	66 to Latamari Rangsapur to Latamari)	1.900
89	Kokrajhar	Kachugaon	004 (Anthabari) to Gumabil	0.950
90	Kokrajhar	Kachugaon	Srirampur to Shyamaguri	4.300
91	Kokrajhar	Kachugaon	105 to Bongaon FV (Jonali gaon to Bongaon)	1.410
92	Kokrajhar	Kokrajhar	NH 31 C to North Bashbari (Karigaon to North Bashbari)	3.270
	Sub Total			38.513
93	Lakhimpur	Bihpuria	Kachikata Bagan to Kachikata Bagan (Rajabari to Kachikata Bagan	1.500
94	Lakhimpur	Bihpuria	Chinatoli to Bengena ati Road (Chinatoli Jamuguri road)	8.040
95	Lakhimpur	Karunabari	6568 Grant to Meneha	2.025
96	Lakhimpur	Karunabari	Rongajan to Rongajan NH 52 to Kachajuli Mirigaon via Rongajan)	1.950
97	Lakhimpur	Karunabari	Tekelabora to Kherbori (Singia to Kherbari via Dakhinawa hat)	3.160
98	Lakhimpur	Lakhimpur	Gubarichali to Gubrisali No.1	4.300
99	Lakhimpur	Lakhimpur	NH 52 to Somani (T04 to Christan Chapori)	8.500
100	Lakhimpur	Narayanpur	Hologuri to Hologuri (Simoluguri Arimora PWD to Hologuri)	0.630
101	Lakhimpur	Narayanpur	Charaidoloni to Notgaon No.2 (Charaidoloni Vill road)	2.056
102	Lakhimpur	Narayanpur	Uttar Katoni no 1 to Uttar Katoni No1 (Uttar Katoni Station feeder road)	1.000

No	Division/ District	Block	Road Name	Length (Km)
103	Lakhimpur	Narayanpur	Gosaibari to Kachari Borpathar (Borkhamti Kinapather Road)	3.300
104	Lakhimpur	Narayanpur	Dhemagar No1 to Dhemagar No.1 (Rampur Dhemagar Rajgarh Road)	1.500
105	Lakhimpur	Narayanpur	Ghugura to Ghugura (Deolia Chengelijan to Borpathar Road)	1.200
106	Lakhimpur	Narayanpur	Khalihamari No1 to Nidhan Chowra (Dhalpur Khalihamari Road)	2.000
107	Lakhimpur	Narayanpur	Dagaon to Mornoiguri (Dhalpur Bazar to Akadhari Road)	4.340
108	Lakhimpur	Narayanpur	Borkhet Bongali no 2 to Borkhet Bongali No.2	1.500
109	Lakhimpur	Narayanpur	Bordewri to Dikrong Chapori No.1 (Narayanpur Block to Temera Mirigaon)	4.240
110	Lakhimpur	Narayanpur	Deotola to Dustimukh (Dustimukh Deotola rd)	1.650
111	Lakhimpur	Narayanpur	Simaluguri No2 to Rajgarh (Simaluguri Kamalpur Rajgarh road)	6.140
112	Lakhimpur	Nowboicha	Khalihamari (Bilotia) to Khalihamari (NH 52 to Bilotia via Khalihamari)	1.300
113	Lakhimpur	Nowboicha	Pukhuri Paria no 1 to Hariohdalani (NH52 to NO 2 Sonapur Phukan Dalani)	3.360
114	Lakhimpur	Nowboicha	NH 52 to Ranabari (Dologhat Kathal pukhuri tp No 2 Sonapur via Ranabari)	3.040
	Sub Total			63.794
115	Morigaon	Bhurbandha	01 M29 to Patrabori	5.640
116	Morigaon	Bhurbandha	Rangadaria to Dighalipathar	2.000
117	Morigaon	Bhurbandha	Charaihagi to Hekenamara	1.500
118	Morigaon	Laharighat	03-M-01 to Rajabori (Niz Gerua to Rajabari)	0.800
119	Morigaon	Mayong	04 M-78 to Da hati Makaria (Dharamtul to Meruagaon via Mantibari)	4.000
120	Morigaon	Mayong	04-M-79 to Naldhara	2.000
121	Morigaon	Mayong	04-M-79 to West Belaguri (Chenimari to West Beloguri)	1.810
122	Morigaon	Mayong	214 to Kasha Chilla (Raja Mayang to Kashashila)	2.000
123	Morigaon	Mayong	151 to Charubari Pather (Katahguri to Charubari Pather)	4.000
124	Morigaon	Mayong	Burgaon No 1 to Kawrihagi	2.500
	Sub Total			27.62
125	Nagaon	Bajigaon	Jatia Pather to Borjuri (Jatia Pather to KA road)	0.720
126	Nagaon	Barhampur	Matiapar to Chapanallah Jiajuri (Niz Chapanalla to Matia pather road)	3.012
127	Nagaon	Barhampur	Nalbari to Jiajuri	0.902
128	Nagaon	Barhampur	Purani gudam gaon to NH 37 (Purani Gudam to Khoundor Chuk)	0.550
129	Nagaon	Dhalpukhuri	Mosoka to Panch bhandar road	1.527
130	Nagaon	Dhalpukhuri	Jorang Pather to Laskar Pather Bajar	1.200
131	Nagaon	Jugijan	West Hatimara to Nabhanga	1.880
132	Nagaon	Jugijan	Uttarmatikhola to Hojai Tumpreng road	1.600
133	Nagaon	Jugijan	Pub solmarijan to Alinagar (Pub Soaloni to Pun Soaloni road)	2.076

No	Division/ District	Block	Road Name	Length (Km)
134	Nagaon	Jugijan	Thikadar Basti to Kachari Basti (Rajapukhuri to Thikadar Basti via Kachari Basti)	1.999
135	Nagaon	Jugijan	Pub Bagori to Dimaru road	0.902
136	Nagaon	Kaliabar	Deupani to NH 37 (Deupani Basti Road)	1.032
137	Nagaon	Kaliabar	Darigaji to Kuwaritol road	2.022
138	Nagaon	Khagarijan	Borbheti Kachamari road to Uttar Simaluguri	0.840
139	Nagaon	Khagarijan	Nagaon Juria to West Herapatty No.2	1.320
140	Nagaon	Khagarijan	Nagaon Dhing road to Cholahati Sonai bridge	1.530
141	Nagaon	Pakhimaria	NH 37 to Majpathori Bahuachuk	2.283
142	Nagaon	Pakhimaria	Dakhinpat Kampur road to Kachariguri	2.240
143	Nagaon	Paschim Kaliabar	Nalani Mikir gaon to Napani TE (Sari sabari)	3.090
144	Nagaon	Paschim Kaliabar	Mikirgaon to KA road	5.111
145	Nagaon	Paschim Kaliabar	Rekapahar to Kelliden pt-II (Napani missa road)	6.000
146	Nagaon	Rupahihat	Kandhulimari to Barpaka-II	1.250
	Sub Total			43.728
147	Sibsagar	Lakwa	Maibela to Gelgeli	1.600
148	Sibsagar	Lakwa	Dhodar ali to Rajabari	1.000
149	Sibsagar	Lakwa	Dhodar ali to Sonowal (Kaliapati ali)	0.950
150	Sibsagar	Nazira	Gahorichowa gaon to Borphukan ali (Borbari ali)	1.000
151	Sibsagar	Nazira	Kaliapani to Chutiagaon (Kaliapani Baruah ali)	0.800
152	Sibsagar	Nazira	Singhaduar to Bor Ali (Singha Duar Ali)	1.000
153	Sibsagar	Nazira	Sukafanagar to Charaideo Rajamaidam (Sukafa Ali)	1.750
154	Sibsagar	Nazira	Shreepur to 137 th Km of Dhodar ali (Nimanagarh Ali)	3.050
155	Sibsagar	Nazira	Santipur to Sreepur (Udoipur Ali)	4.100
156	Sibsagar	Nazira	Luthuri Gaon to Ramani ali (Luthuri Ali)	0.800
157	Sibsagar	Nazira	Tairi Gaon to Bor ali (Lakhimi Ali No 3)	0.950
158	Sibsagar	Nazira	Selengpathar to Phulanibari Krishipam	1.200
159	Sibsagar	Nazira	Moinating to Mechipur Ali	1.200
160	Sibsagar	Nazira	Satishgarh to NEC road	1.400
161	Sibsagar	Pachim Abhaypur	Purani Tawkak to Lalati Pather No 3 (Bekadalang Road)	1.500
162	Sibsagar	Pachim Abhaypur	Mathurapur to Chinglopathar (Chinglupather Kacharigaon road)	4.000
163	Sibsagar	Sapekhati	Dhodar ali to Kuwaripather (Dharam Pather No 1)	1.500
164	Sibsagar	Sonari	Rangabam to Khamungaon (Kamun Pohuchungi road)	2.500
165	Sibsagar	Sonari	Jajali Pachali to Kacharibam (Kacharibam Rd)	1.200
166	Sibsagar	Sonari	Dabokatia to Rangabam (Bahbari road)	0.750
	Sub Total			32.259
167	Sonitpur	Chayduar	NH 52 to Bholaguri	2.500
168	Sonitpur	Baghmora	Dhemajibari to NH 52	5.840
169	Sonitpur	Balipara	Hahchara Napam to Khelmati	2.000
170	Sonitpur	Balipara	Moldongpur to Ansumi	1.200

No	Division/ District	Block	Road Name	Length (Km)
171	Sonitpur	Behali	Serelia to Kuhiarbari	2.000
172	Sonitpur	Behali	NH 52 to Kachamari	1.500
173	Sonitpur	Borchala	NH 52 to Natunpam	2.520
174	Sonitpur	Dhekiajuli	Natun Basti to Maz Roumari	1.500
175	Sonitpur	Dhekiajuli	Katanibari to Bhergaon	1.465
176	Sonitpur	Naduar	Borigaon to Uparkari	2.606
177	Sonitpur	Naduar	Panigaon to Dholaibil	2.478
178	Sonitpur	Pub Chayduar	Dolouguri to Subansiri	2.000
179	Sonitpur	Pub Chayduar	Pahukata to Tihulabari	1.500
	Sub Total			29.109
180	Tinsukia	Guijan	Rongagora to Dinjan Chapori	3.000
181	Tinsukia	Guijan	Boruaholla to Gandhia Nahorani	8.150
182	Tinsukia	Guijan	Gobindapur to Changmaigaon	7.620
183	Tinsukia	Kakopathar	Kako Borali Road (Borachuk to Tezipather)	7.800
	Sub Total			27.482
184	Udalguri	Kalaigaon	Ganakpara to Balipota	5.310
185	Udalguri	Kalaigaon	Puthiakhat to Puthimari	6.000
186	Udalguri	Khoirabari	Dolonghat Tini Ali (Gomthapara) to MM road at Kendra (Gomthapara to Namkhola road)	6.800
187	Udalguri	Khoirabari	Sareng to Bahmula (Bahmula Bainara road)	3.000
188	Udalguri	Mazbat	Hatimara to Phurabari	3.670
189	Udalguri	Mazbat	Dakhin Chuba to Udalguri Jungle	1.000
190	Udalguri	Mazbat	Nepalipara to Garobasti	2.500
191	Udalguri	Rowta Charali	Balisia Jungle Mouja to Oubari Jungle	1.000
192	Udalguri	Rowta Charali	Dhansiri No 2 to Rowta Chari ali (Station)	1.000
193	Udalguri	Rowta Charali	Mohanpur Lawdang	1.000
194	Udalguri	Rowta Charali	Moudubi No1 to Gormara	1.000
195	Udalguri	Rowta Charali	Rongagorah to Kajiamati	1.500
196	Udalguri	Udalguri	Garobasti to Golmagaon (Golmagaon Khorang road)	7.800
	Sub Total			41.58
	TOTAL			486.984

State: CHHATTISGARH

No	Division/ District	Block	Road Name	Length (Km)
1	Bilaspur	Gourella	Chuktipani Bazardand To Chutkipani Bahrijhorki	3.08
2	Bilaspur	Kota	Amagohan To Mohali Pandarpani	3.87
3	Bilaspur	Kota	Katra Rd To Bargawa Lusada Kedadand	1.44
4	Bilaspur	Marawahi	Semardari Rd Bhatatikara To Bagiha Tola	4.50
5	Bilaspur	Bilha	Bitkuli Pondi Hathini Road	3.18
6	Bilaspur	Bilha	Bilha - Dodki Kwanchhi	4.50
7	Bilaspur	Bilha	T010 - Aithulkapa	1.86
8	Bilaspur	Bilha	Murkuta - Nawagaon H	3.25

No	Division/ District	Block	Road Name	Length (Km)
9	Bilaspur	Bilha	L091 - Khairkhundi	1.35
10	Bilaspur	Bilha	L022-Belpara Limha Patharapali	2.01
11	Bilaspur	Bilha	Bellara - Barbhatha-Bel	1.20
12	Bilaspur	Bilha	Mohatrai - Chumkunwa	2.41
13	Bilaspur	Bilha	Kadar - Kunwa	7.32
14	Bilaspur	Bilha	Kadar - Limatri	5.40
15	Bilaspur	Bilha	L091 - Sarvandevari	4.04
16	Bilaspur	Bilha	T04-Bahatarai Parsahi Rd	6.40
17	Bilaspur	Kota	Kota Ratanpur To Chherkabandha	2.82
18	Bilaspur	Kota	Kurwar To Navadih	3.03
19	Bilaspur	Kota	Amagohan To Khongsara Basti	2.01
20	Bilaspur	Kota	Kurdur To Bagdhar Via Sargod	20.30
21	Bilaspur	Kota	Rmkk Road To Kunvaji	1.56
22	Bilaspur	Kota	Banki Ghat To Kota Ratanpur Road	1.20
23	Bilaspur	Lormi	Amlidih To Koilari	3.50
24	Bilaspur	Lormi	Khektara To Nathelapara	2.37
25	Bilaspur	Lormi	Tekanpara To Kota Lormi Road	1.37
26	Bilaspur	Lormi	Lormi Mungeli MDR To Khapridih	0.75
27	Bilaspur	Lormi	Budhwara To Tulasaghat	1.20
28	Bilaspur	Lormi	Bhaskara To Khairakhurd	1.50
29	Bilaspur	Mungeli	Bicharpur To Uslapur Singhanpur	6.30
30	Bilaspur	Mungeli	Bhurka To SH 26	5.97
31	Bilaspur	Mungeli	Birgahani To Mdr Takhatpur To Pathariya	0.72
32	Bilaspur	Mungeli	Reunta To MDR Mungeli Nandghat Road	2.31
33	Bilaspur	Mungeli	Kodukapa To MDR Nadghat Road	1.30
34	Bilaspur	Mungeli	Aurabandha To MDR Nandghat Road	1.14
35	Bilaspur	Mungeli	Chichesara To Mungeli	3.90
36	Bilaspur	Mungeli	Tulsikapa To SH26	2.60
37	Bilaspur	Mungeli	SH 26 Road Chhulha	2.42
38	Bilaspur	Mungeli	Bhumiyapara To SH26 Bijatarai	1.98
39	Bilaspur	Mungeli	Bijhori To SH 26	1.30
40	Bilaspur	Pathariya	T03 - Hathkera	2.25
41	Bilaspur	Pathariya	L036 - Umariya	7.32
42	Bilaspur	Pathariya	Main Road - Rambod Kokedi	2.01
43	Bilaspur	Pathariya	T04 - Sawatpur	5.55
44	Bilaspur	Takhatpur	Ganiyari To Pondi	3.36
45	Bilaspur	Takhatpur	Kotaghutku Road To Padaripar	1.20
46	Bilaspur	Takhatpur	Araiband Approach Road	4.00
47	Bilaspur	Takhatpur	Khapari To Modhe Road	1.00
48	Bilaspur	Takhatpur	Amane To Bija Kargird	2.31
49	Bilaspur	Takhatpur	Bhunda To Pathara	1.32
50	Bilaspur	Takhatpur	Navapara To Satti Para	1.32
51	Bilaspur	Takhatpur	Uslapur To Pondi Road	1.38
52	Bilaspur	Takhatpur	Pali To Butena	1.92
53	Bilaspur	Takhatpur	Savada Bra To Pura	2.55
Sub Total				164.85
54	Durg	Bemetara	Bahinga - Karhi Road	2.90
55	Durg	Bemetara	Main Road NH12a - Joung	2.65
56	Durg	Bemetara	Mohrenga - Pausari	2.50

No	Division/ District	Block	Road Name	Length (Km)
57	Durg	Bemetara	Main Road - Atriya	1.45
58	Durg	Berla	Bachedi - Khumiguda	3.00
59	Durg	Berla	Main Road - Hathpan Road	2.20
60	Durg	Dhamdha	Main Road To Parsada	6.40
61	Durg	Dhamdha	Dondki - Dewarkona Road	2.23
62	Durg	Dhamdha	Kanharpuri - Jataghara Road	2.90
63	Durg	Dhamdha	Main Road T13 - Kandai Road	1.50
64	Durg	Dhamdha	Main Road Girhola - Ghikudiya Road	2.15
65	Durg	Dondi	Bhandaritola - Lakhmatola Road	1.76
66	Durg	Durg	Nikum - Masabhat Road	3.50
67	Durg	Nawagarh	Murkuta - Jhanki Road	3.50
68	Durg	Nawagarh	Boerkachra Amlidih - Thengabhat	4.33
69	Durg	Nawagarh	Main Road Mohtara - Andhiyarkhor Road	1.35
70	Durg	Nawagarh	Kodiya - Bhaismuda Road	2.15
71	Durg	Patan	Gadadih Marra Road - Bodal Road	0.80
72	Durg	Patan	Main Road - Chulgahan	1.00
73	Durg	Patan	Main Road - Guruwaindhih Road	0.70
74	Durg	Patan	Ausar - Jharmokhali Road	2.50
75	Durg	Saja	Main Road - Matiya	2.10
76	Durg	Saja	Thelka - Bhanora Lalpur	2.45
77	Durg	Saja	Main Road - Kehka	1.55
78	Durg	Saja	Kanhera - Rampura Road	3.53
79	Durg	Saja	Main Road - Dehri Road	2.25
80	Durg	Saja	Mohgaon - Budhwara	0.75
Sub Total				64.1
81	Jangir- Champa	Dabhara	T05 To Bijani	2.65
82	Jangir- Champa	Malkharada	T01 To Bokrel	3.50
Sub Total				6.15
83	Dhamtari	Nagri	Sahnikhar to Latiyara	2.60
Sub Total				2.6
84	Jashpur	Bagicha	L030 To Dobh (Vr)	6.00
85	Jashpur	Bagicha	Chhiropara To Tr 11	7.50
86	Jashpur	Bagicha	Mahadeo Jabala To Tr 12	11.00
87	Jashpur	Bagicha	Turrikona To Tr 02 MDR	5.00
88	Jashpur	Bagicha	Ghoghar To L54	1.30
89	Jashpur	Bagicha	Judwain To Tr10 MDR (01tr-09)	7.95
90	Jashpur	Duldula	Jamchuwa To T04 Makaribandha Duldula Road	5.70
91	Jashpur	Duldula	Judwain Ambatoli To L 45 Salamali	6.65
92	Jashpur	Duldula	Ranibandh - Makribandha	9.60
93	Jashpur	Duldula	Mayurchundi - L- 38	3.00
94	Jashpur	Jashpur	Jashpur To Dodkachoura (04I-50)	1.65
95	Jashpur	Kansabel	Titapakar To T07 Pandripani	5.80
96	Jashpur	Kansabel	Marhatoli To T06 Karmatoli (05I-43)	6.00
97	Jashpur	Kansabel	Semarkachhar To Tr-04 (Vr)	2.16
98	Jashpur	Kansabel	Koranga To Kunjara (Vr57)	3.10
99	Jashpur	Kansabel	Mdiajhariya To T02 Nh 78	2.50

No	Division/ District	Block	Road Name	Length (Km)
100	Jashpur	Kansabel	Dumartoli To Sabadmunda Kansabel Road	4.20
101	Jashpur	Kunkuri	Lodhaamba - L-38 Harradand	6.20
102	Jashpur	Manora	Lakwakona - Sonkyari	23.23
103	Jashpur	Pathalgaon	Chandarpur To Tr03	6.00
104	Jashpur	Pathalgaon	Karrajore To Tr07	4.00
105	Jashpur	Pathalgaon	Tamta - Bathanpara	2.40
106	Jashpur	Pathalgaon	Hardijhariya To Tr07	1.63
107	Jashpur	Pathalgaon	L-87 - Tihalisarai	7.10
108	Jashpur	Pathalgaon	Tr-04 To Karadand	2.50
109	Jashpur	Pathalgaon	Tr-01 - Makkapur	1.75
110	Jashpur	Pathalgaon	Darrimahua To Tr01	2.60
111	Jashpur	Pathalgaon	Bangoda - Tr-05	1.65
112	Jashpur	Pathalgaon	Khamgada - L-74	2.60
	Sub Total			150.77
113	Mahasamund	Bagbahara	T 01 Tendukona To Dokarpali	3.05
114	Mahasamund	Bagbahara	T02 Mungaser To Firgi	6.35
115	Mahasamund	Basna	Bizrabhata Tr 01 Tukda To Dhama Ghutkuri	1.20
116	Mahasamund	Basna	Kudekel To Potapara	2.20
117	Mahasamund	Basna	Tr 04 To Birsinghpali S	1.35
118	Mahasamund	Basna	Tr 03 To Rupapali	4.55
119	Mahasamund	Basna	Tr 04 To Karnapali	4.95
120	Mahasamund	Basna	Tr 03 Bandabari To Bamhanidih	3.80
121	Mahasamund	Basna	Tr 03 Bade Sajapali To Bhuthabahara	4.30
122	Mahasamund	Basna	Tr 03 Bade Sajapali To Harda	4.10
123	Mahasamund	Basna	NH 6 To Badetemari	2.52
124	Mahasamund	Mahasamund	NH 6 To Khadsa	1.90
125	Mahasamund	Mahasamund	NH6 Kuhari To Pasid ODR	1.50
126	Mahasamund	Mahasamund	Amora T05 To Kachhardih	1.95
127	Mahasamund	Mahasamund	NH 6 To Dumaripali	2.65
128	Mahasamund	Pithora	Lr 066 To Nawagaon Kala	1.55
129	Mahasamund	Pithora	T 12 To Saragtor	3.40
130	Mahasamund	Pithora	MDR Bagbahara Rd Tendukona To Udarlami	5.85
131	Mahasamund	Pithora	Bamhani To Kesaripur	2.35
132	Mahasamund	Pithora	Tr 10 Bhurkoni To Kolda	8.10
133	Mahasamund	Pithora	Tr 10 To Faroda	7.65
134	Mahasamund	Pithora	T 11 To Bartunda	1.55
135	Mahasamund	Pithora	NH 6 To Gauriya	4.80
136	Mahasamund	Pithora	Katangtarai To Chhoteloram	4.75
137	Mahasamund	Pithora	NH6 To Loharindongari	1.50
138	Mahasamund	Saraipali	NH 6 To Bandimal	8.30
139	Mahasamund	Saraipali	T 03 To Sahajpani	8.95
140	Mahasamund	Saraipali	Baloda To Gerra	5.00
	Sub Total			110.12
141	Raigarh	Baramkela	T03 To Jhal	16.40
142	Raigarh	Baramkela	T-03 To Karapi	16.00
143	Raigarh	Baramkela	Bishnupali Sonabala To Dulopali	1.60
144	Raigarh	Baramkela	Dongaripali Jhal To Amapali	1.05
145	Raigarh	Baramkela	T05 To Marodarha	2.25

No	Division/ District	Block	Road Name	Length (Km)
146	Raigarh	Baramkela	T06 Katangpali Sariya To Kandola	1.65
147	Raigarh	Baramkela	T-05 To Bade Amakoni (Vr3)	3.00
148	Raigarh	Baramkela	Sariya Sankara Road To Tora	9.50
149	Raigarh	Dharamjaigarh	L035 To Baghni para	5.45
150	Raigarh	Dharamjaigarh	T06 To Jamabeera	3.00
151	Raigarh	Dharamjaigarh	Bandhanpur Sajapali T-04 - Chitamara	7.30
152	Raigarh	Dharamjaigarh	L050 (Potiya) - Bhagdahi	7.75
153	Raigarh	Dharamjaigarh	Dharamjaigarh Pathalgaon Raod T05 - Uraonpara	3.52
154	Raigarh	Dharamjaigarh	L035 - T02 To Darogapara	2.40
155	Raigarh	Dharamjaigarh	Sohanpur Road - Gidhakhota	4.55
156	Raigarh	Dharamjaigarh	Dharamjaigarh Kapu Rd (T-03) - Branchpara	1.50
157	Raigarh	Dharamjaigarh	Bandhapali Dongabhawna Rd To Gadainbahri	2.05
158	Raigarh	Dharamjaigarh	Katrapara To Jaroliama	4.73
159	Raigarh	Dharamjaigarh	T- 010 To Medarmar Colony	1.50
160	Raigarh	Dharamjaigarh	L 044 - Dhondhagaon	3.60
161	Raigarh	Dharamjaigarh	Bandhanpur- Chantipali Road - Salkheta	2.10
162	Raigarh	Kharsia	Kurubhatta To Tendumudi	0.60
163	Raigarh	Lailunga	Ghatgaon To Patelpara	3.30
164	Raigarh	Lailunga	Kesala To Khairbahar (Vr78)	2.40
165	Raigarh	Lailunga	Lamdand - Kaharchua	1.60
166	Raigarh	Lailunga	Keshla Main Road To Saraimal	1.00
167	Raigarh	Pussore	Pussore Borodipa NH 200 Lohakhan	2.65
168	Raigarh	Pussore	Nawapara Lara To Mahlol	1.50
169	Raigarh	Pussore	Pussore Badebhandar Road Bunga To Nawapara-B	4.70
170	Raigarh	Pussore	Raigarh Kankatora To Renaglpali	2.00
171	Raigarh	Pussore	Kodatarai Surajgarh To Nawapali W	2.07
172	Raigarh	Pussore	Nawapara Lara To Basanpali	4.00
173	Raigarh	Sarangarh	Raigarh Sarangarh Road Tokhursi	2.55
174	Raigarh	Sarangarh	Sarangarh Shiverinarayan Road To Kalmi	1.00
175	Raigarh	Sarangarh	Hardi Dhuta Chharra Pindri To Khaira Bade	1.00
176	Raigarh	Sarangarh	T-06 To Ghatara	4.50
177	Raigarh	Sarangarh	L-049 To Dabgaon	2.50
178	Raigarh	Sarangarh	T-06 To Baigindih (Vr5)	4.50
179	Raigarh	Sarangarh	Sarangarh Shiverinarayan Rd To Paraskhol	0.90
180	Raigarh	Sarangarh	T-09 To Silyari	2.00
181	Raigarh	Sarangarh	T-06 To Chawarpur (Vr6)	2.70
182	Raigarh	Tamnar	Hukara Dongamahua T-02 To Tihairampur (Vr01)	2.00
183	Raigarh	Tamnar	Hukra Dongamahua To Lamdarha	2.20
184	Raigarh	Tamnar	Saraipali To Darama	1.75
185	Raigarh	Tamnar	Aamagha T- Kachkoba To Nayapara (Vr3)	1.75
186	Raigarh	Gharghoda	Gharghoda Dharamjaigarh To Bulekera	3.80
187	Raigarh	Raigarh	Raigarh Kolaibahal Road To Dumarpali E	4.02
188	Raigarh	Raigarh	Sambalpuri Kolaibahal Road To Sapnai	1.95
189	Raigarh	Raigarh	Dhanager Bhupdeopur Rd To Hardi Jharla	3.00

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No	Division/ District	Block	Road Name	Length (Km)
190	Raigarh	Raigarh	Raigarh Kolaibahal Rd To Bade Attarmuda	1.75
	Sub Total			170.59
191	Raipur	Balodabazar	Dhobadih To Deori	4.10
192	Raipur	Balodabazar	SH 22km To Chhuiya	0.75
193	Raipur	Balodabazar	Balodabazar To Koliyari Saloni	1.55
194	Raipur	Balodabazar	.Khamhariya To Bhairwadih	2.00
195	Raipur	Balodabazar	SH 33km To Lawanband	0.90
196	Raipur	Balodabazar	Balodabazar 28km To Bemetara	2.05
197	Raipur	Balodabazar	Risda To Puran	2.30
198	Raipur	Bhatapara	Rampur To MDR	0.80
199	Raipur	Bhatapara	Semariya To Datrengi	1.80
200	Raipur	Bhatapara	Koni Via Bagbudwa To Kodwa	1.10
201	Raipur	Bhatapara	Sendri To Khaparadih	2.00
202	Raipur	Bhatapara	Kesla To Lachchhanpur	2.25
203	Raipur	Bhatapara	Mopar To Arjuni	3.00
204	Raipur	Bhatapara	Akoli To Lewai	5.05
205	Raipur	Bhatapara	Bharatpur To Mopka	2.25
206	Raipur	Bhatapara	Pasid To Khapari	1.85
207	Raipur	Bhatapara	Nawagaon To Khamhariya	2.25
208	Raipur	Bilaigarh	Tundri To Maldiya	3.60
209	Raipur	Bilaigarh	Pipardula To Manpasar	2.10
210	Raipur	Bilaigarh	Beltikari To Pandripani	1.95
211	Raipur	Bilaigarh	Churla To Tendumudi	2.25
212	Raipur	Bilaigarh	Bisanpur To Nagardha	2.50
213	Raipur	Bilaigarh	Barbhata To Deoraha	2.40
214	Raipur	Gariaband	Gariaband To Khatti	5.30
215	Raipur	Kasdol	Mudhipar To Piparchhedi	3.15
216	Raipur	Kasdol	Nardha To Navrangpur	2.00
217	Raipur	Kasdol	Kasdol Kurkutti Road To Dhamalpura	0.80
218	Raipur	Kasdol	Kasdol Aurai To Damjhar	1.20
219	Raipur	Kasdol	Deopur To Thakurdiya	20.90
220	Raipur	Kasdol	Dhaurabhata To Bamhani	4.00
221	Raipur	Kasdol	Chhachhi To Amakhoha	5.75
222	Raipur	Pallari	Bhawanipur To Rewadih	4.18
223	Raipur	Pallari	Balodi To Odan	2.50
224	Raipur	Pallari	Datan To Gatapar Bbazar	4.10
225	Raipur	Pallari	SH09 Km 64 To Patharidih	2.13
226	Raipur	Pallari	T02 Balodi To Ahamadpur	3.73
227	Raipur	Pallari	Binouri To Gatapar	2.10
228	Raipur	Pallari	Junwani To Deogaon	0.90
229	Raipur	Pallari	Datan Sakari To Aurashi	1.10
230	Raipur	Pallari	Pandariya Dotopar Amera Bhalookona 13 Km To Achholi	5.90
231	Raipur	Pallari	Datan Sakari To Aurashi	1.00
232	Raipur	Pallari	Lakadiya	4.50
233	Raipur	Pallari	12104 Km 17 To Malpuri	1.30
234	Raipur	Pallari	Gidkera To Saiha Bazar	3.50
235	Raipur	Pallari	Muswadih To Semharadih	3.00
236	Raipur	Pallari	Bhairwadih To Bijradih	1.04

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No	Division/ District	Block	Road Name	Length (Km)
237	Raipur	Rajim	Kosamkhunta To Khapari	2.70
238	Raipur	Rajim	Pokhara - Raksha	1.55
239	Raipur	Simga	Suhela Kathiya Road Km 2 To Ameri	1.65
240	Raipur	Simga	Diggi To Matiya	4.55
241	Raipur	Simga	Darchura To Manhora	3.07
242	Raipur	Simga	Kachlon To Kirwai	4.30
243	Raipur	Simga	Nh200 Km 54 To 14t02 Km 6	1.75
244	Raipur	Simga	Tildabandha To Newari	1.60
245	Raipur	Simga	Kathiya To Bhalesur	4.70
246	Raipur	Simga	Pounsari To Lanja	0.85
247	Raipur	Chhura	Mongra - Birnibahara	6.08
248	Raipur	Chhura	Kantakhusari To Rajpur Via Dharampur	4.50
249	Raipur	Chhura	Dadargaon To Chhatarmadai O Via Kothigaon	2.60
250	Raipur	Chhura	Rakshi To Nawadih	2.40
251	Raipur	Chhura	Bamhani To Nawadih	2.50
252	Raipur	Deobhog	Kadalimuda - Dhungiyamuda	1.80
253	Raipur	Deobhog	Dhurwapara - Bhatarabahali	4.50
254	Raipur	Deobhog	Jhiripani To Dahigaon (Vr-660)	1.02
255	Raipur	Deobhog	Karlaguda To Dhungiyamuda (Vr-686)	1.02
256	Raipur	Deobhog	Latapara To Fudelpara	2.10
257	Raipur	Deobhog	Kodobhata To Khwaspara (Vr-672)	2.00
258	Raipur	Deobhog	Dohel To Podaguda (Vr-697)	1.00
259	Raipur	Deobhog	Sargibahali To Limpara (Vr-678)	2.40
260	Raipur	Deobhog	Sh2b To Dhodhara	1.00
261	Raipur	Mainpur	Bhatapani - Kuchenga	3.95
262	Raipur	Mainpur	Chanabhata To Urmal	2.03
263	Raipur	Mainpur	Kachharpara To Sarnabahal	2.75
264	Raipur	Mainpur	Sh2b - Beharadih	1.15
265	Raipur	Mainpur	Shobha - Kareli	1.98
266	Raipur	Mainpur	Bargaon To Mongaradih	2.75
267	Raipur	Tilda	Chicholi To Keotara Via Gourkheda	2.25
268	Raipur	Tilda	Tulsi M To Sarfonga	2.63
Sub Total				216.01
269	Surguja	Ambikapur	Bilaspur Road Dhanwar Road (SH 2a) Rd228.6 K.M. To Khaliwa Khas	3.00
270	Surguja	Lakhanpur	Belkharikha To Turna Baigapara	2.50
271	Surguja	Lundra	NH 78 Katni Gumla Rd To Silsila Uparpara	2.80
Sub Total				8.3
272	Bastar	Bakawand	Badepara Talnar To Khaspara Chitalur	7.20
273	Bastar	Bakawand	Bakawand To Bhirinda	3.80
274	Bastar	Bastanar	L036-Gaytaparairpa To Pujariparairpa	2.55
275	Bastar	Bastar	Farsaguda Chhurawand Road- Khaspara Khadka Vhaya Jamgaon	8.80
276	Bastar	Bastar	Farsaguda To Patelpara Chhurawand	7.50
277	Bastar	Darbha	NH 16 Pakhnar Road 9 Km To Koikimari	0.95
278	Bastar	Darbha	Manjhiguda To Khaspara	0.80
279	Bastar	Darbha	Darbha Chandameta Road To Thotapara	1.20
280	Bastar	Darbha	J K Road Rd 26 Km To Budagibhata	5.90

No	Division/ District	Block	Road Name	Length (Km)
	Sub Total			38.7
281	Kanker	Durgukondal	Kewti Pakhanjur To Marrampani	2.20
282	Kanker	Koelibeda	Bande To Haridaspur	2.80
283	Kanker	Koelibeda	2 Km of Govindpur Markanar To Vijaynagar	2.35
284	Kanker	Koelibeda	Janakpur To Krishnanagar	1.50
285	Kanker	Koelibeda	Vishrampur To Alor	0.90
286	Kanker	Koelibeda	49 Km of Bhanpratappur Bande Road Badgaon To Badepara	1.40
287	Kanker	Koelibeda	Sankanrnagar To Padenga	1.90
288	Kanker	Koelibeda	Roopnagar To Jagannathpur	6.00
	Sub Total			19.05
289	Korba	Kartala	T04 To Kasipani	2.10
290	Korba	Kartala	L052 To Jhinka	6.60
291	Korba	Kartala	T01 To Dongama	4.10
292	Korba	Katghora	Dipka Ring Road To Binjhari	2.60
293	Korba	Katghora	Darri To Mohariyamuda	1.50
294	Korba	Korba	T01 Chirra To Along	1.60
295	Korba	Korba	T01 To Dadarpara	4.25
296	Korba	Korba	T09 To Narbada	3.25
297	Korba	Korba	L023 To Dhanpuri	3.50
298	Korba	Korba	T02 Batati To Darga	4.60
299	Korba	Korba	L054 To Daldalipara	1.20
300	Korba	Korba	T08 Ajarbahar To Gaurbora	4.30
301	Korba	Pali	L047 To Bagaihapara	3.20
302	Korba	Pali	L048 To Bhelwadongri	1.70
303	Korba	Pali	L039 To Hardipara	2.55
304	Korba	Pali	L046 To Duggupara	1.50
305	Korba	Pali	T02 To Sadakpara	1.70
306	Korba	Podiuproda	L021 To Dhauramuda	3.15
307	Korba	Podiuproda	T05 To Barra	4.00
308	Korba	Podiuproda	T02 To Kodwari	6.05
309	Korba	Podiuproda	T02 To Nawapara	1.80
310	Korba	Podiuproda	T03 To Babupara Thotanpara	2.30
311	Korba	Podiuproda	L0100 To Bagdharidand	2.30
312	Korba	Podiuproda	T04 To Khamarpara	1.05
313	Korba	Podiuproda	T02 To Junapara	2.00
314	Korba	Podiuproda	T03 To Lalmatiya	1.35
315	Korba	Podiuproda	L0104 To Chuhari	3.85
316	Korba	Podiuproda	T07 To Mengadhi	5.05
317	Korba	Podiuproda	T02 to Khamharmuda	5.10
318	Korba	Podiuproda	L095 To Bagharidand	3.30
319	Korba	Podiuproda	T04 To Jambahar	4.15
320	Korba	Podiuproda	T06 to Manjharpara	9.00
	Sub Total			104.7
	TOTAL			1055.94

State: MADHYA PRADESH

No	Division/ District	Block	Road Name	Length (Km)
1	Ashoknagar	Chanderi	L088-L085 to Lidhorakalan	3.50
2	Ashoknagar	Chanderi	L045-T002 to Goraseharai	2.10
3	Ashoknagar	Ashoknagar	L123-T008 to Bawadikheda	3.60
4	Ashoknagar	Ashoknagar	L089-T006 to Jamakhedi	2.00
5	Ashoknagar	Ashoknagar	L125-T008 to Kudai	4.10
6	Ashoknagar	Ashoknagar	L065-T003 to Rajebamora	2.60
7	Ashoknagar	Ashoknagar	L084-T005 to Bamuriya Foot	3.20
8	Ashoknagar	Ashoknagar	L070-L067 to Sijawat	1.60
9	Ashoknagar	Ashoknagar	L077-T004 to Tarawali	1.20
10	Ashoknagar	Issagarh	L055-L054 to Manak Chock	3.80
11	Ashoknagar	Issagarh	L071-T003 to Imjhara	4.00
12	Ashoknagar	Issagarh	L105-T005 to Khemkhedi	3.00
13	Ashoknagar	Issagarh	L130-T005 to Hinotiya Foot	5.50
14	Ashoknagar	Issagarh	L106-L105 to Pipariya	3.10
15	Ashoknagar	Issagarh	L041-L040 to Piprol	2.40
16	Ashoknagar	Issagarh	L117-L116 to Cheerkheda	4.50
17	Ashoknagar	Mungaoli	L134-L 133 to Piparia	2.7
18	Ashoknagar	Mungaoli	L139-L 138 to Semri Piprai	4.00
19	Ashoknagar	Mungaoli	L070-T05 to Bhesonakala (Baibani)	1.40
20	Ashoknagar	Mungaoli	L053-T-03 to Ruhana	1.40
21	Ashoknagar	Mungaoli	L024-T-01 to Kenwara	3.50
22	Ashoknagar	Mungaoli	L021-T-01 to Pyasi (Piprai)	5.40
23	Ashoknagar	Mungaoli	L039-T-03 to Chiroli	4.40
24	Ashoknagar	Mungaoli	L052-T-03 to Bamman Khiria	2.20
	Sub Total			75.2
1	Betul	Betul	Tahali to Devthan	3.80
2	Betul	Betul	Neemjhiri to Bodna	5.00
3	Betul	Betul	Jogli Gondra Road to Ratamati Khurd	2.15
4	Betul	Betul	Lapajhiri to Gehuras	2.85
5	Betul	Betul	Sohagpur to Junawani	3.40
6	Betul	Ghodadongri	Ghuggi to Chopna	2.25
7	Betul	Ghodadongri	Vikrampur to Ghughari	1.55
8	Betul	Amla	Parsoda to Rambhakhedi	1.50
9	Betul	Amla	Amla Bordehi Road to Rateda Khurd	1.45
10	Betul	Amia	Tarodakala to Kacharboh	2.85
11	Betul	Amla	Barangwadi to Kothiya Raiyat	4.20
12	Betul	Amla	Somlapur to Pastlaimal	4.25
13	Betul	Multai	Khedicort to Lehida	3.80
14	Betul	Multai	Multai Bordehi Road to Temjhira (B)	2.50
15	Betul	Multai	Barkhed - Jam Road to Siladehi	1.50
16	Betul	Multai	Mahatpur to Khadakwar	2.20
17	Betul	Multai	Jam to Buwalkhapa	3.00
18	Betul	Multai	Multai Chhmdwara Sn to Dunai	1.85
19	Betul	P. Pattan	Bisnoor Jogikheda (T-07) Road to Kunda	2.80
20	Betul	P. Pattan	Masod-Ghan Road to Khediramoshi	1.00
	Sub Total			41.7

No	Division/ District	Block	Road Name	Length (Km)
1	Bhind	Ater	Pawai Road to Mahewa	1.83
2	Bhind	Bhind	Etawah Gwalior Road to Chasar	1.30
3	Bhind	Bhind	Umari Pandri Road to Puleh	1.50
4	Bhind	Bhind	Jakhmoli to Khodan	0.90
5	Bhind	Raun	Jaitpura Guda Road to Lidhora	1.15
6	Bhind	Raun	Ucha Road to Lachoor	2.4
7	Bhind	Lahar	Ajnar Road to Rohani Singh Ka Pura	3.00
8	Bhind	Lahar	Lahar Amayan Road to Dhohar	2.00
9	Bhind	Lahar	Lahar Seoda Road to Harpura	0.90
10	Bhind	Lahar	Kuthar Road to Khurd	2.20
11	Bhind	Lahar	Daboha Khajuri Road to Dharampura	2.20
12	Bhind	Lahar	Daboha Khajuri Road to Bagheri	4.00
13	Bhind	Lahar	Ratanpura Alampur Road to Chadraua	5.00
14	Bhind	Mehgaon	Jawasa Piphadi Road to Shayampura	2.30
15	Bhind	Mehgaon	Gawalior Etawa Road to Gishakpura	1.20
16	Bhind	Mahegaon	Gawalior Etawa Road to Vijaypura	1.25
17	Bhind	Mehgaon	Jawasa Pipahadihed Road to Kheriya	1.55
18	Bhind	Mehgaon	Mehgaon Murena Road to Tejpur	2.80
19	Bhind	Gohad	Charenta (Karwas) Road to Madanpur	3.25
20	Bhind	Gohad	Gohad Mou Road to Silhona	2.10
21	Bhind	Gohad	Badagarh Road to Bankepura	2.20
22	Bhind	Gohad	Guhiser Road to Adupura	1.50
23	Bhind	Gohad	Ratva Road to Gumara	3.80
Sub Total				44.8
1	Chhatarpur	Bijawar	Ragoli to Auriya	3.10
2	Chhatarpur	Bijawar	T-10 to Dilari	1.85
3	Chhatarpur	Rajnagar	Ganj Jhamtulli to Rampura	2.15
4	Chhatarpur	Rajnagar	Rajnagar Chhatarpur to Kota	4.50
5	Chhatarpur	Rajnagar	Benigunj Road to Bamnora	3.70
6	Chhatarpur	Badamalhara	Awarmata Road to Sorai	1.78
7	Chhatarpur	Badamalhara	Tikamgarh Shahgarh Road to Amarwan	2.88
8	Chhatarpur	Badamalhara	Dharampura to Piprakala	1.80
9	Chhatarpur	Badamalhara	Badamalhara Ghuwara to Baraj	1.70
10	Chhatarpur	Badamalhara	Dhanguwan to Hardhota	3.15
11	Chhatarpur	Chhatarpur	T-10 to Sigon	1.00
12	Chhatarpur	Chhatarpur	T-06 to Gonchi	2.20
13	Chhatarpur	Chhatarpur	T-01 to Shaymra	3.60
14	Chhatarpur	Chhatarpur	T-02 to Palotha	1.65
15	Chhatarpur	Chhatarpur	T-09 to Piprakala	2.40
16	Chhatarpur	Chhatarpur	T-03 to Ataniya	3.28
17	Chhatarpur	Laundi	Laundi Mahoba to Itwa	1.00
18	Chhatarpur	Nowgong	T 10 (Joran) to Deotha	4.93
19	Chhatarpur	Nowgong	T 09 to Thathehra	0.75
Sub Total				47.42
1	Chhindwara	Parasia	Kachram To Damuamal	2.125
2	Chhindwara	Sousar	Satnur T01 To Malegaon	6.700
3	Chhindwara	Harrai	Tharwa To Chhata	5.35
4	Chhindwara	Harrai	L110 Kamthi Kareli Rd To Karaghat	3.025

No	Division/ District	Block	Road Name	Length (Km)
5	Chhindwara	Chourai	Bamanwara To Mour	2.08
6	Chhindwara	Mohkhed	Hirawadi-Dhagdiyamal Road (L027) To Chourai	1.30
7	Chhindwara	Parasia	Chhabadi To Bijori Khurd	2.60
8	Chhindwara	Sousar	Borgaon To Jamlapani -2	2.450
9	Chhindwara	Pandhurna	Pandhurna(T04) To Kamthikhurd	2.000
10	Chhindwara	Amarwara	L043-Cwa-Narsinghpur Main Rd Km.30 To Tendni Mal(Verven)	4.62
11	Chhindwara	Amarwara	L058-Kolhiya(Kubdi) To Sariyapani	4.40
12	Chhindwara	Junnardeo	Bilawar Kala To Junapani	4.00
13	Chhindwara	Junnardeo	Bhamanwara To Ramnagri	2.23
14	Chhindwara	Junnardeo	Bilawarkhurd To Patniya	1.80
15	Chhindwara	Junnardeo	Dungariya Bhardagrah (Chunrichougan) to Brajpura	3.53
16	Chhindwara	Junnardeo	Unchetemru (T13) To Dhannor	2.83
17	Chhindwara	Junnardeo	Barelipar To Dhamniya	1.30
18	Chhindwara	Junnardeo	T05 (Nimoti) To Mandla	2.09
19	Chhindwara	Junnardeo	Ghurrekhurremau To Harrapathar	3.95
20	Chhindwara	Chourai	Main Road Km 112 (Salkani) To Bilanda	2.10
21	Chhindwara	Chourai	T01 To Hathni	2.10
22	Chhindwara	Chourai	T01 Kunda To Bichhuwa	1.30
23	Chhindwara	Mohkhed	Jam To Umriyadalel	0.90
24	Chhindwara	Chhindwara	T10 To Chhabri	3.00
Sub Total				58.76
1	Datia	Bhander	I.P.S. Road To Charai (Tendot To Semaha)	3.75
2	Datia	Bhander	Bhander Sarsai Road (Khiriya Sahab) to Novai (Bhander Sarsai Road to Novai)	2.00
3	Datia	Bhander	Bhander Rd. To Sahjoura (Berachh to Ajitpura)	4.00
4	Datia	Datia	Gwalior Jhansi (Gandhari) Road To Lamaycha	1.30
5	Datia	Seondha	Indergarh Goraghat Road To Pipra	4.10
6	Datia	Seondha	Indrgarh Goraghat Road To Ramgarh	2.65
7	Datia	Seondha	Kulaith Rd.To Jaswantpura (Indergarh Pichore Road To Jaswantpura)	4.95
8	Datia	Seondha	Senthri (Parsodagujer) Road to Fatehpur	2.25
9	Datia	Seondha	Datia-Seondha Mau (Ikona) Road To Thaili	2.25
10	Datia	Seondha	Bhaguapura Alampur Road To Maliyapura (Datia Mau Road To Maliyapura)	3.20
11	Datia	Seondha	Unchiya Tiraha To Jaura (Indergarh Kamad Road (Bagpura) Road To Jaura)	2.90
Sub Total				25.3
1	Dewas	Dewas	Tolapura (Siroliya) To Sutarkheda	6.35
2	Dewas	Dewas	Mirkhedi To Khatamba (Kankund)	4.10

No	Division/ District	Block	Road Name	Length (Km)
3	Dewas	Dewas	Sumarkheda To Maxi Rd 18 Km	1.02
4	Dewas	Dewas	Nagora To Tigariya Road	1.60
5	Dewas	Sonkach	Nanadharakhedi To Nevari Road	1.83
6	Dewas	Sonkach	Kachnariya To Rajapur Road	0.75
7	Dewas	Sonkach	Baroli To Babai Road (Oad)	2.10
8	Dewas	Sonkach	Kharsi (Pardi Kheda) To Bhopal Road	1.10
9	Dewas	Tonkhurd	Vijaygarh Muriya To Chaubara Road	2.87
10	Dewas	Tonkhurd	Jasmiya To Ratankhedi	2.38
11	Dewas	Bagli	Udainagar To Patadiya (Seevanpani)	3.50
12	Dewas	Bagli	Premgarh (Bawadikheda) To Udaynagar Punjabura	4.30
13	Dewas	Bagli	Sadipura Road To Bavaliya	3.80
14	Dewas	Bagli	T-06 (Punjabura) To Kewtiapani	1.40
15	Dewas	Bagli	Badiamandu Road (Mana Pipaliya) To Dhekiya (Mendia)	2.90
16	Dewas	Bagli	Pandutalao To Bhadak (Sitapuri)	4.00
17	Dewas	Khategaon	Mola To Sannod (Sukardi)	3.75
18	Dewas	Khategaon	Kana Bujurg To MDR(T05) (Rajor)	2.40
19	Dewas	Khategaon	Guradiya To NH-59 A	1.88
20	Dewas	Kannod	MDR To Chichhi (Pangri)	1.30
21	Dewas	Kannod	Nanasa To Amoda (Surani)	3.90
22	Dewas	Kannod	Kusmaniya To Devsinghiya (Kitiya)	2.00
23	Dewas	Kannod	MDR To Bamni Bujurg	2.70
24	Dewas	Kannod	MDR (Dabri Bujurg) To Mehndul	3.10
25	Dewas	Kannod	Kataphod (Bhayli) To Chorwra	1.90
26	Dewas	Kannod	Kannod To Nagjhiri (Raipura)	3.50
27	Dewas	Kannod	MDR To Nayapura	3.10
Sub Total				73.53
1	Guna	Aron	L052-T-04 Aron - Hapakhedi To Roriya	2.900
2	Guna	Aron	L039-T-04 Aron - Hapakhedi To Sarai	3.300
3	Guna	Aron	L033-L-032 To Rusalla To Budhakheda	2.900
4	Guna	Aron	L037-L-036 Mundra Khurd To Jakhoda	3.600
5	Guna	Bamori	L085-T-04 Sen Board Hamirpur To Churela	1.200
6	Guna	Bamori	L089-T-04 Sen Board Hamirpur To Baniyani Hamirpur	2.300
7	Guna	Bamori	L048-T-03 Meenapura-To Umri-Sirsi Rd. to Bhurakhedi	5.200
8	Guna	Bamori	L095-T-05 Fatehgarh-Lakhnakhedi Rd To Bhilkheda	5.200
9	Guna	Bamhori	L051-T-07-Rampur To Puraposar To Dudhai	3.500
10	Guna	Chachoda	L111-T-09 Kumbraj-Badod Sanai Rd To Jhareda	3.700
11	Guna	Chachoda	L108-T-08 Kumbraj-Miragwas Rd To Amlya	2.200
12	Guna	Chachoda	L064-T-06 Chachoda Manohar Thana Rd To Piplyamoti	1.500
13	Guna	Chachoda	L066-T-06 Chachoda Manohar Thana Rd To Maheshpura	2.000

No	Division/ District	Block	Road Name	Length (Km)
14	Guna	Chachoda	L143-T-010-Barod-Chhabra Rd To Behdabeh	1.200
15	Guna	Chachoda	L031-T-01 Khatoli-A.B.Road To Sagar	2.800
16	Guna	Chachoda	L070-T-07 Chachoda-Miragwas To Kusmpura	1.500
17	Guna	Chachoda	L043-T-03 Binagnaj-Teligaon To Suthaliya To Barkhua	4.000
18	Guna	Chachoda	L084-T-011 Kubmraj-Batawada Rd to Kanakhedi	2.800
19	Guna	Chachoda	L093-L-081 Dedla To Muhansakhurd	3.800
20	Guna	Guna	L139-T-01 A. B. Road To Agra	8.40
21	Guna	Guna	L084-T-08 Guna-Fathegarh Rd To Mahugarh	1.60
22	Guna	Guna	L070-T-07 Jetadonger-Barkheda Rd To Kadhon	1.00
23	Guna	Guna	L088-T-01 A. B. Road To Bamori Bujurg	1.00
24	Guna	Guna	L096-T-09 Guna-Umri-Sirsi Rd To Ari	2.60
25	Guna	Guna	L031-L-030 Manpur To Punamkhedi	3.60
26	Guna	Guna	L097-T-09 Guna-Umri-Sirsi Rd To Bheraghati	4.00
27	Guna	Guna	L120-T-10 A.B. Road To Patai-Umri-Sirsi Rd To Karkekemahu	1.00
28	Guna	Raghogarh	L135-T-04 A.B. Raod-Janjali-Maksudangarh- Banskhedhi To Karela	4.50
29	Guna	Raghogarh	L107-T-04 A.B. Raod-Janjali-Maksudangarh- Banskhedhi To Kherkheda	2.00
30	Guna	Raghogarh	L119-T-05 Ukawad-Naseerpur-Suthaliya Road To Mahuakheda	3.10
	Sub Total			55.8
1	Hoshangabad	Babai	Babai-Nasirabad Rd. (Ganera) to Gondalwada	2.200
2	Hoshangabad	Babai	SH-22 To Bamhori Kalan	1.750
3	Hoshangabad	Babai	SH-22(Guradiya) To Kanskhedha	3.100
4	Hoshangabad	Babai	SH-22 To Meghli	1.350
5	Hoshangabad	Hoshangabad	Silari To Rupapur	2.700
6	Hoshangabad	Hoshangabad	Dolariya-Tigaria Road To Kharkhedhi	1.075
7	Hoshangabad	Kesla	Itarsi-Dharamkundi Rd. To Nazarpur	4.500
8	Hoshangabad	Pipariya	SH-19 To Dabka	4.250
9	Hoshangabad	Pipariya	SH-22 (Hathwas-Kareli) Rd. To Tada	3.500
10	Hoshangabad	Pipariya	SH-19 (Seoni) To Sarra Kishore	1.725
11	Hoshangabad	Pipariya	SH-22 To Mahalwada	1.900
12	Hoshangabad	Pipariya	SH-22 To Rajola	1.250
13	Hoshangabad	Pipariya	SH-22 To Semri Randhir	2.950
14	Hoshangabad	Seoni Malwa	Dhamasa To Temla Kalan	2.150
15	Hoshangabad	Seoni Malwa	Seoni Malwa Rd. To Khal	1.850
16	Hoshangabad	Seoni Malwa	Seoni Malwa Rd. To Pathada	3.400
17	Hoshangabad	Sohagpur	SH-22 To Khapa Rd. To Singwada	3.450
	Sub Total			43.1
1	Jabalpur	Kundam	T07 To Dadargawan	2.00

No	Division/ District	Block	Road Name	Length (Km)
2	Jabalpur	Kundam	T03 To Sanjari	2.00
3	Jabalpur	Panagar	Beerner To Saraswahi	0.95
4	Jabalpur	Patan	MDR 1 To Khairi	0.51
5	Jabalpur	Shahpura	L-049 Gadapipariya(NH-12) To Katangi	2.25
6	Jabalpur	Jabalpur	Purwa To Junwani	1.10
7	Jabalpur	Kundam	T07 To Batai	4.15
8	Jabalpur	Kundam	T-02 To Khari	0.85
9	Jabalpur	Patan	Konikala To Itwa Imlia	4.80
10	Jabalpur	Patan	Sh-37 To Ganj Khamaria	2.80
11	Jabalpur	Patan	MDR To Timari	0.65
12	Jabalpur	Shahpura	Sakri To Lalpur	2.10
13	Jabalpur	Shahpura	Managawan (NH12) To Imaliya 18	3.40
14	Jabalpur	Shahpura	T02 MDR Tilwara Chargawa Rod To Nunpur	0.80
15	Jabalpur	Sihora	Kitola Panumariya To Padriakala	3.20
16	Jabalpur	Sihora	Sihora Silondi Road To Bahtuli	2.65
	Sub Total			31.31
1	Katni	Badwara	PWD Rd To Bhadawar	3.1
2	Katni	Badwara	NH-78 To Chhaphani	3.5
3	Katni	Badwara	Pwd Rd To Gopalpur	6.3
4	Katni	Badwara	Harwah To Nipaniya	1.6
5	Katni	Badwara	SH-14 To Khirheni	1.5
6	Katni	Bahoribandh	Neemkheda To Bhatgawa	1.6
7	Katni	Bahoribandh	Patori To Magela	1.2
8	Katni	Deemar Kheda	Pakariya To Baroda	1.9
9	Katni	Deemar Kheda	Bamhani To Khandwara	10.8
10	Katni	Katni	NH-78 To Khirwa	4.2
11	Katni	Rithi	Bilhari To Ghinochi	5.45
12	Katni	V.Garh	Kanti To Padwai	1.1
13	Katni	V.Garh	Chora To Chori	2.5
	Sub Total			39.3
1	Khandwa	Harsud	Hoshangabad Khandwa Rd To Kadouli Ryt.	1.20
2	Khandwa	Harsud	Mandla To Karoli Road	3.90
3	Khandwa	Khandwa	Khandwa-Kalmukhi Rd To Balyapura	3.50
4	Khandwa	Khandwa	Khandwa Aashapur Road To Badgaon Road	4.90
5	Khandwa	Khandwa	Matpur To Jinwania Ala Road	3.60
6	Khandwa	Pandhana	Itwa Mal To Singot-Bhilkhedi Rd	3.50
7	Khandwa	Pandhana	Kedar Khedi To Singot Bhil Khedi Road	1.15
8	Khandwa	Pandhana	Chickheda To Singot Road	3.50
9	Khandwa	Punasa	Badhani To Narmadanagar- Punasa Rd	2.20
10	Khandwa	Punasa	Awaliya (Fv) To Jalwa Bujurg Road	2.83
11	Khandwa	Punasa	Borani To Kenood Road	4.82
12	Khandwa	Punasa	Dait To Mundi Atotkhas Road	2.30
13	Khandwa	Punasa	Dhawadiya To Kothi Road	2.46
	Sub Total			25.21
1	Khargone	Bhagwanpura	Kariyapura To Lalpura	4.90
1	Khargone	Barwah	Bhogawa Nipani To Sanghavi	5.10

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No	Division/ District	Block	Road Name	Length (Km)
2	Khargone	Barwah	Jethway - Berphad Bujurg To Jujakhedi	1.90
3	Khargone	Barwah	Badi Khargone Road To Bandhikhar	1.50
4	Khargone	Barwah	Khandwa Indore S.H.27 To Lohari	4.90
5	Khargone	Barwah	Sainik Nagar To Jamaniya	1.25
6	Khargone	Barwah	Bagod To Methawan	3.80
7	Khargone	Barwah	Padliya Bujurg To Lalpura Road	2.40
8	Khargone	Barwah	Bagod To Dolatpura	1.70
9	Khargone	Barwah	Methwan To Kakatti	3.00
10	Khargone	Barwah	Khedi To Ramkula	3.00
11	Khargone	Barwah	Barud To Nandgaon	1.04
12	Khargone	Barwah	Kundiya To Aroda	2.20
13	Khargone	Kasrawad	Bamandi To Titraniya	5.70
14	Khargone	Kasrawad	Mukandpura To Mathlay	2.70
15	Khargone	Kasrawad	Kasrawad Khurd To Ahilyapura	3.20
16	Khargone	Kasrawad	Approach Road To Bardevia	3.40
	Sub Total			37.69
1	Narsinghpur	Narsinghpur	NH.26 Km. 352 To Agariya	1.00
2	Narsinghpur	Narsinghpur	Ghapindrai To Malhaua	2.10
3	Narsinghpur	Narsinghpur	Bhaiua To Pala	1.10
4	Narsinghpur	Narsinghpur	Lalpuri Gorakhpur Road Km. 2 To Barpani	0.90
5	Narsinghpur	Narsinghpur	S.N. 22 Km 76 To Sahajpura	1.00
6	Narsinghpur	Narsinghpur	Ghatpindrai Road To Jhirikhurd	1.60
7	Narsinghpur	Narsinghpur	Nayagaon To Badguan	3.35
8	Narsinghpur	Narsinghpur	Dudwara To Lighari	1.10
9	Narsinghpur	Narsinghpur	NH 26 K.M. 370 Gadariya	2.25
10	Narsinghpur	Narsinghpur	Kodras Kala To Mehgaon	1.40
11	Narsinghpur	Narsinghpur	Khapa (Dh) To Gheghra	5.50
12	Narsinghpur	Narsinghpur	Ranipipariya Rd To Nawalgaon	2.00
13	Narsinghpur	Narsinghpur	Chandpura To Gadariya Kheda	2.80
14	Narsinghpur	Narsinghpur	Kurpa To Jhar-Kurpa	3.00
15	Narsinghpur	Narsinghpur	Nawalgaon To Barurewa	4.40
16	Narsinghpur	Gotegaon	Nagwara To Katkuhi	3.6
17	Narsinghpur	Gotegaon	Simri Bandhi Road To Ankhiwara	1
18	Narsinghpur	Gotegaon	O.B. Road To Tikari	1.7
19	Narsinghpur	Gotegaon	Barheta Road To Gadarwara Khera	2.75
20	Narsinghpur	Gotegaon	Rohiya Road To Shedpipariya	4.35
21	Narsinghpur	Gotegaon	O.B. Road To Belkhedi	2.77
22	Narsinghpur	Gotegaon	Deonagar To Rajakacchar	3.4
23	Narsinghpur	Gotegaon	Barehta Rd To Andhyari	2.5
24	Narsinghpur	Gotegaon	Kunda Road To Gotegaon Kheda	1.05
25	Narsinghpur	Gotegaon	Jamuniya Road To Muwar	2.4
26	Narsinghpur	Gotegaon	Dhuwa Road To Koregaon	2.9
27	Narsinghpur	Gotegaon	Mehas Road To Umara	1.7
28	Narsinghpur	Gotegaon	O.B. Road To Deogaon	2.8
29	Narsinghpur	Gotegaon	Gourtala To Majni	2.5
30	Narsinghpur	Gotegaon	Chandankheda To Nandiya	3.28
31	Narsinghpur	Kareli	Manegaon To Bikor	2.51
32	Narsinghpur	Kareli	Rakai To Basedi	4.4

No	Division/ District	Block	Road Name	Length (Km)
33	Narsinghpur	Kareli	Bikor Road To Kudi	3.4
34	Narsinghpur	Kareli	Sas Bahu (Amheta) To Pipariya (A)	3.75
35	Narsinghpur	Kareli	Singhpur Road To Gwari Kala	2.8
36	Narsinghpur	Kareli	Kosam Kheda To Mehgawan	2.7
37	Narsinghpur	Saikheda	T08 To Sokalpur	4.70
38	Narsinghpur	Saikheda	Saikheda To Khairua	5.50
39	Narsinghpur	Saikheda	Saikheda To Pithras	7.00
40	Narsinghpur	Saikheda	Bankhedi Tigadda To Bankhedi	2.30
	Sub Total			98.5
1	Rajgarh	Biaora	NH-12 To Peepalbey	1.500
2	Rajgarh	Biaora	Nevali To Newaj	2.000
3	Rajgarh	Biaora	SH - 14 To Luhari	3.200
4	Rajgarh	Biaora	Suthaliya To Nalajhiri	3.250
5	Rajgarh	Narsinghgarh	Eklera Kurawar Road To Sehat Khedi	4.600
6	Rajgarh	Narsinghgarh	NH-12 To Padaliya Bana	2.100
7	Rajgarh	Narsinghgarh	Narsinghgarh - Bairasiya Road To Baraytha	1.300
8	Rajgarh	Narsinghgarh	Narsinghgarh To Vijaygarh	3.100
9	Rajgarh	Narsinghgarh	Sujalpur - Pachor Road To Karondi	2.300
10	Rajgarh	Narsinghgarh	Boda - Narsinghgarh Road To Chatha	1.900
11	Rajgarh	Narsinghgarh	Sukli To Guradiya	3.000
12	Rajgarh	Sarangpur	AB. Road To Bhura Khedi	3.200
13	Rajgarh	Sarangpur	Chatkiya To Mehrimoti	1.300
14	Rajgarh	Sarangpur	Sarangpur Sandawata Road To Digwad	2.100
15	Rajgarh	Sarangpur	Lima Chouhan To Pathari Jagir	4.500
16	Rajgarh	Sarangpur	Bhiyana To Dedla	2.000
17	Rajgarh	Sarangpur	Khujner (Sarangpur) - Gulawata Road To Echiwada	1.900
18	Rajgarh	Sarangpur	A B Road To Nipaniya Ruwala	1.900
19	Rajgarh	Sarangpur	Mau (A.B. Road) To Dingalpur	3.500
20	Rajgarh	Sarangpur	Padliya - Mata To Bapchya	4.175
21	Rajgarh	Sarangpur	Pachor Machalpur Road To Bhilkheda	2.650
22	Rajgarh	Jirapur	Bhandawat To Laxman Pura	2.200
23	Rajgarh	Jirapur	Bhanpura To Goriyakheda	5.400
24	Rajgarh	Khilchipur	NH - 12 To Chibad Kalan	2.500
25	Rajgarh	Khilchipur	Khilchipur - Jirapur Road To Gujar Khedi	1.000
26	Rajgarh	Khilchipur	Khilchipur - Bhoomariya Road To Dalupura	1.500
27	Rajgarh	Khilchipur	Biaora Kala To Dundahedi	4.100
28	Rajgarh	Rajgarh	Rajgarh Khjner (Kalipeeth) Road To Tandikalan	2.000
29	Rajgarh	Rajgarh	NH-3 To Padampura	3.200
30	Rajgarh	Rajgarh	NH - 3 To Sameli	2.500
31	Rajgarh	Rajgarh	NH - 12 To Fool Khedi	1.000
32	Rajgarh	Rajgarh	Chatukheda Bamlabey Road To Baiheda	2.400
	Sub Total			37.125

No	Division/ District	Block	Road Name	Length (Km)
1	Ratlam	Alote	Jaora Alote Road To Jhangaria	2.100
2	Ratlam	Alote	Alote Unhel Road To Painagra	1.880
3	Ratlam	Piploda	Jaora Amba Road To Ajampurdodiya	2.500
4	Ratlam	Ratlam	Mangrol Road To Kaharakhedi	1.320
5	Ratlam	Alote	Jaora Alote Road To Bisalkheda	1
6	Ratlam	Alote	Rajala To Majanpura	3.8
7	Ratlam	Alote	Kothadi (Tal) To Nakatwada	3.3
8	Ratlam	Alote	Tugni To Akyakhurd	3.6
9	Ratlam	Alote	Alote Barkheda Road To Narani	0.825
10	Ratlam	Alote	Alote Barkheda Road To Devgarh	2.6
11	Ratlam	Alote	Alote Barod Road To Kabria Khedi	1.75
12	Ratlam	Alote	Alote Barkheda Road To Jalodiya	2.5
13	Ratlam	Jaora	Jaora Alote Road To Batwadia	3.6
14	Ratlam	Jaora	Batwadia To Roopdi	2.1
15	Ratlam	Jaora	Ringnod To Kamliya	3.7
16	Ratlam	Jaora	Bandwa To Borwana	1.9
17	Ratlam	Jaora	Netawali Rola Road To Sujanpura	1.7
18	Ratlam	Jaora	Lasudiya Jungli To Chayyan	3.05
19	Ratlam	Piploda	Sherpur To Ummedpura	2.5
20	Ratlam	Ratlam	Dosigaon To Borana	1.28
21	Ratlam	Ratlam	Pritam Nagar To Bhilkhedi	3.2
22	Ratlam	Ratlam	S.B. Road To Aiwariya	1.67
23	Ratlam	Ratlam	Sarwad To Surjapur	2.63
	Sub Total			20.5
1	Rewa	Rewa	Rewa Tamara Road To Padiya	2.80
2	Rewa	Rewa	Teekar Road To Dhophkari 299	4.20
3	Rewa	Sirmour	L-083 (Badagawan) To Bela	5.00
4	Rewa	Sirmour	Tilkhan To Guhiya	3.10
5	Rewa	Teonther	Manika To Lokhawar	1.00
6	Rewa	Teonther	Khatkhari Khalan To Khatikhari Khurd	1.00
7	Rewa	Mauganj	Ratangawan To Matiyari	4.00
8	Rewa	Mauganj	Harraimudahan To Umarishripati	4.60
9	Rewa	Gengeo	Lalgaon To Devhata	2.00
10	Rewa	Gengeo	Anterila To Pondi	2.55
11	Rewa	Gengeo	Raghunathganj To Dhabaiya Fauji -255	2.50
12	Rewa	Gengeo	Joraut To Hinauta	2.70
13	Rewa	Hanumana	Khatkhari To (Ghogham) Uskakothar	13.00
14	Rewa	Hanumana	Majhagawan To Alhawa	2.00
15	Rewa	Hanumana	Domodar Garh (Belha) To Koidar	4.00
	Sub Total			54.45
1	Sagar	Banda	T01 /B07 To Tentwara	2.30
2	Sagar	Banda	B 07 To Hinoti	1.25
3	Sagar	Banda	B 07 To Kalraho	2.00
4	Sagar	Bina	T 09 To Lahrawda	1.05
5	Sagar	Malthone	Jhikni To Barodiya	2.128
6	Sagar	Khurai	Karaiya Pmgsy App Road To Bilaiya	1.80
7	Sagar	Khurai	Karaiya Pmgsy App Road To Jharai	0.525
8	Sagar	Khurai	MDR To Barkheri	3.20
9	Sagar	Khurai	MDR Dhanora To Karai	2.00

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No	Division/ District	Block	Road Name	Length (Km)
10	Sagar	Khurai	MDR Muriya To Semra Ghat	2.18
11	Sagar	Shahgarh	T 04 To Dhawara	5.58
12	Sagar	Shahgarh	T 05 To Simariya Kala	0.96
13	Sagar	Shahgarh	T 04 To Jalampur	0.80
14	Sagar	Shahgarh	Khatorakala To Lidhora	2.35
15	Sagar	Deori	T-09 To Ghosi Patti	0.700
16	Sagar	Jaisinagar	Sh15 To Banjariya	1.920
17	Sagar	Jaisinagar	Jaisinagar To Jera	6.200
18	Sagar	Jaisinagar	T02 To Tekapar	1.700
19	Sagar	Jaisinagar	Kallai To Rampura	1.300
20	Sagar	Kesli	Narayan Pur To Indalpur	1.500
21	Sagar	Kesli	Keolari To Bagdari Khurd	5.300
22	Sagar	Rahatgarh	Khajra Maphy To Bhabuka Wari	3.000
23	Sagar	Rahatgarh	Chauki To Shikarpur	4.200
24	Sagar	Rahatgarh	Khajra Maphy To Nandan Wada	3.300
25	Sagar	Rahatgarh	Eran NH86 To Khari Gumariya	2.680
26	Sagar	Rahatgarh	Batyawada To Basoda	3.600
27	Sagar	Rahatgarh	Mahuna Gujar To Pekhlon	3.000
28	Sagar	Rahatgarh	L119 To Pachoha	0.700
29	Sagar	Rahatgarh	Samos To Dhana-Naryawali	2.600
30	Sagar	Rahatgarh	Khiriya Nikhara To Kodni	1.550
31	Sagar	Rehli	Patana To Patti Bargaon	1.700
32	Sagar	Rehli	Samal Khiriya To Pipargour	1.500
33	Sagar	Sagar	NH26 To Jasraj	1.800
34	Sagar	Sagar	Bamhori To Chawra	3.65
Sub Total				35.843
1	Seoni	Seoni	T-23 To Gangerua	2.70
2	Seoni	Seoni	Lakhanwada Kedparpur (T20) To Simariya	1.75
3	Seoni	Seoni	Pindrai (T07) To Jorawari	1.50
4	Seoni	Seoni	Hinotiya To Narwakheda	1.70
5	Seoni	Seoni	T-18 Seoni Chhindwada To Chargaon	2.90
6	Seoni	Seoni	Binjhawada NH-7 By Pass (T10) To Patra	3.65
7	Seoni	Seoni	Chandouri Khurd To Nakotiya	3.23
8	Seoni	Seoni	T-21 (Sapapar) To Gadawara	4.90
9	Seoni	Seoni	NH-7(T01) To Gorakhpur	4.20
10	Seoni	Seoni	Karirat To Gundrai	4.24
11	Seoni	Seoni	Seoni Amarwada (T21) To Panjra	4.10
12	Seoni	Seoni	Jamuniya To Bineki	2.10
13	Seoni	Seoni	NH-7 Chandanwadakhurd (T02) To Bisapur	1.10
14	Seoni	Seoni	Gopalganj To Datni	1.85
15	Seoni	Seoni	Marjhor To Sakarda	2.10
16	Seoni	Seoni	Bandol To Pipariya	2.43
17	Seoni	Seoni	Singori To Katarwara	0.80
18	Seoni	Seoni	NH-7 Chandanwada Khurd (T02) To Bandra	0.70
19	Seoni	Seoni	Thanwari (T02) To Radhai	2.20

No	Division/ District	Block	Road Name	Length (Km)
20	Seoni	Seoni	Potalpani To Jatlapur	3.63
21	Seoni	Seoni	Lakhanwada (T18) To Pindrai	3.20
22	Seoni	Barghat	Lalpur (T04) To Ulat	2.77
23	Seoni	Dhanora	Khirkhiri(Amo) To Amoli	3.90
24	Seoni	Ghansore	Karithoon To Roto	4.20
25	Seoni	Ghansore	Kudwari To Chamarwah	2.60
26	Seoni	Keolari	Jhitara To Sindradehi	1.20
27	Seoni	Keolari	Jhola To Bhadutola	1.05
28	Seoni	Keolari	Sunwara To Khapa	0.775
29	Seoni	Lakhnadone	T-01 To Mohgaon Khurd	3.40
Sub Total				72.175
1	Shajapur	Shajapur	Muli Khedi To Magriya Rd.	1.20
2	Shajapur	Moman Barodiya	Ukawata - Rasulpur	0.80
3	Shajapur	Moman Barodiya	Kharsoda To Salsalai	1.70
4	Shajapur	Moman Barodiya	Koriya To Gulana	4.80
5	Shajapur	Moman Barodiya	Bhatahedi To Dhandeda Rd.	2.80
6	Shajapur	Moman Barodiya	Dankani To Sarsi	2.40
7	Shajapur	Moman Barodiya	Malikhedi To Shujalpur Road 17. 5 Km	2.00
8	Shajapur	Shujalpur	Choki Nasirabad To Akhtiar Pur	5.50
9	Shajapur	Shujalpur	Bankakhedi To Harrai Kalan Road	3.80
10	Shajapur	Shujalpur	Lasidiya Hazam to Shujalpur Khardon Rd Km 5	2.18
11	Shajapur	Shujalpur	Kamalia To Nandsura Road	0.55
12	Shajapur	Kalapipal	Sadan Khedi To Kalapipal Kurawar Road Km16	2.00
13	Shajapur	Kalapipal	Kohara To Kalapipal Kurawar Road Km2	2.20
14	Shajapur	Kalapipal	Bisamkhedi To Arandia	4.50
15	Shajapur	Agar	Malikhedi To Pat - Agar Road (Km. 119)	2.5
16	Shajapur	Agar	Badgon To Pat - Agar Road (Km, 111/8)	3.1
17	Shajapur	Agar	Kalmoi To Chandan Gaon	2.42
18	Shajapur	Agar	Agar - Sarangpur Road Km. 30 To Mathurakhedi	2.22
19	Shajapur	Susner	Dehriya Soyat To Diwankhedi	1.75
20	Shajapur	Susner	Indore - Kota Road (Km. 160/8) To Mangishpur	2.55
21	Shajapur	Susner	Mehatpur To Patpada	2.35
22	Shajapur	Susner	Maina To Kalriya	1.73
23	Shajapur	Susner	Indore - Kota (Km. 146/4) To Kadia	1
24	Shajapur	Susner	Indore - Kota (Km. 155/4) To Nipaniya	2
25	Shajapur	Barod	Tanodiya Madkota Road To Fatehgarh	1.7
26	Shajapur	Barod	Ratankhedi To Narwal - Gangapur In Km. 8	3.8

No	Division/ District	Block	Road Name	Length (Km)
27	Shajapur	Nalkheda	Gujarkhedi To Eklera	2.2
28	Shajapur	Nalkheda	Bagawad To Kakadiya To Nanakhedi Gurjar	3.5
29	Shajapur	Nalkheda	Kachanariya To Bisani	2.3
	Sub Total			42.67
1	Shivpuri	Kolaras	T04 Rannod Road To Pachawala	1.00
2	Shivpuri	Kolaras	T03 Bhadota Road To Berasiya	4.90
3	Shivpuri	Kolaras	Ab Road To Ukawal	2.55
4	Shivpuri	Khaniyadhana	L046 Cp Road To Vishanpura	1.10
5	Shivpuri	Khaniyadhana	L044 Cp Road To Khiriya Bamore	2.30
6	Shivpuri	Khaniyadhana	B07 (Bhagari) To Loharcho	2.40
7	Shivpuri	Badarwas	L030 Sajai To Gagoni	4.70
8	Shivpuri	Badarwas	Amhara Dehrada Isagar Road (L038) To Bhagoriya	1.20
9	Shivpuri	Badarwas	L051 (Deharda Isagar Road) To Bamorekhurd	2.00
10	Shivpuri	Badarwas	L060 Ab Road To Banskhedha	3.70
11	Shivpuri	Badarwas	L081 Badarwas Rampuri To Kirola Nainagir	11.70
12	Shivpuri	Badarwas	L061 Ab Road To Rijodi	5.00
13	Shivpuri	Karera	Shivpuri Jhansi Road (NH25) To Ambari	4.00
14	Shivpuri	Narwar	Badgor Road To Sahidakhurd	1.10
15	Shivpuri	Pichhore	T07 To Umrikhurd	4.70
16	Shivpuri	Pichhore	T03 To Baxanpur	1.00
17	Shivpuri	Pichhore	T02 To Khargwaha	4.15
18	Shivpuri	Pichhore	T06 To Piproniya	4.65
19	Shivpuri	Pohri	Shivpuri-Seopur Road (T04) To Chhinari	2.50
20	Shivpuri	Pohri	L095 To Beharda	1.80
21	Shivpuri	Pohri	Shivpuri-Seopur Road (T04) To Ganesh Kheda	2.25
22	Shivpuri	Shivpuri	Boudi Broud To Khearouna	6.00
	Sub Total			16.6
1	Singrauli	Waidhan	Gadahra To Rajbandh	1.750
2	Singrauli	Waidhan	Pondi Path To Kamai	5.50
3	Singrauli	Waidhan	Gadahra To Chokara	2.40
4	Singrauli	Waidhan	Hardi Road To Dhatura Phokara	6.04
5	Singrauli	Waidhan	Khatkari To Barauha	1.20
6	Singrauli	Chitrangi	Geer To Badnai	5.40
7	Singrauli	Chitrangi	Khatai To Chikani	4.40
8	Singrauli	Chitrangi	Barmani To Lotan	2.60
9	Singrauli	Chitrangi	Dhani To Pipari	5.80
10	Singrauli	Chitrangi	Ghoghara To Agrahawa	5.05
11	Singrauli	Chitrangi	Bagaiya To Sirgudi	10.05
12	Singrauli	Chitrangi	Mohgadhi Road To Butwa	5.725
13	Singrauli	Chitrangi	Deora To Piparjhar	4.41
14	Singrauli	Chitrangi	Kulhiya To Akla	3.40
15	Singrauli	Chitrangi	Katarihar Road To Saketi	7.00

No	Division/ District	Block	Road Name	Length (Km)
16	Singrauli	Chitrangi	Ghoghara To Patehara	2.00
17	Singrauli	Chitrangi	Mohariya Road To Gairuai	3.62
18	Singrauli	Chitrangi	Bagaiya Road To Gawardahi	5.34
19	Singrauli	Deosar	Main Road To Bamhani Alias	3.45
20	Singrauli	Deosar	Parsohar To Jaghat	1.70
21	Singrauli	Deosar	Nayatola To Madraich	5.775
22	Singrauli	Deosar	Saraundha To Daudol	1.525
23	Singrauli	Deosar	Parsohar To Chandreh	3.50
24	Singrauli	Deosar	Saraundha To Bhaisahun	7.10
25	Singrauli	Deosar	Gajaradai To Patharidah	3.65
26	Singrauli	Deosar	NH-75 (Atarwa) To Songarh	4.625
27	Singrauli	Deosar	Saraundha To Madwa	1.025
28	Singrauli	Deosar	Jhundihawa To Ghaghitola	2.600
29	Singrauli	Deosar	Kundwar To Sanda	7.230
30	Singrauli	Deosar	NH-75 To Langhadand	2.500
	Sub Total			126.365
1	Ujjain	Badnagar	Badanagar Runija Road To Pitlawdiya	1.60
2	Ujjain	Badnagar	Badnagar Kesor Road To Birgodanadu	1.63
3	Ujjain	Badnagar	Badanagar Runija Road To Maswadiya Dhar	5.75
4	Ujjain	Badnagar	Amlawad Bhika To Jamalpura	2.10
5	Ujjain	Badnagar	Bhidawad To Rawadiya Kalan	3.10
6	Ujjain	Khachrod	Barthoon To Bramhankheda	5.33
7	Ujjain	Khachrod	Madawada To Barlai (Khachrod Road To Barlai)	5.05
8	Ujjain	Khachrod	Khachrod Ratlam Road To Nandwasla	2.97
9	Ujjain	Khachrod	Banjari Road To Kutlana (Batiawadi Ghudawan Road To Kutlana)	2.05
10	Ujjain	Khachrod	Kadiyali To Sekdi Sultanpur (Part-I)	1.25
11	Ujjain	Ujjain	Kadacha To Kadchhali	2.20
12	Ujjain	Ujjain	Bolasa To Khokariya	4.50
13	Ujjain	Ujjain	Dewas Road To Bolasa	2.45
14	Ujjain	Ujjain	Ujjain To Kankariya - Chirakhan To Brijrajkhedi	3.05
15	Ujjain	Ujjain	Tajpur To Umriya - Jagir	4.05
16	Ujjain	Ujjain	Harnawada To Kasampur	4.10
17	Ujjain	Ujjain	Ring Road To Nahariya	0.90
18	Ujjain	Ujjain	Ujjain - Maxi To Khajuria - Kumawat	1.95
19	Ujjain	Ghattiya	Malikhedi To Kalesar	1.05
20	Ujjain	Ghattiya	T 05 (Outer Ring Road) To Utesara	1.85
21	Ujjain	Mahidpur	Ghosala Mahidpur Road To Kala Pipal	2.00
22	Ujjain	Mahidpur	Zarda To Sakariya	3.30
23	Ujjain	Mahidpur	Ghosla Mahidpur Road (Lambi Kheda) To Lasudiya Devsi	4.60
24	Ujjain	Mahidpur	Makla Borkheda Now Road To Khedliya Manpur	0.90
25	Ujjain	Mahidpur	Jagoti (Mahudi) To Hingoniya	3.60
26	Ujjain	Mahidpur	Araniya Najik Mahidpur Marg To Bagala	3.50
27	Ujjain	Mahidpur	Bolkheda Now (C) to Mahudiya -	7.80

No	Division/ District	Block	Road Name	Length (Km)
			Lasudiya Goyal (C)	
28	Ujjain	Mahidpur	Lasudiya Mansoor To Khajuriya Mansoor	2.60
29	Ujjain	Tarana	Rupakhedi Laxmipura Road To Tilawdi	1.40
30	Ujjain	Tarana	Tarana-Ujjain-Road To Rajpura	2.45
31	Ujjain	Tarana	Kanthadi To Godadi	1.50
32	Ujjain	Tarana	Rupakhedi Laxmipura Road To Mundli	1.10
33	Ujjain	Tarana	Kanasiya To Laxmipura Rupakhedi To Palduna	0.50
34	Ujjain	Tarana	Rawan Khedi To Tejla Khedi	3.50
35	Ujjain	Tarana	Tarana To Sala Khedi	2.50
36	Ujjain	Tarana	Rupakhedi Laxmipura Road To Bijan Kheda	1.50
37	Ujjain	Tarana	Laxmipura To Rupakhedi To Pankhedi	0.75
38	Ujjain	Tarana	Kapeli To Umrajher	3.20
39	Ujjain	Tarana	Barkheda To Surajpura	0.75
40	Ujjain	Tarana	Tarana Berchhi Sunwa Goun	3.65
41	Ujjain	Tarana	Pat - Rupakhedi Road To Pipliya Bazaar (Dhabala Hardu To Khaka-Nisultan)	2.20
	Sub Total			96.73
1	Umaria	Karkeli	Kgrk Road To Karaundi	1.80
2	Umaria	Karkeli	Bandhwatola To Baghwar	2.40
3	Umaria	Karkeli	Kaudiya To Bansa	2.05
4	Umaria	Karkeli	Karaundi To Birhuliya	1.60
5	Umaria	Karkeli	Tammannara To Urdani	6.20
6	Umaria	Karkeli	Amari-Mardari Road To Aaganhudi	1.60
7	Umaria	Karkeli	Pathari Kalan To Bajakund	3.10
8	Umaria	Karkeli	Kgrk Road To Raghobpur	1.10
9	Umaria	Karkeli	Kgrk Road To Sahijana	2.30
10	Umaria	Karkeli	Kgrk Road (Singhpur) To Semariya	2.45
11	Umaria	Karkeli	Birsinghpur To Jhanpi	1.00
12	Umaria	Karkeli	Tammannara To Jamuniya	7.70
13	Umaria	Karkeli	Bilaspur To Manikpur	2.40
14	Umaria	Karkeli	Dhanwahi To Lagwari	5.90
15	Umaria	Karkeli	Karri-Bodli Road To Tikariya	4.50
16	Umaria	Karkeli	Kalda To Bichhiya	3.30
17	Umaria	Karkeli	Uphari To Ujaniya	3.10
18	Umaria	Karkeli	Pathari Kalan To Kataria	1.95
19	Umaria	Karkeli	Patrai To Atariya	3.30
20	Umaria	Karkeli	Tummadar To Amuwari	1.80
21	Umaria	Karkeli	Akhrar To Gura	4.70
22	Umaria	Karkeli	Khalekhatai To Tikurakhatai	3.70
23	Umaria	Karkeli	Baherwah To Barmani	1.30
24	Umaria	Karkeli	Nimha To Chhataini	2.70
25	Umaria	Karkeli	Akhrar Bilaspur Road To Kotalde	2.70
26	Umaria	Karkeli	Majmani Khurd To Ginjari	2.50
27	Umaria	Karkeli	Uchehra To Akmaniha	5.45
28	Umaria	Karkeli	Jhanpi To Tikurapathari	10.70

No	Division/ District	Block	Road Name	Length (Km)
29	Umaria	Manpur	Dhamokhar Bijauri Road To Mardari	5.45
30	Umaria	Manpur	Semra To Semri	2.20
31	Umaria	Manpur	Karaundi Tola To Dongari Tola	2.51
32	Umaria	Manpur	Bagaiha To Salkhaniya	3.63
33	Umaria	Pali	Goira Road To Parsaura	2.40
34	Umaria	Pali	Chandpur To Baghannara	3.50
35	Umaria	Pali	NH 78 To Marwa Tola	1.25
36	Umaria	Pali	S.M.Road To Balbai	1.60
37	Umaria	Pali	Pali Sundar Dadar Road To Kunkuni	0.90
Sub Total				116.74
1	Vidisha	Lateri	Unarsi Kalan Rd. To Mundara Ratansi	3.20
2	Vidisha	Lateri	Motipur To Daurala	1.50
3	Vidisha	Lateri	Lateri-Shamshabad Rd. To Semri Ahir	2.10
1	Vidisha	Nateran	Nateran To Khajuri Das	3.10
2	Vidisha	Nateran	Mahuta To Singrampur	2.20
1	Vidisha	Sironj	Kurwai-Sironj Rd. (T02) To Sona	1.30
2	Vidisha	Sironj	Sironj-Lateri Rd. To Jhukar Hauj	2.00
3	Vidisha	Sironj	Sironj-Imlani Rd. To Lidhoda	0.60
9	Vidisha	Vidisha	Sunpura Road To Bais	1.25
10	Vidisha	Vidisha	Vidisha-Ahmadpur Rd. To Mungod	4.00
11	Vidisha	Vidisha	Sh-19 (Kagpur) To Kanari	3.30
12	Vidisha	Nateran	Nayagola Road To Narkheda Khadya	2.60
13	Vidisha	Vidisha	Khamkheda To Salaikhedi	3.20
14	Vidisha	Basoda	L165-Rojroo To Grahini	1.70
15	Vidisha	Basoda	L150-Karariya Jajgir To Pawai Kurwai	5.00
16	Vidisha	Basoda	L049-T01 To Kanjna	1.40
17	Vidisha	Basoda	L053-Behlot To Tabakkalpur	4.75
18	Vidisha	Basoda	L135-L134 To Chourawar	4.55
19	Vidisha	Kurwai	L139-T06 To Veerapur	1.98
20	Vidisha	Kurwai	L145-T06 To Pairakhedi	1.28
21	Vidisha	Kurwai	L104-Parsari To Sikandarpur	1.73
22	Vidisha	Kurwai	L026-Layara To Lachayara	6.45
23	Vidisha	Kurwai	L083-Bilakhedi To Simarghan	2.85
24	Vidisha	Kurwai	L101-T05 To Raimoodara	2.05
25	Vidisha	Kurwai	L042-T03 To Shyampur Gudawal	2.15
26	Vidisha	Kurwai	L153-T07 To Girwasa	3.80
27	Vidisha	Kurwai	L137-Mala To Karmedi	5.20
Sub Total				64.54
TOTAL				1381.36

State: ODISHA

No	Division/ District	Block	Road Name	Length (Km)
1	Balasore I	Nilgiri	Kansa- Kakudipal	2.50
2	Balasore I	Nilgiri	Telipal- Siarimal	1.50

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No	Division/ District	Block	Road Name	Length (Km)
3	Balasore I	Nilgiri	PWD - Khuntapaladiha	1.70
4	Balasore I	Nilgiri	PWD- Bholanal	3.03
5	Balasore I	Nilgiri	PWD- Sarupal	1.50
6	Balasore I	Oupada	PWD Road to Pinchhabania	4.30
7	Balasore I	Oupada	Dimichua - Harichandrapur	2.00
8	Balasore I	Remuna	Kuligaon - Gambharia	2.00
9	Balasore I	Remuna	Bhadrasahi- Gaudgaon	3.40
10	Balasore I	Basta	Kothia - Kuchuli	1.50
11	Balasore I	Balasore	NH 60 - Paramanandapur	3.00
12	Balasore I	Balasore	PWD Road- Kuradiha	2.00
13	Balasore I	Balasore	Salt Road- Dalsusa	2.00
14	Balasore I	Balasore	NH60 - Belbaria	3.00
	Sub Total			33.43
1	Balasore II	Bahanaga	R.D. road to Kaharagohiri	5.60
2	Balasore II	Simulia	Dadhibamanpur to Parameswarpur	3.50
3	Balasore II	Simulia	Astia to Biranchipur	5.40
4	Balasore II	Khaira	Chakradharpur (RD road) to Krushnadaspur	3.50
5	Balasore II	Khaira	Soro Kupari PWD Road to Arjunpur	0.70
6	Balasore II	Khaira	Tudigadia to Rafayatpur	5.50
7	Balasore II	Simulia	Bari to Tirukha	3.70
	Sub Total			27.90
1	Bhadrak I	Tihidi	Barsar to Madhupur	5.00
	Sub Total			5.00
1	Bhadrak II	Bhadrak	Asura to Trisalpur	4.50
2	Bhadrak II	Bhadrak	PWD Road to D S Bindha	3.00
3	Bhadrak II	B.Pokhari	Barahanuapada	3.00
4	Bhadrak II	B.Pokhari	T2 to Mudhapada	3.00
5	Bhadrak II	Dhamangar	PWD Road to Dinajpur	3.70
6	Bhadrak II	Dhamangar	PWD Road to Tarabantia	2.70
7	Bhadrak II	B.Pokhari	(A) T2 to Nawarangapur	2.50
8	Bhadrak II	B.Pokhari	(B) T2 to Surubana	3.20
9	Bhadrak II	B.Pokhari	T1 to Sarapada	4.90
10	Bhadrak II	B.Pokhari	T3 to Bankamuhana	4.80
11	Bhadrak II	Chandabali	T3 to Pithiasenda	5.50
12	Bhadrak II	Basudavpur	PWD Road to Mishrapur	4.00
13	Bhadrak II	Basudavpur	(A) L42 to Kuali	5.50
14	Bhadrak II	Basudavpur	(B) T2 to Purusotampur	1.50
15	Bhadrak II	Basudavpur	PWD Road to Samia	1.50
16	Bhadrak II	Basudavpur	Eram Road to Olagada	6.50
17	Bhadrak II	Chandabali	Chardiha to Rajendrapalli	3.20
18	Bhadrak II	Chandabali	T6 to Kandisahi	2.20
19	Bhadrak II	B.Pokhari	T-1 to Uttarbad	4.00
20	Bhadrak II	Chandabali	Dosinga to Oramal	4.00
21	Bhadrak II	Basudavpur	PWD Road to Jignipur	4.00
22	Bhadrak II	Basudavpur	PWD Road to Bhoisahi	4.70
	Sub Total			81.90
1	Bolangir	Aglapur	RD road to Amarmunda (Road-A)	2.00
2	Bolangir	Aglapur	RD road to Pudapadar (Road-B)	3.33
3	Bolangir	Aglapur	N.H.-201 to Danipali (Road-C)	2.00

No	Division/ District	Block	Road Name	Length (Km)
4	Bolangir	Aglapur	RD road to Pandkital (Road-D)	1.41
5	Bolangir	Belpada	RD Road to Daramunda (Road-A)	3.25
6	Bolangir	Belpada	RD Road to Sunabahal (Road-B)	2.13
7	Bolangir	Bolangir	RD Road to Ramsingha (Road-A)	1.25
8	Bolangir	Bolangir	Baxiundar to Dhobaudar (Road-B)	2.50
9	Bolangir	Bolangir	Mayabarah to Uchhabahal (Road-C)	3.25
10	Bolangir	Bolangir	SH-42 to Bedtenlenpali (Road-A)	3.33
11	Bolangir	Bolangir	SH-42 to Khagsabahali (Road-B)	3.50
12	Bolangir	Bolangir	Bhudimuhan to Santenpali (Road-c)	2.30
13	Bolangir	Deogaon	PWD Road to Jamjharan	4.50
14	Bolangir	Gudvella	Dungibahal to Mandapala	5.20
15	Bolangir	Gudvella	P.S Road to Sindurbahali	1.30
16	Bolangir	Khaprakhol	Nandupala to Tumbipadar	2.30
17	Bolangir	Khaprakhol	Bhaludunguri to Karlakutna(Road-B)	4.20
18	Bolangir	Khaprakhol	Kariamal to Dudukipadar(Road-A)	2.30
19	Bolangir	Khaprakhol	RD Road to Ambapali(Road-B)	3.60
20	Bolangir	Khaprakhol	RD Road to Brahmani(Road-A)	2.40
21	Bolangir	Loisingha	NH-201 to Banjhipali (Road-A)	1.50
22	Bolangir	Loisingha	NH-201 to Karliput (Road-B)	2.00
23	Bolangir	Loisingha	RD road to Unchhabahali (Road-C)	3.00
24	Bolangir	Patnagarh	PWD Road to Kanheital	4.60
25	Bolangir	Patnagarh	PS Road to Kerbeda (Road-A)	1.45
26	Bolangir	Patnagarh	RD Road to Mandamahai (Road-B)	1.65
27	Bolangir	Patnagarh	RD Road to Bijamugar (Road-C)	1.00
28	Bolangir	Patnagarh	PS Road to Babejore (Road-D)	2.55
29	Bolangir	Puintal	NH-201 to Padiabahai (Road-A)	3.00
30	Bolangir	Puintal	RD Road to Khamarmunda (Road-B)	1.00
31	Bolangir	Puintal	Jamgaon RD to Kasurpali (Road-C)	1.50
32	Bolangir	Saintala	RD Road to Biratkani	1.00
33	Bolangir	Saintala	RD Road to Bhatasar	1.10
34	Bolangir	Saintala	TD RD Road to Jurabandha	0.78
35	Bolangir	Agalpur	RD Road to Gandpali	3.00
36	Bolangir	Khaprakhol	PWD Road to Bendra	8.30
37	Bolangir	Saintala	Tikrapada RD Road to Dukelcharchar	2.60
38	Bolangir	Puintala	SH-14 to Bhalbuka	2.75
39	Bolangir	Patnagarh	Khuntsamalei to Daitarymunda	2.20
	Sub Total			101.03
1	Titlagarh	Muribahal	Sargul to Bayaudar	1.60
2	Titlagarh	Muribahal	Chanabahai chhak to Ledapadar	2.70
3	Titlagarh	Muribahal	Tentulikhunti to Karlapitha	3.10
4	Titlagarh	Muribahal	Jamkani to Limpala	1.20
5	Titlagarh	Muribahal	Asumunda Chhak to Dudukapada	2.00
6	Titlagarh	Muribahal	Bijighat to Makhapali via: Sahajpani	1.80
7	Titlagarh	Muribahal	RD Road to Bijighat	4.30
8	Titlagarh	Muribahal	Dumerpada to Barajuri	3.00
9	Titlagarh	Muribahal	Singhpali to Siletpara	2.10
10	Titlagarh	Bangomunda	RD Road to Balkhamar	2.70
11	Titlagarh	Bangomunda	Themera to Utkela	2.05
12	Titlagarh	Bangomunda	PWD Road to Sahajot	4.60

No	Division/ District	Block	Road Name	Length (Km)
13	Titlagarh	Bangomunda	RD Road to Bahalpadar	4.40
14	Titlagarh	Bangomunda	Barlabahali to Baldha	1.60
15	Titlagarh	Bangomunda	RD Road to Chandaguda	1.50
16	Titlagarh	Bangomunda	Khujenbahal to Dangia	2.40
17	Titlagarh	Bangomunda	Dangia to Bagbahal	2.40
18	Titlagarh	Bangomunda	Khira to Deogaon	5.00
19	Titlagarh	Bangomunda	Pipalmunda to Telipadar	1.80
20	Titlagarh	Bangomunda	SH-16 to Gharla	1.85
21	Titlagarh	Titilagarh	MDR-40 to Thalka	2.22
22	Titlagarh	Titilagarh	NH-217 to Belpada	1.80
23	Titlagarh	Titilagarh	Titilagarh-Ghadar to Chitalal	2.20
24	Titlagarh	Titilagarh	Sireikela-Goudtola RD Road to Goidabari	0.60
25	Titlagarh	Titilagarh	SH-16 to Shukhunabhata	1.10
26	Titlagarh	Titilagarh	SH-16 to Kandra	1.00
27	Titlagarh	Titilagarh	MDR to Badpatrapali	4.20
28	Titlagarh	Titilagarh	L-89 to Beherapada	0.90
29	Titlagarh	Tureikela	Ramod to Mahanilaha	3.50
30	Titlagarh	Tureikela	Salepada to Patimal	3.00
31	Titlagarh	Tureikela	Mandla to Kameimunda	2.30
32	Titlagarh	Tureikela	Dabri to Kandupada	1.80
33	Titlagarh	Tureikela	PWD Road to Bagbahal	2.30
34	Titlagarh	Tureikela	Nandol to Bharuakani	5.50
35	Titlagarh	Tureikela	PWD Road to Halanbhata	7.40
36	Titlagarh	Tureikela	Badadakla to Nagaphena	2.20
37	Titlagarh	Tureikela	Dholmandal to Gabahara	2.80
38	Titlagarh	Muribahal	Janipara to Nuapada	2.00
39	Titlagarh	Muribahal	Dejuri to Padhanmundi	4.50
40	Titlagarh	Tureikela	RD Road to Simanbahal	1.30
41	Titlagarh	Tureikela	Khujen to Bandhanpali	2.00
Sub Total				106.72
1	Cuttack I	Cuttack Sadar	Paikasahi(Nurpatna) to Chanchapada	5.00
2	Cuttack I	Cuttack Sadar	Paikasahi(Nurpatna) to Chanchapada	5.73
3	Cuttack I	Mahanga	Balipada to Dihigop(0/0 Km to 0/4000Km)	4.00
4	Cuttack I	Mahanga	Balipada to Dihigop(4/000 Km to 9/900Km)	5.90
5	Cuttack I	Mahanga	Balipada to Dihigop(9/900 Km to 15/200Km)	5.30
6	Cuttack I	Cuttack Sadar	Bhoipada to Sadhusahi	6.94
7	Cuttack I	Cuttack Sadar	Bhoipada to Sadhusahi	4.08
8	Cuttack I	Nischintakoili	Kulia to San Routpati	4.87
9	Cuttack I	Nischintakoili	Kulia to San Routpati	3.22
10	Cuttack I	Nischintakoili	Kulia to San Routpati	6.32
Sub Total				51.34
1	Cuttack II	Narsinghpur	Nuagarh to Bhuska	3.80
2	Cuttack II	Baramba	Badakambilo to Chhanchunia	9.00
Sub Total				12.80
1	Deogarh	Reamal	Gadiapal to Thianal	4.05
2	Deogarh	Reamal	NH 200 to Panchamahala	2.20
3	Deogarh	Reamal	N.H.200 Rangamatia (Kadalipal)	9.93
4	Deogarh	Reamal	Mahasindhu to Chhachupali	6.09
5	Deogarh	Tileibani	Jharagogua to Raital	4.50

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No	Division/ District	Block	Road Name	Length (Km)
6	Deogarh	Tileibani	Parposi to Tasarada	5.00
7	Deogarh	Tileibani	Jamunali to Manjaribahal	2.20
8	Deogarh	Barkote	Jharabahal to Netrabahal	2.70
9	Deogarh	Barkote	Saida to Rugudakudar	5.45
10	Deogarh	Barkote	Rugudakudar to Pacheripani	5.10
11	Deogarh	Tileibani	Bhaluguha to Surupa	3.10
	Sub Total			50.32
1	Ganjam I	Beguniapada	Janibili to PWD road	9.10
2	Ganjam I	Beguniapada	Kalimeghi to Luhakote	6.00
3	Ganjam I	Sorada	Nuagam to Binjigiri	4.10
4	Ganjam I	Sorada	Sunakhandi to Sandhipiplapanka	2.50
5	Ganjam I	Bellaguntha	PWD Road to Raipada	1.98
6	Ganjam I	Bellaguntha	SH-7 to Ambadeuli	1.48
7	Ganjam I	Bellaguntha	RD Road to Saranuapalli	7.00
8	Ganjam I	Bhanjanagar	PWD Road to Boribandha	2.00
9	Ganjam I	Sorada	RD Road (Mayangi) to Dhepapalli	13.20
10	Ganjam I	Jagannathprasad	Balakiari to Gundribadi	2.50
11	Ganjam I	Jagannathprasad	SH-21 to Tikrapalli	1.20
12	Ganjam I	Jagannathprasad	Haridapadar to Chudakhai	3.80
13	Ganjam I	Sorada	Goudagotha to Kurubandha	7.20
14	Ganjam I	Sorada	B.Kotibadi to Petaguda	3.50
15	Ganjam I	Sorada	Perju to Muliapalli	1.50
16	Ganjam I	Sorada	Perju to Hatiguda	1.50
17	Ganjam I	Bhanjanagar	Dhumakumpa to Akhupadar	3.80
18	Ganjam I	Bhanjanagar	Daha to Gudiapadar	3.00
19	Ganjam I	Sorada	PWD Road to Ragada	10.20
20	Ganjam I	Bhanjanagar	PWD Road to Kanabindha	8.50
21	Ganjam I	Sorada	Sarapanka to Kalama	1.30
22	Ganjam I	Sorada	Dulada (022) to Gochapalli	2.00
23	Ganjam I	Bhanjanagar	RD Road to Rambhapalli	6.00
24	Ganjam I	Bhanjanagar	Kathachira to Kumbhipalli	5.00
25	Ganjam I	Bhanjanagar	Durgaprasad Chhak to Ulungia	12.96
26	Ganjam I	Dharakote	Manikyapur to Maradi	3.80
27	Ganjam I	Dharakote	MDR - 64 to JN Pur	2.60
28	Ganjam I	Aska	Pathara to Gabanala Sarapanka road to Kalama	8.50
29	Ganjam I	Dharakote	MDR - 64 to Lalitpur	1.80
30	Ganjam I	Dharakote	Kangidi to Adibandha	1.80
31	Ganjam I	Dharakote	RD Road to Gopalpur	3.50
32	Ganjam I	Polosara	Banthapalli to Muktamaladeipur road	3.10
33	Ganjam I	Buguda	Pokasunga Jn. to Bellaguma Badakhola	1.85
34	Ganjam I	Buguda	Samalai to Dhimirisahi road	1.88
35	Ganjam I	Polosara	R.D road to Bhitrakhola	2.25
36	Ganjam I	Buguda	Khadalapalli to Pokasunga	4.00
37	Ganjam I	Polosara	Mathura road to Dhaumala (Hatipadapalli)	4.20
38	Ganjam I	Dharakote	RD Road to Sarapada	6.70
39	Ganjam I	Buguda	Hadichira to Badatanda	6.50
	Sub Total			173.80
1	Ganjam II	Chatrapur	Chikalakhandi to Jharapokhari	3.50

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No	Division/ District	Block	Road Name	Length (Km)
2	Ganjam II	Digapahandi	PWD road to Gunthapada	4.80
3	Ganjam II	Digapahandi	PWD road to Kukutabandha to Narayanpur	2.30
4	Ganjam II	Digapahandi	PWD road to Ramachandapur	4.30
5	Ganjam II	Digapahandi	PS road to Sindhava to Syamasundarpalli	2.80
6	Ganjam II	Digapahandi	RD road to Nimakhandipentha to Baiganabadi	8.20
7	Ganjam II	K.S.Nagar	PWD road to Ratnapur	2.50
8	Ganjam II	K.S.Nagar	Duhanapalli to Mohanapalli road	2.00
9	Ganjam II	Khallikote	Badapalli to Badabola	2.20
10	Ganjam II	Khallikote	Badapalli to Chakasingi	2.80
11	Ganjam II	Khallikote	RD road to Haripur	6.60
12	Ganjam II	Khallikote	Biripur to Raipada	3.20
13	Ganjam II	Kukudakhandi	PWD road to Ramadhia	11.10
14	Ganjam II	Patrapur	RD road to Parvatipur	4.00
15	Ganjam II	Patrapur	PWD road to Daleswar	2.00
16	Ganjam II	Patrapur	PWD road to Budagada	2.51
17	Ganjam II	Patrapur	PWD road to Patrapur to Mukundapur	5.50
18	Ganjam II	Sanakhemundi	PWD road to Nunilathi to Khairapadar	3.95
19	Ganjam II	Sanakhemundi	SH-17 to Podamari to Buguda	12.16
20	Ganjam II	Sheragada	SH-29 to Nuapalli	1.50
21	Ganjam II	Sheragada	SH-36 to L.N.Pur	2.00
22	Ganjam II	Sheragada	SH-36 to P Karadakana	1.50
23	Ganjam II	Patrapur	RD road to Buratal	7.50
24	Ganjam II	Patrapur	PWD road to Ankuli (GP) Reach-I from 0/0 to 11/60	11.60
25	Ganjam II	Patrapur	PWD road to Ankuli (GP) Reach-II from 11/60 to 32/900	21.30
26	Ganjam II	Rangeilunda	NH-5 to Mishrapalli	1.60
27	Ganjam II	Digapahandi	RD road to Narendraballi	0.70
Sub Total				134.11
1	Jagatsinghpur	Balikuda	Nuagaon to Samantarapur	2.50
2	Jagatsinghpur	Tirtol	Badjanga to Rankei	2.70
3	Jagatsinghpur	Biridi	Basandra to Bambilo	4.70
4	Jagatsinghpur	Tirtol	K.N.Pur to Itatikiri	3.35
5	Jagatsinghpur	Erasama	Kujanga Noliasahi RD Road - Janardhanpur	1.30
6	Jagatsinghpur	Balikuda	Santho to Alikanta	2.30
7	Jagatsinghpur	Naugaon	Arakhakud to Harispur	5.00
8	Jagatsinghpur	Erasama	Erasama Chatua RD Road (Deika) to Dhobei	3.00
9	Jagatsinghpur	Tirtol	PWD Road 2nd km to Hazipur	2.50
10	Jagatsinghpur	Tirtol	Nuapokhari to Dhunpur	10.10
11	Jagatsinghpur	Balikuda	Kulanpur to Daraba	2.50
12	Jagatsinghpur	Tirtol	Nuapokhari to Dianpur	1.70
13	Jagatsinghpur	Balikuda	Rahana to Prasanpur	2.70
14	Jagatsinghpur	Balikuda	Jaganathpur to Khaleri	2.50
15	Jagatsinghpur	Tirtol	Bisanpur to Nirapoi	2.25
16	Jagatsinghpur	Balikuda	Naharana to Sunadhar	6.70
17	Jagatsinghpur	Erasama	Khatikolda to Ganeswarpur	4.00

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No	Division/ District	Block	Road Name	Length (Km)
	Sub Total			59.80
1	Jajpur I	Dasarathpur	Kayan to Ichhapur	6.32
2	Jajpur I	Korei	N.H.- 5A to Badatrilochanpur	0.75
3	Jajpur I	Korei	R.D. Road to Nuagada	3.00
4	Jajpur I	Binjharpur	RD Road to Andhalo	7.50
5	Jajpur I	Dasarathpur	P.W.D. Road to Sidheswarpur	5.00
6	Jajpur I	Sukinda	RD Road to Arjunajhar	5.00
7	Jajpur I	Korei	Rampur Sagadi to Bengamadhapur	1.35
8	Jajpur I	Dasarathpur	PWD Road to Sanadogada	6.00
9	Jajpur I	Dasarathpur	R.D. Road to Jundupur	7.55
10	Jajpur I	Danagadi	Expressway to Jandapal	1.95
	Sub Total			44.42
1	Jajpur II	Dharmasala	R & B road to Krushnaposi	2.35
2	Jajpur II	Dharmasala	RD road Madhusudanpur to Tarasha	3.00
3	Jajpur II	Dharmasala	Bajabati to Khunta	2.95
4	Jajpur II	Dharmasala	R & B road to Majhipatna	2.85
	Sub Total			11.15
1	Dharmagarh	Dharmagarh	P.W.D. Road to Budhimunda	3.30
2	Dharmagarh	Dharmagarh	Palaspani to Beheraguda (Road - A)	3.00
3	Dharmagarh	Dharmagarh	P.S. Road to Hatipakhan (Road - B)	3.36
4	Dharmagarh	Dharmagarh	R.D. ROAD TO Bankimunda (Road - A)	3.21
5	Dharmagarh	Dharmagarh	R.D. Road to Palsapada (Road - B)	2.10
6	Dharmagarh	Dharmagarh	R.D. Road to Ravanguda (Road - A)	1.83
7	Dharmagarh	Koksara	Khuntia to Pipalpada (Road - B)	2.60
8	Dharmagarh	Kalampur	P.W.D. Road to Goud Kenduguda	2.50
9	Dharmagarh	Kalampur	Bijmara to Dumermunda	2.50
10	Dharmagarh	Kalampur	Karmel to Dongriguda (Road - A)	1.29
11	Dharmagarh	Kalampur	Bodelbandha to Tutraguda (Road - B)	2.10
12	Dharmagarh	Jaipatna	R.D. Road to Gopalpur (Road - A)	5.04
13	Dharmagarh	Jaipatna	P.S. Road to Ghumapada (Road - B)	3.03
14	Dharmagarh	Jaipatna	R.D. Road to Bastiguda	4.65
15	Dharmagarh	Jaipatna	R.D. Road to Sagihore	5.01
16	Dharmagarh	Koksara	Dahagaon To Jharabandha (Road - A)	3.60
17	Dharmagarh	Koksara	Dahagaon To Gitikapadar (Road - B)	1.30
18	Dharmagarh	Koksara	Siuni Nh-201 To Tikrapada	2.91
19	Dharmagarh	Koksara	Gotamunda R.D. Road To Kanakpur	4.50
20	Dharmagarh	Koksara	T05 To Jampada	2.04
21	Dharmagarh	Koksara	Pipaljhapar To Gotamunda (Road - A)	2.25
22	Dharmagarh	Koksara	Bhursaguda To Malpada (Road - B)	2.00
23	Dharmagarh	Koksara	Soniapada To Ladugaon	6.03
24	Dharmagarh	Koksara	Ampani To Karlakhutiapada	4.80
25	Dharmagarh	Jaipatna	P.W.D. Road To Kuhuriguma	5.25
26	Dharmagarh	Jaipatna	Lakhabahali To Jamchuan	5.45
27	Dharmagarh	Golamunda	R.D. Road To Ramchandrapur (Road - A)	1.50
28	Dharmagarh	Golamunda	R.D. Road To Sanjiful Juba (Road - B)	3.95
29	Dharmagarh	Golamunda	Sancherigaon To Jhamjharan (Part - I)	9.09
30	Dharmagarh	Golamunda	Sancherigaon To Jhamjharan (Part - II)	6.06
31	Dharmagarh	Dharmagarh	P.W.D. Road To Bhimkhojpada	3.00
	Sub Total			109.25

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No	Division/ District	Block	Road Name	Length (Km)
1	Kendrapara II	Aul	Tunga To Boulajodi	5.45
2	Kendrapara II	Rajnagar	Hansina To Chakamanipur	12.00
3	Kendrapara II	Rajnagar	R&B Road To Silapokhari	10.50
4	Kendrapara II	Pattamundai	Alapua To Nandalalpatna	2.00
5	Kendrapara II	Rajkanika	P.W.D. Road To Badatalla	5.90
6	Kendrapara II	Rajnagar	Santhapada To Chakibanka Road	8.00
7	Kendrapara II	Pattamundai	Vedisahi To Banto Road	3.00
8	Kendrapara II	Rajkanika	Irregation Embankment To Madhupada	4.65
9	Kendrapara II	Rajkanika	R.D Road To Gharabhanjahola	6.10
10	Kendrapara II	Aul	R.D. Road To Beta	2.60
11	Kendrapara II	Rajkanika	R.D Road To Bajpur	2.00
12	Kendrapara II	Aul	R.D. Road To Padanipal	5.16
13	Kendrapara II	Pattamundai	Mangarajpur To Deuli	4.10
14	Kendrapara II	Rajnagar	Mahulia To Pokharia Road	2.50
15	Kendrapara II	Aul	Brahmani Ghat To Nalapahi Road	2.52
	Sub Total			76.48
1	Keonjhar I	Keonjhar	N.H.215 to Badudighar Road	3.02
2	Keonjhar I	Keonjhar	Khajuripani-Kumudabahal road	2.82
3	Keonjhar I	Keonjhar	Haladharpur to Dudurapal road	4.02
4	Keonjhar I	Keonjhar	P.W.D. Road to Ramachandrapur road	1.86
5	Keonjhar I	Keonjhar	Manoharpur to Banamalipur road	1.85
6	Keonjhar I	Keonjhar	Patung to Amunipur road	1.62
7	Keonjhar I	Keonjhar	N.H.6 to Mahuldiha road	2.85
8	Keonjhar I	Keonjhar	N.H.215 to Jamunalia road	2.25
9	Keonjhar I	Keonjhar	Kusumita to Upper Kampdihi road	3.85
10	Keonjhar I	Keonjhar	Potala to Biswanathpur	2.40
11	Keonjhar I	Keonjhar	Tangarani(Belaposi)-Mathuramandali	3.25
12	Keonjhar I	Jhumpura	P.W.D. road to Gidhibas road	2.13
13	Keonjhar I	Saharpada	Jamuda to Arjunposi road	2.50
14	Keonjhar I	Saharpada	Purunapani to Talapada road	4.10
15	Keonjhar I	Saharpada	Gurandijodi to Badabaliposi road	6.60
16	Keonjhar I	Saharpada	R.D.Road (Phulpahadi) to Purunapani road	3.30
17	Keonjhar I	Saharpada	Tendra to Hariharpur road	5.50
18	Keonjhar I	Saharpada	Bilabaliposi road to Mangalpur road	4.00
19	Keonjhar I	Saharpada	Padiaposi to Deuliaposi road	3.50
20	Keonjhar I	Saharpada	R.D. Road to Bhagabil road	2.00
21	Keonjhar I	Saharpada	N.Jagannathapur to Hinjalgadla road	4.10
22	Keonjhar I	Ghatgaon	Binida-Fuljhar road	2.87
23	Keonjhar I	Ghatgaon	Ramamchandapur-Ghuntiari road	3.63
24	Keonjhar I	Ghatgaon	Mutapur to Bhagaghar road	5.05
25	Keonjhar I	Ghatgaon	R.D.Road Asanbani road	4.76
26	Keonjhar I	Patna	Putugaon to Tentulikhunti road	2.20
27	Keonjhar I	Patna	Bhalupahadi to Kimirdaposi road	3.00
28	Keonjhar I	Patna	P.W.D. Road to Analadiha road	2.79
29	Keonjhar I	Patna	R.D. Road to padampur road	2.82
30	Keonjhar I	Jhumpura	Chauthia to Jagannathpur road	3.88
31	Keonjhar I	Ghatgaon	Chandposi to Deobandha road (R.D.Road to Badajuli)	2.40
	Sub Total			100.92

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No	Division/ District	Block	Road Name	Length (Km)
1	Keonjhar II	Champua	Unchabali- Rengalbeda	2.10
2	Keonjhar II	Champua	Jally- Tangarpada	6.49
3	Keonjhar II	Joda	PWD Road- Barapada	4.00
4	Keonjhar II	Keonjhar-II	PWD Road- Kankana	12.20
5	Keonjhar II	Jhumpura	Mahadevpur -Parbatipur	3.30
6	Keonjhar II	Jhumpura	PS Road- Ranipur	3.10
7	Keonjhar II	Jhumpura	Nayagarh- Saradhapanka	3.90
8	Keonjhar II	Jhumpura	Basantapur -Kaijoda	3.80
9	Keonjhar II	Jhumpura	Nayagarh - Jalpaposi	3.50
10	Keonjhar II	Banspal	Uperkaipur- Mamulaposi	4.30
11	Keonjhar II	Banspal	NH-6 -Lunagarh	6.30
12	Keonjhar II	Banspal	Nayakot - Ambadala	3.80
13	Keonjhar II	Banspal	PWD Road- Kadalibadi	2.50
14	Keonjhar II	Banspal	Phuljhar - Sakari	8.80
15	Keonjhar II	Banspal	NH-6 - Lata	8.00
16	Keonjhar II	Banspal	PWD Road- Kanthada	4.15
17	Keonjhar II	Telkoi	PWD Road-Ramachandrapur	2.00
18	Keonjhar II	Telkoi	PWD Road - Lokanathpur	1.50
19	Keonjhar II	Banspal	Jatra - Ladapani	7.50
20	Keonjhar II	Telkoi	RD Road - Purusottampur	5.50
21	Keonjhar II	Banspal	PWD Road- Panasuan	9.95
22	Keonjhar II	Telkoi	Kaliahata - Kantini	3.70
23	Keonjhar II	Telkoi	Kaliahata- Karangapal	5.15
24	Keonjhar II	Telkoi	RD Road(Deuldiha) - Ragada	8.30
25	Keonjhar II	Champua	Kankada -Nuagaon	2.50
26	Keonjhar II	Champua	Basudevpur- Sunariposi	3.15
Sub Total				129.49
1	Bhubaneswar	Bolagarh	Badanayapalli to Suanal	4.00
2	Bhubaneswar	Bolagarh	RD road to Ekadalia	2.11
3	Bhubaneswar	Bolagarh	Kalanga to Paikasahi via Phiripharapatna	2.02
4	Bhubaneswar	Bolagarh	Deuli to Talatumba road	2.50
5	Bhubaneswar	Tangi	Nalasingh to Totapada	3.20
6	Bhubaneswar	Balianta	Balipatna RD road to Hotasahi	2.40
7	Bhubaneswar	Balianta	Prataprudrapur to Nuasahi	2.90
8	Bhubaneswar	Balianta	PMC to Bhaichuamandagada	3.30
9	Bhubaneswar	Balianta	Balianta to Chandanbasta	3.25
10	Bhubaneswar	Balipatna	Nariso Meladanda to Chandiapada	2.30
11	Bhubaneswar	Balipatna	Nariso to Badapokharisahi	2.00
12	Bhubaneswar	Balianta	Bisuniapada to Baliamala	1.50
13	Bhubaneswar	Balianta	Bhargabi Right Embankment to Terabatia	2.90
14	Bhubaneswar	Balipatna	Dalakasati Sanmachhapur	3.00
15	Bhubaneswar	Balipatna	Madhuban Darada road to Deulapokhari	1.86
16	Bhubaneswar	Balipatna	Bhakarsahi to Naranpur	3.15
17	Bhubaneswar	Banapur	R D road to Kandha Ambajhar	2.00
18	Bhubaneswar	Khurda	Naranagarh Girls High School to Bhogapur	2.16
Sub Total				46.55
1	Koraput	Koraput	N.H-43 To Chapsil Road	1.85
2	Koraput	Dasmantpur	P.S. Road To Runjaguda	4.50
3	Koraput	Kundra	Dighapur to Gumar	3.00

No	Division/ District	Block	Road Name	Length (Km)
4	Koraput	Nandapur	PWD (RD) road to Badliguda	4.50
5	Koraput	Koraput	P.W.D Road To Ambagam	2.70
6	Koraput	Lamtaput	RD road to Jodaput	7.50
7	Koraput	Nandapur	RD road to Sobhaput	6.70
8	Koraput	Nandapur	RD road to Khadaput Boding	4.50
9	Koraput	Boriguma	NH-43 to Banduguda	10.19
10	Koraput	Kundra	Beheraguda to Katriguda	7.00
11	Koraput	Boipariguda	PWD Road to Kadamguda	2.00
12	Koraput	Lamtaput	RD road to Maliguda via Bandhanpada.	3.60
13	Koraput	Boriguma	Aunli to Majhia	2.08
14	Koraput	Kotpad	Ghatarla to Kusumguda	1.54
15	Koraput	Kundra	RD Road to Nuaguda	1.30
16	Koraput	Lamtaput	RD road to Guneipada.	1.30
17	Koraput	Kotpad	Kharagpur to Kumahandi	5.60
18	Koraput	Lamtaput	RD road to Lamanda	1.20
19	Koraput	Koraput	N.H-43 to Panaspur Road	4.60
20	Koraput	Koraput	R.D Road to Daleiput	1.20
21	Koraput	Lamtaput	MDR to Silpeda	1.55
22	Koraput	Jeypore	MDR SH-48 to Bali Pujariput	1.55
23	Koraput	Nandapur	RD road to Khingmung Karanjaguda	4.50
24	Koraput	Dasmantpur	Mujango to Champapadar (Dengajaniguda)	5.20
25	Koraput	Jeypore	MDR SH48 to Singbandha	4.83
26	Koraput	Jeypore	Dhanpur to Targei	2.08
27	Koraput	Kotpad	Batasana to Thakadugulahandi	5.50
28	Koraput	Kundra	Raniguda to Atigam	5.45
29	Koraput	Boriguma	Katharagada to Mankidiatal Road	4.50
30	Koraput	Boriguma	Katharagada to Katahandi Road	5.50
31	Koraput	Kundra	Ghumar to Hatakudupi	2.80
32	Koraput	Kundra	Bagderi to Kantinikunda	4.00
Sub Total				124.31
1	Sunabeda	Laxmipur	Upperchampi (P.W.D. Road) to Talachampi	3.00
2	Sunabeda	Laxmipur	R.D Road to Kenduwada	2.50
3	Sunabeda	Semiliguda	Sorisapadar(NH-26) to Bhitarkota	11.00
4	Sunabeda	Narayanpatna	P.S Road to Tingnaput	1.80
5	Sunabeda	Laxmipur	P.S. Road to Maligan	2.50
6	Sunabeda	Laxmipur	P.W.D. Road to Niraniguda	2.10
7	Sunabeda	Semiliguda	Bilaput to Bhitarsubai	1.00
8	Sunabeda	Pottangi	Sipaiput(NH-26) to Malkarbandha	3.40
9	Sunabeda	Laxmipur	P.S. Road to Ramijholla	3.00
10	Sunabeda	Laxmipur	P.W.D. Road to Jholaguda	8.00
11	Sunabeda	Pottangi	Jamuguda (NH-26) to Bitra	7.50
12	Sunabeda	Semiliguda	Malimarla to Uppergelaguda	1.50
13	Sunabeda	Semiliguda	N.A.D to Balda	2.60
14	Sunabeda	Semiliguda	P.W.D Road to Adamunda	4.00
15	Sunabeda	Narayanpatna	SH-50 to Pachingi	3.30
16	Sunabeda	Laxmipur	Upperchampi to Jambirijhola (Upper Bilangsil)	6.10
17	Sunabeda	Semiliguda	R.D. Road to Deula	3.00
18	Sunabeda	Semiliguda	Nalco road to Masuriguda (Missinguda)	1.00

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No	Division/ District	Block	Road Name	Length (Km)
19	Sunabeda	Pottangi	R.D. Road to Debaguntha via Sangamguda	3.80
20	Sunabeda	Pottangi	(A) P.W.D. Road (R.D. Road) to Marialpadu	0.95
21	Sunabeda	Pottangi	(B) R.D. Road to Putapadu	0.95
22	Sunabeda	Semiliguda	NH-43 (26) to Daleiguda	6.00
23	Sunabeda	Semiliguda	NH-43 (26) to Bileiguda	2.80
24	Sunabeda	Pottangi	R.D. Road(P.W.D Road) to Teda	1.40
25	Sunabeda	Pottangi	Dalapatiguda to Pangiguda via Dugariguda	2.40
26	Sunabeda	Pottangi	(A) NH-43(26) to Sakirai	1.70
27	Sunabeda	Pottangi	(B) NH-43 (26) to Dumuriguda	0.85
28	Sunabeda	Semiliguda	N.H.-43(26) to Kadamguda	2.10
29	Sunabeda	Semiliguda	Charangul to Hanjaraguda	2.30
30	Sunabeda	Semiliguda	Tiapar to Phulbandha	2.00
31	Sunabeda	Semiliguda	Mukhibedi to Challanput	2.60
32	Sunabeda	Pottangi	RD Road to Guntha, Jhankarada via Kapatiguda	4.00
33	Sunabeda	Pottangi	NH-43 (26) to Siura	3.10
34	Sunabeda	Pottangi	P.W.D Road to Upperbandha	1.60
35	Sunabeda	Laxmipur	P.W.D. Road to Bogeipadar	2.00
36	Sunabeda	Narayanpatna	P.S. Road(PMGSY) to Semla	4.25
37	Sunabeda	Narayanpatna	PWD Road to Sabaput, Bisipur	3.10
38	Sunabeda	Bandhugaon	P.W.D.Road to Kesabadhra	1.80
39	Sunabeda	Bandhugaon	P.W.D. Road to Jhumuka	3.00
40	Sunabeda	Bandhugaon	Jarpa (P.W.Droad) to Lundurukana	5.00
41	Sunabeda	Narayanpatna	P.W.D.Road to Khajaguda	2.40
42	Sunabeda	Narayanpatna	P.W.D Road to Dhaiguda	2.50
43	Sunabeda	Narayanpatna	Bijaghati to Keragan	3.00
44	Sunabeda	Laxmipur	P.W.D. Road(P.S Road) to Putsil	4.00
Sub Total				136.90
1	Baripada	Moroda	Bhaliadiha to Sunahaja	7.00
2	Baripada	Moroda	PWD Road to Idor	3.00
3	Baripada	Betnoti	RD Road at Durgapur to Sardiha	4.50
Sub Total				14.50
1	Karanjia	Bangiriposi	Andala to Naikali	7.00
2	Karanjia	Bangiriposi	RD road to Kurkutia	2.00
3	Karanjia	Bangiriposi	RD road to Mahupahadi	1.00
4	Karanjia	Bangiriposi	RD road to Majhigaon	2.30
5	Karanjia	Bangiriposi	RD road to Kundalabani	5.60
6	Karanjia	Bangiriposi	Rayan to Pandubadi	4.50
7	Karanjia	Bangiriposi	Rayan to Ramaharipur	4.50
8	Karanjia	Bangiriposi	MDR-45 to Jamdapa	1.10
9	Karanjia	Bangiriposi	Ghatkuanri to Domuhani	1.10
10	Karanjia	Bisoi	RD road to Chuakankar	2.90
11	Karanjia	Bisoi	NH-6 to Hatichhad	7.60
12	Karanjia	Bisoi	SH-50 to Sunajodia	5.00
13	Karanjia	Bisoi	SH-50 to Gargadi	2.50
14	Karanjia	Bisoi	SH-50 to Banapokharla	2.50
15	Karanjia	Bisoi	Baneikala to Patijhari	4.10
16	Karanjia	Sukruli	RD road to Silmaposi	2.25
17	Karanjia	Raruan	RD road to Purunapani	1.50

No	Division/ District	Block	Road Name	Length (Km)
18	Karanjia	Jashipur	Gandirabeda chhak (Aski) to Asura	4.10
19	Karanjia	Jashipur	Badasialnai to Sansialnai	2.75
20	Karanjia	Jashipur	Siltia to Banapandugandi	2.88
21	Karanjia	Karanjia	PWD road to Baliposi	1.10
22	Karanjia	Karanjia	RD road to Jhatiali	2.25
23	Karanjia	Karanjia	NH-6 to Jarali	3.05
24	Karanjia	Karanjia	NH-6 to Jarasahi	2.05
25	Karanjia	Thakurmunda	Thakurmunda (R D Road) to Niscintpur	4.63
26	Karanjia	Thakurmunda	S.H-53 to Nipania	2.55
27	Karanjia	Thakurmunda	S.H-53 o Padhiarsahi	2.60
28	Karanjia	Thakurmunda	R D Road to khasakudar	2.84
29	Karanjia	Thakurmunda	R D Road to San-Andharikhaman	1.82
30	Karanjia	Thakurmunda	R D Road to Chaulajhari	3.54
31	Karanjia	Thakurmunda	Salchua (Nada) to Karadapal	3.00
	Sub Total			96.61
1	Rairangpur	Bahalda	Fatatanger to Patkadih (Sagjodi)Road	2.50
2	Rairangpur	Bahalda	Tarana to Patramahulpani (Thakurbadi) Road	2.00
3	Rairangpur	Tiring	Jirei to Nandua (Bijaybasa) Road	2.90
4	Rairangpur	Tiring	Rengalbeda to Dhobadhubani (Gobrasol) Road	2.60
5	Rairangpur	Tiring	Nuadihi to Baldapada road	1.50
6	Rairangpur	Tiring	S.H.-50 at Nuagaon to Dakadihi (Dinasasan) road	1.50
7	Rairangpur	Kusumi	O.D.R to Ghadadega road	6.93
8	Rairangpur	Kusumi	R.D. road to Dhakata road(Dova to Ralibeda)	4.70
9	Rairangpur	Kusumi	ODR to Dudhijharan	1.35
10	Rairangpur	Rairangpur	M.D.R to Sanchampouda Road	4.90
11	Rairangpur	Rairangpur	Sundhal to Katupit(N)	8.50
12	Rairangpur	Rairangpur	Guhaldangri to Dublabeda	4.90
13	Rairangpur	Rairangpur	Kuldiha to Kahutuka Road	5.80
14	Rairangpur	Rairangpur	Badgaon to Rehedakocha	2.40
15	Rairangpur	Rairangpur	Gorumahisani to Gidighaty	3.30
16	Rairangpur	Rairangpur	Guhaldangri to Jampani	1.80
17	Rairangpur	Bijatala	Dalki to Badbil road	8.46
18	Rairangpur	Bijatala	R.D road to Kaduani road	4.63
19	Rairangpur	Bijatala	(A)S.H -50(Madansila PMGSYroad) to Sanjharan	3.26
20	Rairangpur	Bijatala	(B)Raihari (N.H - 6) to Jaldiha	3.89
21	Rairangpur	Jamda	R.D Road To Hensda	1.83
22	Rairangpur	Kusumi	R.D. Road to Changbaria road	2.70
23	Rairangpur	Kusumi	R.D road to Badjaidhanposi road	3.09
24	Rairangpur	Bijatala	Chadheipahadi to Balarampur	7.33
25	Rairangpur	Kusumi	ODR to Dighia road (RD Road to Sanjoidanposi)\	1.10
	Sub Total			93.86
1	Nawrangpur	Dabugam	Badaoloma to Khutuluguda	3.50
2	Nawrangpur	Dabugam	RD Road to Barkiguda road	3.03

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No	Division/ District	Block	Road Name	Length (Km)
3	Nawrangpur	Dabugam	PWD Road to Jandriguda road	2.50
4	Nawrangpur	Dabugam	Rabanaguda to Sapadharaguda	2.10
5	Nawrangpur	Kosagumuda	Sana-Amda to Neigaon	4.80
6	Nawrangpur	Nandahandi	Bhanjaguda to Poluguda	2.50
7	Nawrangpur	Nandahandi	RD Road to Gajiaguda	2.00
8	Nawrangpur	Nabarangapur	R.D Road to Boxaguda	2.00
9	Nawrangpur	Nowrangpur	RD Road to Kochiaguda	1.55
10	Nawrangpur	Nowrangpur	RD Road to Sonuguda	2.70
11	Nawrangpur	Papadahandi	SH - 39 Jn. To Birisola	3.20
12	Nawrangpur	Papadahandi	Biriguda to Jhidingiguda	1.30
13	Nawrangpur	Papadahandi	RD Road to Kartiguda	11.90
14	Nawrangpur	Papadahandi	Dhansuli to Palasaguda	4.20
15	Nawrangpur	Papadahandi	NH Jn. To Disariguda	1.10
16	Nawrangpur	Papadahandi	Kodabaata to Haradaguda	2.00
17	Nawrangpur	Tentulikhunti	Project road to Nuapujariguda	1.40
18	Nawrangpur	Tentulikhunti	Bhitartmengra to Boriguda	1.50
19	Nawrangpur	Tentulikhunti	RD road to Nuaguda	0.50
20	Nawrangpur	Dabugam	Pakhanaguda to Maniaguda	3.25
21	Nawrangpur	Papadahandi	Ghusarabeda to Ratiguda	5.00
22	Nawrangpur	Papadahandi	Kodabhata to Mundaguda	1.40
23	Nawrangpur	Papadahandi	RD Road Jn. To Sikadaguda	3.50
24	Nawrangpur	Papadahandi	Biriguda to Khutiaguda	3.50
25	Nawrangpur	Papadahandi	Miriguda to Dakribeda	3.50
26	Nawrangpur	Papadahandi	SH - 39 Jn. to Dalchaparaguda	3.80
27	Nawrangpur	Papadahandi	NH Jn. To Minja	4.00
28	Nawrangpur	Papadahandi	PS Road to Kukurabindha	2.50
29	Nawrangpur	Papadahandi	Dongra to Kumbharaguda	4.70
Sub Total				88.93
1	Nuapada	komna	Batibahal to Sunabeda(Part-A)	10.00
2	Nuapada	komna	Batibahal to Sunabeda(Part-B)	10.00
3	Nuapada	komna	Cherichuan to Kankermanji(Part-A)	9.00
4	Nuapada	komna	Cherichuan to Kankermanji(Part-B)	8.00
5	Nuapada	komna	Kotrabeda to Deosil	8.00
6	Nuapada	Boden	Patdarha to Kathphar(Part-A)	7.00
7	Nuapada	Boden	Patdarha to Kathphar(Part-B)	6.00
8	Nuapada	komna	Sunabeda to Gatibeda	5.00
9	Nuapada	komna	Sunabeda to Jamgaon	6.50
10	Nuapada	komna	Sunabeda to Soseng	8.00
11	Nuapada	Nuapada	SH-3 Sunsunia to Dehenpara	3.90
12	Nuapada	Nuapada	RD Road to Bhalukana	2.00
13	Nuapada	Nuapada	Amodi to Tamkidadar(Road-A)	1.60
14	Nuapada	Nuapada	RD Road to Negipali(Road-B)	2.00
15	Nuapada	Nuapada	RD Road to Sethjampani via Masrangi	4.20
16	Nuapada	komna	Poinr to Anupgad	1.50
17	Nuapada	komna	Komna Nuagaon Road to Patpani	4.00
18	Nuapada	komna	PWD Road to Tukelapada	1.90
19	Nuapada	komna	PWD Road to Bandajore via Barnapat	2.60
20	Nuapada	komna	Chhata to Kotenpara	2.30
21	Nuapada	komna	Kurumpani-Lakhna Road to Thakurpali	2.10

No	Division/ District	Block	Road Name	Length (Km)
22	Nuapada	komna	Thango to Mawalbhata	5.00
23	Nuapada	Khariar	Vijaypur to Gordhuapadar	2.50
24	Nuapada	Khariar	SH-16 to Sandohel	1.40
25	Nuapada	Khariar	MDR-121 to Kikiribeda	1.50
26	Nuapada	Khariar	Lanji to Vemapadar	4.20
27	Nuapada	Khariar	Deobahal to Thongopada	1.60
28	Nuapada	Khariar	Bankapur to Khairbadi	2.50
29	Nuapada	Khariar	Ranimunda to Palma	1.30
30	Nuapada	Khariar	NH-217 to Sandibahali	1.60
31	Nuapada	Khariar	Chancharabhata to Hanspada	1.50
32	Nuapada	sinapali	Timpur to Rebedi	3.60
33	Nuapada	sinapali	Palsapada to Dongergaon	1.30
34	Nuapada	sinapali	PS Road to Sonversa	2.80
35	Nuapada	sinapali	PWD Road to Karlapani	2.70
36	Nuapada	sinapali	Telekote to Sindursil	2.60
37	Nuapada	Boden	PWD Road to Mahulpadar	4.00
38	Nuapada	Boden	Bhainsadani to Sirigidi	5.30
39	Nuapada	komna	NH-217 to Bilenjore	2.30
40	Nuapada	komna	Mendhatal to Dangargaon via Dedenga	3.00
Sub Total				156.30
1	Phulbani	Raikia	Kilkia (T-5) to Didrabadi	13.50
2	Phulbani	Chakapad	RD Road to Pandrisima	3.30
3	Phulbani	G. Udayagiri	RD Road to Sakadi	5.80
4	Phulbani	Baliguda	Sudra to Tikarabaju	9.00
5	Phulbani	Daringibadi	Pangaraha (NH-217) to Iripisura	7.50
6	Phulbani	Khajuripada	PWD Road to Meru(Lambabadi)	8.00
7	Phulbani	K. Nuagaon	Sainipada to Dargaon	4.20
8	Phulbani	Daringibadi	Badipadar (NH-217) to Baimela	13.20
9	Phulbani	Khajuripada	Garakumpa to Balisugri	4.00
10	Phulbani	Khajuripada	Nediguda to Gundribadi	2.00
11	Phulbani	K. Nuagaon	PWD Road T-5 Dharampur to Letingia (Reach-I) RD0/0 to 1/110 Km & 2/100 to 9/00 Km	9.00
12	Phulbani	Kotagarh	Subarnagiri to Parigada Road (Reach - I) RD 0/0 to 4/260 & 4/560 to 5/790 & 6/050 to 9/0 Km	8.84
13	Phulbani	Kotagarh	Subarnagiri to Parigada Road (Reach-IV) RD 9/0 to 18/0 Km	9.00
Sub Total				97.34
1	Puri	Kanas	N.J. Sadak to Balipada-A	2.40
2	Puri	K.Prasad	Badabhui to Gangadharur	1.10
3	Puri	K.Prasad	PWD road to Anandpur	0.80
4	Puri	K.Prasad	PWD road to Kamalasingh	1.83
5	Puri	K.Prasad	Badajhada to Samantarapur	2.20
6	Puri	K.Prasad	PWD road to Noliassahi	2.30
7	Puri	K.Prasad	PWD road to Paikarapur	1.10
8	Puri	Puri	Siruli Project road to Jirakandi	1.10
9	Puri	K.Prasad	R.D. road to Kahneipur	1.30
10	Puri	Pipili	Kasarda to Rajtei	2.08

No	Division/ District	Block	Road Name	Length (Km)
11	Puri	Pipili	T-5 to Nalihana	1.24
12	Puri	Pipili	N.H.203 to Potal	1.86
13	Puri	Pipili	N.H.203 to Baragarh	1.10
14	Puri	Pipili	T-5 to Solana	3.94
15	Puri	Pipili	L-24 to Sarola	1.20
16	Puri	Pipili	N.H.203 to Malibarahi	1.33
17	Puri	Pipili	S.H.13 to Sunapada	2.52
18	Puri	Pipili	T-6 to Raigurupur	1.00
19	Puri	Pipili	T-6 to Subudhipada	1.20
20	Puri	Pipili	N.H.203 to Gobardhanpur S. Nagar	2.00
21	Puri	Delang	T-4 to Jayapur	2.00
22	Puri	Delang	T-1 to Golapada	1.20
23	Puri	Delang	T-7 to Tikarpada	7.00
24	Puri	Satyabadi	Algum PWD road to Baniasahi	2.00
25	Puri	Satyabadi	Algum WD road to Bagasahi	0.60
26	Puri	Satyabadi	N.Someswarapur to Bastapada	0.80
27	Puri	Satyabadi	Budhang Canal to Balisahi	2.02
28	Puri	Satyabadi	R.D. road to Otarakera	2.50
29	Puri	Puri	L-34 to Odasamal	2.00
30	Puri	Puri	R.D. road to Jagannathpur	2.50
31	Puri	Puri	N.H.203 to Nilachakranagar	2.70
32	Puri	Puri	Malatipatpur R.D. road to Rahangiria via- Kanchinala Irrig. Embkt. (golasahi)	7.00
33	Puri	Puri	N.H.203 to Apila	4.80
34	Puri	Puri	N.J. Sadak to Karadi	1.80
35	Puri	Brahmagiri	RD Road to Sahaspur	3.28
36	Puri	Brahmagiri	L-76 to Jagannathpur	0.60
37	Puri	Brahmagiri	N.H.203A to Gokhara	1.60
38	Puri	Brahmagiri	N.H.203 A to Bentapur	1.66
39	Puri	Brahmagiri	L-58 to Baghalanji	2.01
40	Puri	Brahmagiri	R.D. road to Haridas	2.57
41	Puri	Brahmagiri	PWD road to Mirzapur	0.75
42	Puri	Brahmagiri	L-69 to Danduasipada	2.09
43	Puri	Brahmagiri	Sikatnuapada to Sisupur	1.00
44	Puri	Kanas	R.D. Road dto Maitratrilochanpur	1.80
45	Puri	Kanas	R.D. road to Delang Charipada	3.50
46	Puri	Kanas	L-28 to Rudhupur	8.00
47	Puri	Kanas	Gadakharada to Malisahi	2.50
48	Puri	K.Prasad	R.D. road to Jamuna	3.77
49	Puri	K.Prasad	R.D. Road to Mahanisa	3.00
50	Puri	K.Prasad	PWD road to Anlakuda	1.90
51	Puri	K.Prasad	Bhawanipur to Parala	1.67
52	Puri	K.Prasad	Manikpatna to Sebakpur	2.70
53	Puri	K.Prasad	PWD road to kandeswar	2.80
54	Puri	K.Prasad	Naba to Samantarapur	1.71
55	Puri	K.Prasad	Badadanda to Khalamunha	1.00
56	Puri	K.Prasad	R.D. road to Adalabad	1.00
57	Puri	Pipili	Podaguna to K.S. Patna	1.30
Sub Total				124.73

No	Division/ District	Block	Road Name	Length (Km)
1	Nimapara	Nimapara	P.K Road to Porakana	3.00
2	Nimapara	Gop	RD Road to Simili	1.50
3	Nimapara	Nimapara	Bamnal to Tihula	5.00
4	Nimapara	Gop	M.B Road to Khadisa	6.00
5	Nimapara	Gop	Mohanty sahi (L-34) to Morada	1.50
6	Nimapara	Gop	R.D Road to Desunthi	3.00
7	Nimapara	Astaranga	Edbansa to Paikhala	1.90
8	Nimapara	Gop	RD Road to Balibasta	2.30
9	Nimapara	Satyabadi	Padmapur to Rudupur	0.70
10	Nimapara	Nimapara	T-5 to Chhatahar	3.20
11	Nimapara	Nimapara	P.K Road to Arilo	4.35
12	Nimapara	Nimapara	Tititngapada to Kantilo	2.00
13	Nimapara	Astaranga	L-28 to Osihan	2.10
14	Nimapara	Astaranga	Manduki to Olara	2.65
15	Nimapara	Astaranga	L-23 to Olihan	1.80
16	Nimapara	Satyabadi	Rudupur to Malasahi	1.60
17	Nimapara	Gop	RD Road to Soma	1.50
18	Nimapara	Gop	Baulanga to Panchena	3.06
19	Nimapara	Astaranga	L-47 to Badaola	2.47
20	Nimapara	Satyabadi	Gabakunda to Chakarapada	1.30
21	Nimapara	Kakatpur	PWD Road (T3) to Osalanga	1.55
22	Nimapara	Gop	RD Road to Ampada	3.00
23	Nimapara	Astaranga	R.D. Road Karanjapur	1.55
24	Nimapara	Astaranga	PWD Road (T-2) to Silari	4.20
25	Nimapara	Nimapara	Porakana to Juanlo	1.50
Sub Total				62.73
1	Sambalpur	Redhakhol	Charmal to Keutibahali	3.00
2	Sambalpur	Naktideul	RD Road to Panduakhol(Upto Podakhol)	3.00
3	Sambalpur	Redhakhol	RD Road to Sarapal	2.50
4	Sambalpur	Redhakhol	SH-24 to Dimirimunda	2.00
5	Sambalpur	Redhakhol	Rengali to Sunamudi	6.50
6	Sambalpur	Jujumura	NH-42 to Budhiakata	2.40
7	Sambalpur	Kuchinda	MDR 26A to Ainlaposi	1.30
8	Sambalpur	Kuchinda	Telitleimal to Dhanudihi	3.50
9	Sambalpur	Kuchinda	Paruabhadi to Pandrikata	0.85
10	Sambalpur	Jamankira	RD Road to Banjari	5.30
11	Sambalpur	Dhankuda	NH-6 to Gengtipali	1.43
12	Sambalpur	Rengali	Babuchakuli to Meherpada	1.62
13	Sambalpur	Jujumura	Dhalpal to Laida	1.62
14	Sambalpur	Dhankuda	RD Road to Bakbira	2.85
15	Sambalpur	Jujumura	NH-6 to Maliamunda	2.70
16	Sambalpur	Maneswar	PWD Road to Saradhapali	1.08
17	Sambalpur	Maneswar	PWD Road to Jampali	0.71
18	Sambalpur	Maneswar	RD Road to Karlabahal	1.00
19	Sambalpur	Rengali	PWD Road to Bhagia	1.70
20	Sambalpur	Maneswar	RD Road to Jharmunda	2.93
21	Sambalpur	Jamankira	Lepeikani to Babejori Road	2.90
22	Sambalpur	Jamankira	RD Road to Langabahal (San)	3.20
23	Sambalpur	Jamankira	N.H.-6 to Biswalpali	1.45

No	Division/ District	Block	Road Name	Length (Km)
24	Sambalpur	Jamankira	RD Road to Dehurunimal	2.80
25	Sambalpur	Jamankira	N.H.-6 to Patrapalli	0.82
26	Sambalpur	Bamra	Uttargaon to Dangakhunti	2.22
27	Sambalpur	Bamra	Dumku to Kinabaga	5.28
28	Sambalpur	Redhakhol	Rengali to Harizanpada (Upto Chakamunda)	4.00
	Sub Total			70.65
1	Sonepur	Ullunda	Salepali Chhak to Badmal	3.60
2	Sonepur	Ullunda	PWD Road to Dakhinpalli	2.00
3	Sonepur	Ullunda	Nakdein to Pipalkata (Meghanad)	10.00
4	Sonepur	Sonepur	T-L RD Road to Jhankarpali	3.20
5	Sonepur	Sonepur	T-L RD Road to Luhurapali	2.35
6	Sonepur	Sonepur	Baslat to Dumerkhol	3.84
7	Sonepur	Sonepur	NH-224 to Majhimunda-1	1.65
8	Sonepur	Sonepur	NDPS road to Kudadera	2.61
9	Sonepur	B.M. Pur	Hanumanpalli Chhak to Deulamunda	3.45
10	Sonepur	B.M. Pur	PWD Road to Phulchara	1.90
11	Sonepur	B.M. Pur	Janakpur (RD Road) to Rajanpali	3.20
12	Sonepur	B.M. Pur	PWD Road to Dahanipali	8.00
13	Sonepur	B.M. Pur	Kardapal to Barjula	3.00
14	Sonepur	B.M. Pur	BM Pur-Amarpali RD Road to Bankia	2.52
15	Sonepur	B.M. Pur	BM Pur Amarpali RD Road (Badmal) to Keshalaga	4.80
16	Sonepur	Tarava	Tarava-Bramhani RD Road to Rugudipali	3.60
17	Sonepur	Tarava	Kamsara-Badtenda Road to Tithipali	4.45
18	Sonepur	Tarava	Kamasara-Balikhmar to Khairabhadi	3.33
19	Sonepur	Tarava	Sargaj-Arda Road to Budhakhaman	2.66
20	Sonepur	Tarava	Sibtala-Lukapada Road to Keketpali	2.25
21	Sonepur	Dunguripali	Sunapali Chhak to Chamarpur	3.50
22	Sonepur	Dunguripali	Sanabhalupali to Chhanaabera	5.00
23	Sonepur	Binika	FM RD Road to P Sahajbahal	3.00
24	Sonepur	Binika	Gulunda (RD Road) to Piteipali	2.00
25	Sonepur	Binika	MDR-39 to Pandakital	1.35
26	Sonepur	Dunguripali	PWD Road to Katapali	3.00
27	Sonepur	Dunguripali	Gajabandha to Kainsakanda	2.00
28	Sonepur	Dunguripali	Cherupali-Agalpur RD Road to Telimal	3.00
29	Sonepur	Ullunda	MJ RD road to Jagannathpali -2	2.00
30	Sonepur	Ullunda	Kadodara-Khuntulipali RD Rd to Bairagipali	6.50
31	Sonepur	Dunguripali	Cherupali-Agalpur Road to Gajmal	2.60
32	Sonepur	Ullunda	PWD road to Dhalei	3.50
33	Sonepur	Ullunda	Irrigation road to Goyelguri	3.50
34	Sonepur	Ullunda	Irrigation road to Radum	4.20
35	Sonepur	Ullunda	PWD road to Hatipahul	3.00
36	Sonepur	B.M. Pur	Tangarsahi Chhak to Khambeswaripalli	2.00
37	Sonepur	B.M. Pur	BMPur Amarpalli road to Ranapalli	1.50
38	Sonepur	B.M. Pur	Jatasingha Chowk to Anandapur	1.50
39	Sonepur	B.M. Pur	BMPur Amarpalli RD road to Dadarpalli	1.50
40	Sonepur	B.M. Pur	Bolipali to Baghartula	2.10
41	Sonepur	Sonepur	PWD Road to Bankbija	2.60

No	Division/ District	Block	Road Name	Length (Km)
42	Sonepur	Sonepur	PWD Road to Pratappur	1.20
43	Sonepur	Sonepur	NH-224 to Gatarkela	4.70
44	Sonepur	Sonepur	RD Road to Baldapali	1.98
45	Sonepur	Sonepur	NH-224 to Singhari	2.00
46	Sonepur	Sonepur	BA RD Road to Karlakhaman	3.85
47	Sonepur	Sonepur	LK RD Road to Badipadia	4.15
48	Sonepur	Sonepur	Asurmunda to Majhimunda	2.00
49	Sonepur	Sonepur	NDPS Road (MDR-39) to Nagapali	5.20
50	Sonepur	Sonepur	MK RD Road to Singhbahali	2.50
51	Sonepur	Sonepur	RD Road to Sankadalipali	1.45
52	Sonepur	Tarava	Kamsara-Balikhamar to Sukhilasar	3.75
53	Sonepur	Tarava	Kamsara-Balikhamar to Polbandh	3.50
54	Sonepur	Tarava	Arda to Balipatha	4.10
55	Sonepur	Tarava	Brahmani (Khuntabandha) road to Pandrapitha	4.60
56	Sonepur	Tarava	Sargaj Arda Road to Jamkani	2.00
57	Sonepur	Tarava	Tarva-Brahmani road to Guhiraghat	2.00
58	Sonepur	Dunguripali	Lingamarini (NH-57) to Chitikilibandhali	5.40
59	Sonepur	Dunguripali	Badkarley to Amamunda	5.30
60	Sonepur	Dunguripali	Sahajbahal Canal Road to Kulthipali	2.60
61	Sonepur	B.M. Pur	Janakpur Chhak to Jubarajpur	4.81
62	Sonepur	Sonepur	PS Road to Salepali	1.50
63	Sonepur	Binika	Canal Road to Khaliapali	6.45
64	Sonepur	Dunguripali	Bandhapali Road to Barpadar	2.50
65	Sonepur	Tarava	Kamsara-Balikhamar to Charniapali	2.50
66	Sonepur	B.M. Pur	PWD Road to Kelgaon	1.70
67	Sonepur	Sonepur	Mahule to Uperphabsi	4.92
68	Sonepur	Ullunda	PWD road to Naikpara to PWD road Rathpur chowk (Bagchhera)	9.00
69	Sonepur	Binika	Baunsuni to Bhikabahali	3.85
70	Sonepur	Tarava	Kamsara-Badtenda Road to Surajmunda	2.98
71	Sonepur	Ullunda	PWD road to Limbapali-2	2.00
72	Sonepur	Tarava	Tarva-Brahmani road to Nadhara	2.50
73	Sonepur	Tarava	Tarva - Panimura road to Sanbhainro	1.90
74	Sonepur	Dunguripali	Lingamarin Road to Mahulpali	1.60
75	Sonepur	Dunguripali	NH201 to Sargul	1.90
76	Sonepur	Sonepur	Bahirkhaman to Mahulkhunta	1.20
Sub Total				245.35
1	Sundargarh	Sundargarh	Bhedabahal to Bamandihi Via Bankubahal	5.15
2	Sundargarh	Balisankara	Talsara to Rengali	7.91
3	Sundargarh	Kutra	SH-10 to Dhipapada	3.57
4	Sundargarh	Kutra	Khatkurbahal to Dhipapada Road	8.13
5	Sundargarh	Lefripada	Mahikani to Dharuadihi	2.80
6	Sundargarh	Subdega	MDR Road to Badamalbasti	1.91
7	Sundargarh	Sundargarh	Karla to Sahupara	3.55
8	Sundargarh	Sundargarh	Kulta to Kuanrmal Via Goyalijhumpa	3.10
9	Sundargarh	Sundargarh	Jamtalia to Kabanga via Colonypara	4.76
10	Sundargarh	Tangarpali	Pudadihi to Jamunadhip Via Khamarbahal (Road-A)	2.20

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No	Division/ District	Block	Road Name	Length (Km)
11	Sundargarh	Kutra	PS Road to Automunda	2.65
12	Sundargarh	Baragaon	RD Road to Dudungpada	1.25
13	Sundargarh	Kutra	SH-10 to Panchupada	6.00
14	Sundargarh	Tangarpali	Niallapali to Kurludhipa	2.00
15	Sundargarh	Rajgangpur	Bahium to Kichinda	8.10
16	Sundargarh	Subdega	SH-31 to Bhagpalbasti	1.65
17	Sundargarh	Subdega	RD Road to Dehurimunda	2.60
18	Sundargarh	Sundargarh	Majhapada to Aunajore Via Chandilipada	2.50
19	Sundargarh	Tangarpali	RD road to Kripsira	1.10
	Sub Total			70.93
	TOTAL			2565.81

State: WEST BENGAL

No	Division/ District	Block	Road Name	Length (Km)
1	Siliguri M.P.	-	Howdavita(NH31) to Tetulguri ((ch. 0.00km - 3.904km)	3.904
2	Siliguri M.P.	-	Balaijhora (NH31C) to Bhogvita, Ch. 0.00km-2.521km	2.521
3	Siliguri M.P.	-	NH31C (near Bapujipath) to Dangarvita via Manjoyjote, ch. 0.00km-2.767km	2.767
4	Siliguri M.P.	-	NH31 (near Bagdogra Airport) to Church More via Tarbanda (ch. 2.355km at Digravita - 8.071km at Saldangi)	5.716
5	Siliguri M.P.	-	NH31(near Ayappa Temple) to Alokjhari via Putimari (ch. 0.00km-2.507km)	2.507
6	Siliguri M.P.	-	NH31C Chowpukuria to Bhariadangar Chhat (ch. 0.00km -6.534km)	6.534
7	Siliguri M.P.	-	NH 31C Rupsingh to Dhemal (ch. 0.00km-6.534km)	7.2
8	Siliguri M.P.	-	Goyaltuli more to Bidhannagar via Tufandangi (ch. 3.98 at Tufandangi to ch. 10.114km at Jorepakuri)	6.134
9	Siliguri M.P.	-	NH31C(near Sathbhaiya) to Naxalbari Tea Estate (ch. 0.00km-3.795km)	3.795
10	Siliguri M.P.	-	Mangalsingh(NH31C) to Sebdella (ch. 0.00km-2.50km)	2.5
	Sub Total			43.578
11	Birbhum	-	Pahareswar More To Kharui More	18.5
12	Birbhum	-	Gerupahari To Babuijore	8.515
13	Birbhum	-	Layekbazar to Karpatikuri Busstand via Donaipur Padmabatipur bye pass	6.99
14	Birbhum	-	Maldiha to Chatrisapara	2.26
15	Birbhum	-	Ayas Dharmatala G.P. Office to Chamtibagan ADB Road via Nachhia Debogram Lambodarpur	7.078
16	Birbhum	-	Dakshingram to Saithia Rampurhat road at Battala via Ratma Sibgram	4.821
17	Birbhum	-	Barutia to Chottorigram Road via Radhanagar	2.381
	Sub Total			50.545

No	Division/ District	Block	Road Name	Length (Km)
18	Burdwan	-	Mougram to Naihati	9.225
19	Burdwan	-	Radhakantapur More to Sahajadpur	5.250
20	Burdwan	-	Chatni (At STKK Rd.) to Kashipur	12.225
21	Burdwan	-	Chelod to Chanda	7.445
22	Burdwan	-	Ura to Dadpur	8.650
23	Burdwan	-	Galsi to Dakshinvasapur	7.900
24	Burdwan	-	Bamungoria to Haripur	5.925
25	Burdwan	-	Chhora to Bishnupur	5.550
26	Burdwan	-	Dignagar to Shibda	6.900
27	Burdwan	-	Bhota to Karanji	13.650
28	Burdwan	-	Gopalmath to Sonai	6.150
29	Burdwan	-	Deslopa to Sankarpur	13.750
30	Burdwan	-	Harishpur J.K. Ropeways to Sidhuli	10.000
31	Burdwan	-	Debipur (NH2) at Panagarah to NH2 at Rajbandh to Manikara	12.200
32	Burdwan	-	Gutulia to Madhaiganj	7.750
33	Burdwan	-	Raniganj (O.D.R.) to Baktar Nagar Vill. (Upto N.H)	4.600
Sub Total				137.17
34	Hooghly	-	Haripal station to Shipaigachi - part of mosai More to Illipur	14.720
35	Hooghly	-	Mukundapur busstop to Blacktop road part of singhtimore Ichanagar Rangupur RD	3.600
36	Hooghly	-	Baradigrui Bus stand to majpur jarapar part of Pursurah Baradigrui	3.160
37	Hooghly	-	Kumarganj To Balitakundu Part Of Pundahit Rathtala To Balitakundu Po Salikana To Shripur Jn	4.084
38	Hooghly	-	Mohanpur Betari More To Jagothpur Part Of Vikdas Saora Road	3.780
39	Hooghly	-	Singti To Binogram Damodhar Bhand Road	11.930
40	Hooghly	-	Chatrashal To Chabbisipur	11.220
41	Hooghly	-	Keshab Chak Bank To Tarakeswar Padmapukur More	5.880
42	Hooghly	-	Purushattambati To Jarura Part Of Korala Via Sugandha To Towards Bhadeswer Ps	10.530
43	Hooghly	-	Apurbapur To Bora Via Paltagarh And Ramnagore	6.900
44	Hooghly	-	Milki Part Of Majiman To 23 No Route Via Mouro	8.440
45	Hooghly	-	Chowanpara Bridge To Kindkarbetai Kadamtala	3.690
Sub Total				87.934
46	Nadia	-	Hazrapur To Duttapulia More	13.58
47	Nadia	-	Nokari To Kulgachhi	5.145
48	Nadia	-	Betaibazar To Chhitkadaspara	10.471
49	Nadia	-	Hanskhali To Nidhirpota	5.302
50	Nadia	-	Kalinagar To Sahapur	19.925
51	Nadia	-	Ghurni To Patuli Ghat	16.937
52	Nadia	-	Goaldanga Dhal(Pwd Road) To Bangaljihi Dakshin	10.111
53	Nadia	-	Baor To Bdo Office Para	7.925
54	Nadia	-	Sadhipur To Lalnagar	16.945
55	Nadia	-	Kharer Math To Gobindapur	6.275
56	Nadia	-	Nimtala Bazar To Rustam Nagar	6.564
57	Nadia	-	Isrnali To Gopinath	6.637

No	Division/ District	Block	Road Name	Length (Km)
58	Nadia	-	Hijuli Ghospara To Baglachra	6.380
59	Nadia	-	Shitalpur To Debgram Krishi Firm	18.034
60	Nadia	-	Janal To Nidaya Sluicegate (Mayapur) Via Post Office More	6.29
61	Nadia	-	Methiadanga Jamtala More To Baganchara Via Barodanga Para	9.604
62	Nadia	-	Ruipukur To Chak Chapra	20.543
63	Nadia	-	Nh 34 Bholdang To Birpur Ghat	10.507
64	Nadia	-	Ghatigachha To Ruppur	8.175
65	Nadia	-	Natna To Chak Madhubona	12.753
Sub Total				218.103
66	Purba Medinipur	-	Jasar To Brindabanchak	11.000
67	Purba Medinipur	-	Diglabarh - Bankura Chak	10.400
68	Purba Medinipur	-	Chandipur - Bar Baharpota	8.100
69	Purba Medinipur	-	Katlauri - Fatepur	7.400
70	Purba Medinipur	-	Nimdasbar - Biramput	5.800
71	Purba Medinipur	-	Gorsafat - Asnan (Arang Kyarana)	9.750
72	Purba Medinipur	-	Khalsiberia To Paschim Sarpai	15.600
73	Purba Medinipur	-	Dakshin Kalandan - Tikashi	9.100
74	Purba Medinipur	-	Durgapur - Jhaugeria	11.000
75	Purba Medinipur	-	Bararamkua - Gaurangabar	6.900
76	Purba Medinipur	-	Kaur Maishali (From Chakrasul) - Pania Via Chakrasul	5.200
Sub Total				100.25
TOTAL				637.58

B. Institutional Strengthening Component

Project 3 includes the construction of 25 RRNMU buildings in the 5 RCIP states of Assam (6 buildings); Chhattisgarh (4 buildings); Madhya Pradesh (5 buildings); Odisha (5 buildings); and West Bengal (4 buildings). The exact locations for these buildings are being identified by each state.

16 February 2015

Mr. Tarun Bajaj
Joint Secretary (MI)
Department of Economic Affairs
Ministry of Finance
Government of India
New Delhi - 110001

Dear Mr. Bajaj,

**Subject: Pipeline Tri-partite Review Meeting held in New Delhi on 20 January 2015
—Final Minutes of Meeting**

Thank you for the DEA's email dated 12 February 2015 regarding confirmation of minutes. We are attaching the final P-TPRM minutes that incorporate your comments. By copy of this letter, we are circulating the minutes to all P-TPRM participants.

Best regards,

Yours sincerely,



M. Teresa Kho
Country Director RS

Attachment: Final Minutes of Pipeline Tri-partite Review Meeting

cc: Ms. Sheyphali B. Sharan, Director (ADB-I), DEA
Mr. Ajay S. Singh, Director (ADB-II), DEA
Mr. Sanjay K. Singh, Under Secretary (ADB-I), DEA
Mr. Parveen Dudeja, Under Secretary (ADB-II), DEA

S. N.	Sector	Timeline for Loan Negotiation	Key Points of Discussion
			DEA requested EA to prepare the plan of action for all roads included in the project so that negotiation may be done in June 2015.
9	Rural Connectivity Investment Program—Tranche 3	June 2015	<p>EA informed that:</p> <ul style="list-style-type: none"> Tranche 3 consisted of 5 states (Odisha, Chhattisgarh, Madhya Pradesh, Assam and West Bengal) and that in respect of 4 states works worth \$467 million had already been sanctioned. The states had already awarded works worth \$198 million. Certain compliances are required for the state of West Bengal before the projects can be sanctioned. The approval for the projects in West Bengal for the proposed Tranche 3 would be issued at the earliest. <p>ADB Mission Leader affirmed to the EAs observations and pointed out that the issues pertaining to West Bengal need to be quickly resolved.</p> <p>JS(MI) was concerned about slow disbursement under ongoing Tranche 2 and advised that it should be speeded up.</p>
10	Six Lane Greenfield Bridge Over River Ganga	November 2015	<p>EA informed that :</p> <ul style="list-style-type: none"> DPR has been completed and Pre- Qualification documents have already been submitted to ADB for approval. The pre-qualification of contracts will start by February 2015 and contract will be awarded by September 2015. Capacity Building TA of \$1 million in view of the new technology for the proposed bridge and the operation and maintenance requirements was requested. Change in financing modality from MFF to a project loan was requested as the entire work will be executed as a single contract. <p>ADB Mission Leader apprised that:</p> <ul style="list-style-type: none"> The progress was satisfactory and Loan Negotiations could be held in November 2015 as envisaged. <p>JS(MI) was apprehensive about the status of land acquisition, especially of approach roads and asked EA to prepare Program Evaluation Review Technique (PERT) chart with respect to this and confirm the total land requirement and status of land acquisition. He also requested EA to go through the new amendments in the Land Acquisition Act and incorporate them in the plan.</p>
	Finance and Multi Sector		
11	Accelerating Infrastructure Investment Facility—Tranche 2	Standby 2015	<p>EA informed that:</p> <ul style="list-style-type: none"> The project is moving as per schedule and an amount of \$170 million under Tranche 1 has been disbursed. India Infrastructure Finance Company Limited (IIFCL) intends to request the Government soon for Tranche 2 guarantee. <p>ADB Mission Leader seconded the EAs' observations and informed that it was possible to negotiate by end 2015.</p>

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Design Summary	Performance Targets and Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
Impact Improved and sustained connectivity of selected rural communities in five RCIP states to markets, district headquarters, and other centers of socio-economic activity.	By the end of the RCIP (2017): About 4,200 rural habitations are newly connected by all-weather RCIP roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumption Continuous allocation of central and state government funds for post construction road maintenance
Outcome Improved and sustained accessibility of selected communities in five RCIP states.	By the end of Project 3 (2017): Estimated 1,320,000 average daily vehicle-km in the first full year of operation. Average number of months per year that the project roads are accessible increases from 9 months in 2014 to 12 months in 2017.	For both indicators: impact monitoring and surveys by TSC	Assumption Timely availability of counterpart funds for maintenance
Outputs 1. Selected rural roads are constructed to all-weather standard	By the end of the Project 3 (2017): About 6,127.66 km of PMGSY sanctioned rural roads in Assam (486.98 km), Chhattisgarh (1,055.94 km), Madhya Pradesh (1,381.36 km), Odisha (2,565.81 km), and West Bengal (637.57 km), are constructed/upgraded to all-weather standards. 33% of construction workers are women.	OMMAS	Risk Initial delays in start of civil works due to delays with government clearances for Project 3.
2. Quality of design of RCIP roads is improved	By the end of Project 3 (2017): 100% of road designs for Project 3 roads follow standardized DPR template. Communities along Project 3 roads (at least 20% women) are consulted in the design process.	Quality control checklists attached to DPRs Community design briefs as included in the DPRs	
3. Maintenance of RCIP roads is improved and sustainable	By the end of Project 3 (2017): At least 25 RRNMUs are fully operational.	Annual reports by RRNMUs and RCTRCs	

Design Summary	Performance Targets and Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
Activities with Milestones 1. Selected rural roads are constructed to all-weather standard 1.1 Approve state-wise road lists and detailed designs by NRRDA before PFR3 submission (March 2015) 2. Quality of design of RCIP roads is improved 2.1 Undertake quality control check during detailed designs (by TSC) based on standardized DPR template 3. Maintenance of RCIP roads is improved and sustainable 3.1 Twenty-five RRNMUs are fully operated by December 2017. 4. Road safety measures are incorporated into the lifecycle of RCIP roads 4.1 Conduct systematic RSAs on sample DPRs under Project 3 (by PICs in 2014) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2015 and 2016; by RRNMUs: in 2017 in 5 districts). 5. Institutional capacity strengthened 5.1 RCTRC (fully staffed and equipped) in place in the RCIP states by December 2016. 5.2 Large scale training started: April 2016. 6. Effective project management provided 6.1 SRRDAs, PIUs, TSC and PICs in place with full staffing and equipment: throughout Project 3. 6.2 SSTC in place: December 2015. 6.3 Start procurement of civil works before Project 3 approval. 6.3 Construction supervision by PIUs (throughout Project 3). 6.4 Conduct baseline surveys by TSC in April 2015. 6.5 Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 3 implementation). 6.6 Impact monitoring by TSC (on completion of Project 3 roads in December 2017) and by NRRDA (on completion of RCIP, by 2018).			Inputs ADB: \$273.00 million (ordinary capital resources loan) Government: \$245.30 million

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project management unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = Pradhan Mantri Gram Sadak Yojana, PRI=Panchayati Raj Institution, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.

Source: Asian Development Bank

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Subject: Fwd: RCIP Project 3 - Revision to DMF
 To: Parveen Dudeja <parveen.dudeja@nic.in>
 Cc: js mi dea <jsmi-dea@nic.in>, sunil.mandi <sunil.mandi@nic.in>

Date: 04/30/15 12:13 PM
 From: Ajay Shanker Singh <diradb2-dea@nic.in>

Appendix3_Design and Monitoring Framework_DEAcommen... (34kB)

diradb2-dea.vcf (387bytes)

in file pl. Design matrix need to reviewed in all cases coming for approval pl.

----- Original Message -----

From: aheriawan@adb.org
 Date: Apr 30, 2015 8:44:31 AM
 Subject: RCIP Project 3 - Revision to DMF
 To: diradb2-dea@nic.in
 Cc: asrivastava@adb.org, psrivastava@adb.org, mkestrella@adb.org, Harish Bhardwaj <h.bhardwaj12@pmgsy.nic.in>

Dear Mr. Singh,

Greetings.

This is in reference to your discussion with Ashok Srivastava (ADB INRM) yesterday, in which you had requested some changes and raised several queries regarding the DMF of the proposed RCIP Project 3. In response to your requests and queries, I have attached the revised DMF, incorporating the changes you have suggested in 'tracked changes' mode, and to include our explanation to your queries.

Please let us know if this revision would clarify matters pertaining to the DMF - otherwise please let us know immediately, in view to expedite the submission of the PFR.

We will communicate and discuss the changes that you suggested on the DMF to NRRDA upon your confirmation.

We look forward to hearing from you.

regards,

Andri Heriawan
 Transport Specialist

Transport and Communication Division (SATC)
 South Asia Department (SARD), Asian Development Bank
 Telp. +63 2 6326885 (Direct)

www.adb.org



please consider the environment before printing this email

Ajay S. Singh
 Director MI
 Department of Economic Affairs, Government of India
 Room No. 233, North Block, New Delhi
 Telefax: +91-11-23093744

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Improved and sustained connectivity of selected rural communities in five RCIP states to markets, district headquarters, and other centers of socio-economic activity.	By the end of the RCIP (2017): About 4,200 rural habitations are newly connected to <u>district headquarters and other centers of socio-economic activities</u> by all-weather RCIP roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumption Continuous allocation of central and state government funds for post construction road maintenance
Outcome Improved and sustained accessibility of selected communities in five RCIP states.	By the end of Project 3 (2017): Estimated 1,320,000 average daily vehicle-km in the first full year of operation. <u>By the end of Project 3 (2017): The project roads are accessible for full 12 months per year in 2017. Average number of months per year that the project roads are accessible increases from 9 months in 2014 to 12 months in 2017.</u>	For both indicators: impact monitoring and surveys by TSC [AH1]	Assumption Timely availability of counterpart funds for maintenance
Outputs 1. Selected rural roads are constructed to all-weather standard [AH2]	By the end of the Project 3 (2017): About 6,127.66 km of PMGSY sanctioned rural roads in Assam (486.98 km), Chhattisgarh (1,055.94 km), Madhya Pradesh (1,381.36 km), Odisha (2,565.81 km), and West Bengal (637.57 km), are constructed/upgraded to all-weather standards. 33% of construction workers are women.	OMMAS	Risk Initial delays in start of civil works due to delays with government clearances for Project 3.

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
2. Quality of design of RCIP roads is improved [AH3]	<p>By the end of Project 3 (2017): All DPRs for Project 3 follows the standardized DPR template, and the quality control checklist is attached to DPRs. 100% of road designs for Project 3 roads follow standardized DPR template.</p> <p>Communities along Project 3 roads (at least 20% women) are consulted in the design process.</p>	<p>Quality control checklists attached to DPRs Reports from PIC and TSC. [AH4]</p> <p>National and State Quality Monitoring reports.</p> <p>Community design briefs as included in the DPRs [AH5]</p>	
3. Maintenance of RCIP roads is improved and sustainable	<p>By the end of Project 3 (2017): At least 25 RRNMUs are fully operational (6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha, and 4 in West Bengal). [AH6]</p> <p>The budget for maintenance for each project road is at least x% of construction cost. [AH7]</p>	<p>Annual reports by RRNMUs and RCTRCs and certified by NRRDA.</p> <p>Budget report.</p>	<p>Assumption Timely availability of counterpart funds for maintenance</p>
4. Road safety measures are incorporated into the design lifecycle of RCIP roads	<p>In the course of preparation of Project 3 (2014): At least 10% of Project 3 designs in all RCIP states undergo RSAs, with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017) in 30 districts of RRNMU: As least 50% of designs and 30% of existing rural road network undergo RSAs annually, with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017): At least 50% of schools in the target habitations receive road safety awareness sessions.</p> <p>By the end of Project 3 (2017): Average 'Safety Risk</p>	<p>Summary RSA reports by PICs, TSC, and RRNMUs Response reports by SRRDAs</p> <p>Summary RSA reports by PICs, TSC, and RRNMUs</p> <p>Annual reports on road safety works completed and response reports by SRRDAs</p>	<p>Assumption State governments provide adequate budget for road safety improvements</p>

DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	Rating' of the RSA reports done by PIC or RRNMU should not be more than 2 on the sample roads.		
5. Qualification and skills of PMGSY engineers, technicians, PRI staff concerned, design consultants, and contractors in the investment program states are improved and maintained.	By the end of Project 3 (2017): Five RCTRCs are established and fully operational, and training and certification of at least 4000 PIU staff and 700-300 PRI staff, 400-design consultants and 300-contractors completed.	Government circulars and budget allocations RCTRC's training certification records.	
6. Effective project management provided	Project3 is approved as scheduled, and completed on time and within budget. All RCIP performance targets and indicators are systematically monitored and achieved.	OMMAS OMMAS PIC reports TSC reports	
Activities with Milestones 1. Selected rural roads are constructed to all-weather standard 1.1 Approve state-wise road lists and detailed designs by NRRDA before PFR3 submission (March 2015) 2. Quality of design of RCIP roads is improved 2.1 Undertake quality control check during detailed designs (by TSC) based on			Inputs ADB: \$273.00 million (ordinary capital resources loan) Government: \$245.30million

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DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
standardized DPR template			
3. Maintenance of RCIP roads is improved and sustainable 3.1 Twenty-five RRNMUs are fully operated by December 2017.			
4. Road safety measures are incorporated into the lifecycle of RCIP roads 4.1 Conduct systematic RSAs on sample DPRs under Project 3 (by PICs in 2014) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2015 and 2016; by RRNMUs: in 2017 in 5 districts).			
5. Institutional capacity strengthened 5.1 RCTRC (fully staffed and equipped) in place in the RCIP states by December 2016. 5.2 Large scale training started: April 2016.			
6. Effective project management provided 6.1 SRRDAs, PIUs, TSC and PICs in place with full staffing and equipment:throughout Project 3. 6.2 SSTC in place: December 2015. 6.3 Start procurement of civil works before Project 3 approval. 6.4 Construction supervision by PIUs (throughout Project 3). 6.5 Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 3 implementation). 6.6 Impact monitoring by TSC (on completion of Project 3 roads in December 2017) and by NRRDA (on completion of RCIP, by 2018).			

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project management unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = Pradhan Mantri Gram SadakYojana, PRI=Panchayati Raj Institution, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.

Source: Asian Development Bank

74

Subject: NRRDA and MORD Confirmation on the revised DMF
To: aheriawan@adb.org
Cc:
parveen.dudeja@nic.in, diradb2-dea@nic.in, ik.pateriya@nic.in,
asrivastava@adb.org, psrivastava@adb.org,
mkestrella@adb.org

Date: 05/11/15 04:41 PM

From: Harish Bhardwaj <h.bhardwaj12@pmgsy.nic.in>

Appendix3_Design and Monitoring Framework_DEAcommen... (32kB)

Dear Mr. Andri,

The updated Design and Monitoring Framework based on the comments of DEA forwarded by your email dated 7 May 2015 is acceptable to NRRDA and MoRD.

This is issued with the approval of Joint Secretary (RC), Ministry of Rural Development.

With Regards & thanks,

H Bhardwaj
Assistant Director (Projects-I)
NRRDA

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Improved and sustained connectivity of selected rural communities in five RCIP states to markets, district headquarters, and other centers of socio-economic activity.	By the end of the RCIP (2017): About 4,200 rural habitations are newly <u>connected to district headquarters and other centers of socio-economic activities</u> by all-weather RCIP roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumption Continuous allocation of central and state government funds for post construction road maintenance
Outcome Improved and sustained accessibility of selected communities in five RCIP states.	By the end of Project 3 (2017): Estimated 1,320,000 average daily vehicle-km in the first full year of operation. <u>By the end of Project 3 (2017): The project roads are accessible for full 12 months per year in 2017. Average number of months per year that the project roads are accessible increases from 9 months in 2014 to 12 months in 2017.</u>	For both indicators: impact monitoring and surveys by TSC	Assumption Timely availability of counterpart funds for maintenance
Outputs 1. Selected rural roads are constructed to all-weather standard	By the end of the Project 3 (2017): About 6,127.66 km of PMGSY sanctioned rural roads in Assam (486.98 km), Chhattisgarh (1,055.94 km), Madhya Pradesh (1,381.36 km), Odisha (2,565.81 km), and West Bengal (637.57 km), are constructed/upgraded to all-weather standards. 33% of construction workers are women.	OMMAS	Risk <u>Delay in initial procurement of civil work packages due to non-responsive bids.</u> Initial delays in start of civil works due to delays with government clearances for Project 3.

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
2. Quality of design of RCIP roads is improved	<p>By the end of Project 3 (2017): <u>All DPRs for Project 3 follows the standardized DPR template, and the quality control checklist is attached to DPRs. 100% of road designs for Project 3 roads follow standardized DPR template.</u></p> <p>Communities along Project 3 roads (at least 20% women) are consulted in the design process.</p>	<p>Quality control checklists attached to DPRs Reports from PIC and TSC.</p> <p><u>National and State Quality Monitoring reports.</u></p> <p>Community design briefs as included in the DPRs</p>	
3. Maintenance of RCIP roads is improved and sustainable	<p>By the end of Project 3 (2017): At least 25 RRNMUs are fully operational <u>(6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha, and 4 in West Bengal)</u>.</p> <p><u>The budget for maintenance for each project road is at least 5% of construction cost.</u></p>	<p>Annual reports by RRNMUs and RCTRCs <u>and certified by NRRDA.</u></p> <p><u>Budget report.</u></p>	<p><u>Assumption</u> <u>Timely availability of counterpart funds for maintenance</u></p>
4. Road safety measures are incorporated into the <u>design</u> lifecycle of RCIP roads	<p>In the course of preparation of Project 3 (2014): At least 10% of Project 3 designs in all RCIP states undergo RSAs, with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017) in 30 districts of RRNMU: As least 50% of designs and 30% of existing rural road network undergo RSAs annually, with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017): At least 50% of schools in the target habitations receive road safety awareness sessions.</p> <p>By the end of Project 3 (2017): Average 'Safety Risk Rating' of the RSA reports</p>	<p>Summary RSA reports by PICs, TSC, and RRNMUs Response reports by SRRDAs</p> <p>Summary RSA reports by PICs, TSC, and RRNMUs</p> <p>Annual reports on road safety works completed and response reports by SRRDAs</p>	<p><u>Assumption</u> State governments provide adequate budget for road safety improvements</p>

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	done by PIC or RRNMU should not be more than 2 on the sample roads.		
5. Qualification and skills of PMGSY engineers, technicians, PRI staff concerned, design consultants, and contractors in the investment program states are improved and maintained.	By the end of Project 3 (2017): Five RCTRCs are established and fully operational, and training and certification of at least 4000 PIU staff and 700, 300 PRI staff, 400 design consultants and 300 contractors completed.	Government circulars and budget allocations RCTRC's training certification records.	
6. Effective project management provided	Project 3 is approved as scheduled, and completed on time and within budget. All RCIP performance targets and indicators are systematically monitored and achieved.	OMMAS OMMAS PIC reports TSC reports	
Activities with Milestones 1. Selected rural roads are constructed to all-weather standard 1.1 Approve state-wise road lists and detailed designs by NRRDA before PFR3 submission (March 2015) 2. Quality of design of RCIP roads is improved 2.1 Undertake quality control check during detailed designs (by TSC) based on standardized DPR template 3. Maintenance of RCIP roads is improved and sustainable 3.1 Twenty-five RRNMUs are fully operated by December 2017. 4. Road safety measures are incorporated into the lifecycle of RCIP roads 4.1 Conduct systematic RSAs on sample DPRs under Project 3 (by PICs in 2014) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2015 and 2016; by RRNMUs: in 2017 in 5 districts). 5. Institutional capacity strengthened 5.1 RCTRC (fully staffed and equipped) in place in the RCIP states by December 2016. 5.2 Large scale training started: April 2016. 6. Effective project management provided			Inputs ADB: \$273.00 million (ordinary capital resources loan) Government: \$245.30 million

DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
6.1 SRRDAs, PIUs, TSC and PICs in place with full staffing and equipment throughout Project 3. 6.2 SSTC in place: December 2015. 6.3 Start procurement of civil works before Project 3 approval. 6.3 Construction supervision by PIUs (throughout Project 3). 6.4 Conduct baseline surveys by TSC in April 2015. 6.5 Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 3 implementation). 6.6 Impact monitoring by TSC (on completion of Project 3 roads in December 2017) and by NRRDA (on completion of RCIP, by 2018).			

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project management unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = Pradhan Mantri Gram Sadak Yojana, PRI=Panchayati Raj Institution, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.

Source: Asian Development Bank

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Improved and sustained connectivity of selected rural communities in five RCIP states to district headquarters, and other centers of socio-economic activity.	By the end of the RCIP (2017): About 4,200 rural habitations are newly connected to district headquarters and other centers of socio-economic activities by all-weather RCIP roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumption Continuous allocation of central and state government funds for post construction road maintenance
Outcome Improved and sustained accessibility of selected communities in five RCIP states.	By the end of Project 3 (2017): Estimated 1,320,000 average daily vehicle-km in the first full year of operation. By the end of Project 3 (2017): The project roads are accessible for full 12 months per year in 2017.	For both indicators: impact monitoring and surveys by TSC	Assumption Timely availability of counterpart funds for maintenance
Outputs 1. Selected rural roads are constructed to all-weather standard	By the end of the Project 3 (2017): About 6,127.66 km of PMGSY sanctioned rural roads in Assam (486.98 km), Chhattisgarh (1,055.94 km), Madhya Pradesh (1,381.36 km), Odisha (2,565.81 km), and West Bengal (637.57 km), are constructed/upgraded to all-weather standards. 33% of construction workers are women.	OMMAS	Risk Delay in initial procurement of civil work packages due to non-responsive bids.
2. Quality of design of RCIP roads is improved	By the end of Project 3 (2017): All DPRs for Project 3 follows the standardized DPR template, and the quality control checklist is attached to DPRs. Communities along Project 3 roads (at least 20% women) are consulted in the design	Reports from PIC and TSC. National and State Quality Monitoring reports. Community design briefs as included in the DPRs	

DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
	process.		
3. Maintenance of RCIP roads is improved and sustainable	<p>By the end of Project 3 (2017): At least 25 RRNMUs are fully operational(6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha, and 4 in West Bengal).</p> <p>The budget for maintenance for each project road is at least 5% of construction cost.</p>	<p>Annual reports by RRNMUs and RCTRCs and certified by NRRDA.</p> <p>Budget report.</p>	<p>Assumption</p> <p>Timely availability of counterpart funds for maintenance</p>
4. Road safety measures are incorporated into the design	<p>In the course of preparation of Project 3 (2014): At least 10% of Project 3 designs in all RCIP states undergo RSAs, with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017) in 30 districts of RRNMU: As least 50% of designs and 30% of existing rural road network undergo RSAs with emphasis on vulnerable road users.</p> <p>By the end of Project 3 (2017): At least 50% of schools in the target habitations receive road safety awareness sessions.</p> <p>By the end of Project 3 (2017): Average 'Safety Risk Rating' of the RSA reports done by PIC or RRNMU should not be more than 2 on the sample roads.</p>	<p>Summary RSA reports by PICs, TSC, and RRNMUs Response reports by SRRDAs</p> <p>Summary RSA reports by PICs, TSC, and RRNMUs</p> <p>Annual reports on road safety works completed and response reports by SRRDAs</p>	<p>Assumption</p> <p>State governments provide adequate budget for road safety improvements</p>

DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
5. Qualification and skills of PMGSY engineers, technicians, PRI staff concerned, design consultants, and contractors in the investment program states are improved and maintained.	By the end of Project 3 (2017): Five RCTRCs are established and fully operational, and training and certification of at least 4000 PIU staff and 700, PRI staff, design consultants and contractors completed.	Government circulars and budget allocations RCTRC's training certification records.	
6. Effective project management provided	Project3 is approved as scheduled, and completed on time and within budget. All RCIP performance targets and indicators are systematically monitored and achieved.	OMMAS OMMAS PIC reports TSC reports	
Activities with Milestones 1. Selected rural roads are constructed to all-weather standard 1.1 Approve state-wise road lists and detailed designs by NRRDA before PFR3 submission (March 2015) 2. Quality of design of RCIP roads is improved 2.1 Undertake quality control check during detailed designs (by TSC) based on standardized DPR template 3. Maintenance of RCIP roads is improved and sustainable 3.1 Twenty-five RRNMUs are fully operated by December 2017. 4. Road safety measures are incorporated into the lifecycle of RCIP roads 4.1 Conduct systematic RSAs on sample DPRs under Project 3 (by PICs in 2014) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2015 and 2016; by RRNMUs: in 2017 in 5 districts). 5. Institutional capacity strengthened 5.1 RCTRC (fully staffed and equipped) in place in the RCIP states by December 2016. 5.2 Large scale training started: April 2016. 6. Effective project management provided 6.1 SRRDAs, PIUs, TSC and PICs in place with full staffing and equipment:throughout Project 3. 6.2 SSTC in place: December 2015. 6.3 Start procurement of civil works before Project 3 approval. 6.3 Construction supervision by PIUs (throughout Project 3).			Inputs ADB: \$273.00 million (ordinary capital resources loan) Government: \$245.30million

DesignSummary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
6.4	Conduct baseline surveys by TSC in April 2015.		
6.5	Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 3 implementation).		
6.6	Impact monitoring by TSC (on completion of Project 3 roads in December 2017) and by NRRDA (on completion of RCIP, by 2018).		

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project management unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = Pradhan Mantri Gram Sadak Yojana, PRI=Panchayati Raj Institution, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.

Source: Asian Development Bank

Facility Administration Manual

Project Number: 40423-013
Loan Numbers: 2881, 3065, xxxx
October 2015

India: Rural Connectivity Investment Program

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- E: Terms of Reference – Consultant for Institutional Development for Rural Road Asset Management
- F: Social Safeguards Checklist for RRMNU and RCTRC
- G: Summary of Design Standard and Technical Approach
- H: Technical Bid Evaluation Report (summary form)
- I: Financial Bid Evaluation Report (summary form)
- J: Contract Award Form
- K: Design and Monitoring Frameworks
- L: GAP Progress Update Format
- M: Outline Community Participation Framework

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 Government and Asian Development Bank (ADB) policies and procedures. 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 Development and National Rural Road Development Agency (executing and implementing agencies at the central level), and the Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal through the respective project executing and implementing agencies (at the state level) are wholly responsible for the implementation of ADB financed projects, as agreed jointly between India and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by executing and implementing agencies with their obligations and responsibilities for the implementation of the Rural Connectivity Investment Program in accordance with ADB's policies and procedures.

At Loan Negotiations, India and ADB shall agree to the FAM and ensure consistency with the Framework Financing Agreement (FFA) and the Loan Agreement of the first project. 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 FFA and the Loan Agreement, the provisions of the Loan Agreement shall prevail.

After ADB Board approval of the Investment Program'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.

Abbreviations

ADB	=	Asian Development Bank
APFS	=	audited project financial statements
CDTA	=	capacity development technical assistance
CPF	=	community participation framework
DMF	=	design and monitoring framework
DPR	=	detailed project report
EA	=	executing agency
EARF	=	environmental assessment and review framework
ECOP	=	Environmental Code of Practice
EIA	=	environmental impact assessment
EMP	=	environmental management plan
FAM	=	facility administration manual
FFA	=	framework financing agreement
FMA	=	financial management assessment
GDP	=	gross domestic product
IA	=	implementing agency
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IPP	=	indigenous people plan
IPPF	=	indigenous people planning framework
LIBOR	=	London interbank offered rate
MORD	=	Ministry of Rural Development
MFF	=	multitranches financing facility
NCB	=	national competitive bidding
NGOs	=	nongovernment organizations
NRRDA	=	National Rural Roads Development Agency
OMMA	=	online management, monitoring, and accounting system
OSRRA	=	Odisha State Rural Road Agency
PAI	=	project administration instructions
PFR	=	periodic financing request
PIC	=	project implementation consultant
PIU	=	project implementation unit
PMGSY	=	Pradhan Mantri Gram Sadak Yojana
PRI	=	Panchayati Raj Institution
QCBS	=	quality- and cost based selection
RCIP	=	Rural Connectivity Investment Program
RCTRC	=	rural connectivity training and research center
RRNMU	=	rural road network management unit
RRP	=	report and recommendation of the President to the Board
RRS	=	rural road sector
SBD	=	standard bidding documents
SC	=	scheduled castes
SOE	=	statement of expenditure
SPS	=	Safeguard Policy Statement
SPRSS	=	summary poverty reduction and social strategy
SRRDA	=	State Rural Roads Development Agency
SSTC	=	Second Stage Training Consultant
ST	=	scheduled tribes
TA	=	technical assistance

TOR	=	terms of reference
TSC	=	technical support consultant

I. PROGRAM DESCRIPTION

A. Program's Rationale, Location and Beneficiaries

1. The Rural Connectivity Investment Program will construct or upgrade to the all-weather standard about 9,000 km of rural roads connecting around 4,200 habitations in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal (the investment program states). The total length has increased to 13,278 km, connecting 5598 habitations. The roads will be constructed or upgraded to a single lane standard. For the investments in physical infrastructure to be effective and sustainable, the investment program will also focus on improvement of institutional arrangements, business processes and associated capacity building, especially in relation to design, operation, safeguard, financial, road safety, and asset management matters.¹

2. Absence of all-weather road connectivity is one of the urgent problems in rural India making communities inaccessible for up to 90 days a year. Poor road infrastructure affects economic growth in rural areas. It impacts negatively on domestic and local trade, on the final cost of goods, competition and competitiveness, logistics in general, movement of people, inward investment opportunities, and ultimately on employment. Poor road connectivity has a strong link to poverty.

3. The Government is redressing this problem through the implementation of a nationwide rural road investment program, *Pradhan Mantri Gram Sadak Yojana*² (PMGSY), aiming to provide all-weather road connectivity to currently unconnected eligible habitations in India's rural areas. To maximize the impacts of the investment under PMGSY, the Ministry of Rural Development (MORD) established strategic criteria to give priority to habitations with a larger population first and gradually expand to cover smaller habitations over time.

4. The proposed investment program will provide support to the PMGSY to achieve its targets over the next 5 years. The investment program is consistent with the strategic objective set out in the Country Partnership Strategy (CPS) 2009-2012 and is included in the Country Operations Business Plan (COBP), 2011-2013.

5. Apart from the need to provide all-weather road connectivity to currently unconnected eligible habitations in India's rural areas, the states included in the investment program need support in the improvement of business procedures, and strengthening of capacities. Specifically, while the emphasis is currently shifting from construction to the operation and maintenance of the rural road network,³ the capacities remain at the same level. There is also a discrepancy between the extent of the rural road network (around 80% of the total road network) and supply of skills, as the training of civil engineers, technicians and site supervisors is currently oriented at high category roads.

6. These challenges are pronounced in the investment program states. PMGSY identified these states among the 10 states with large rural population that lack adequate coverage in terms of all-weather road connectivity. The poverty head count rates in these states are among

¹ The Asian Development Bank (ADB) provided project preparatory technical assistance. ADB. 2009. *Technical Assistance to India for Preparing Rural Road Sector III Investment Program*. Manila.

² Means Prime Minister's Rural Roads Program.

³ Specifically, more than 65,000 km is currently on 5-year post-construction maintenance, and the length of roads beyond 5-year post-construction maintenance will increase from around 17,000 km to more than 80,000 km within the next 5 years.

the highest in India. Chhattisgarh and Madhya Pradesh have already been provided with an ADB Loan in the amount of \$400 million to finance RRS-I (closed in 2009), under which 9,757 km of all-weather roads connecting 3,207 habitations have been constructed. Under the ongoing MFF financing RRS-II (to be closed in 2012), ADB is providing financial assistance to construction of PMGSY roads in Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal. The total amount of RRS-II is \$750 million and 5 loans provided will fully utilize the MFF amount. The proposed investment program will provide a continuation for RRS-I and RRS-II.

B. The Investment Program

7. **Impact and Outcome.** The long-term impact of the investment program will be reduced poverty and deprivation, and inclusive socioeconomic growth in the communities served by the investment program roads. The immediate outcome will be improved and sustainable connectivity of rural communities in the investment program states to markets, district headquarters, and other centers of economic activity.

8. **Outputs.** Specific outputs working towards achieving the outcome will include: (i) selected priority rural roads are constructed/upgraded into all-weather standard; (ii) quality of design of investment program roads is improved; (iii) maintenance of investment program roads is improved and sustainable; (iv) road safety measures are incorporated into the lifecycle of investment program roads; (v) qualification and skills of PMGSY engineers, technicians, site supervisors, concerned staff of Panchayati Raj Institutions (PRIs),⁴ design consultants and contractors in the investment program states is improved and maintained; and (vi) effective project management is provided.

9. **Road Infrastructure Development Component.** The investment program will construct to the all-weather standard⁵ about 9,000 km of rural roads in the investment program states. Civil works will include constructing/upgrading rural roads to a full single-lane cross section having 3.75 m wide carriageway and a 7.5 m formation width,⁶ strengthening of culverts and bridges, realignments as necessary, constructing of new bridges and cross-draining structures, and providing road furniture. Design standards for RCIP are in Attachment G.

10. **Institutional Strengthening Component.** The investment program will support the establishment of Rural Connectivity Training and Research Centers (RCTRCs) and pilot Rural Road Network Management Units (RRNMUs) in the investment program states. One RCTRC and around 6 RRNMUs will be established in each investment program state at the end of the implementation of the investment program. The pilot RRNMU will be established in each investment program state during the first year of implementation, and the rest will be established during the third year. The support will include construction of modern facilities including laboratories and providing all necessary state-of-the art equipment, system and tools. To ensure the operational sustainability of these organizations, all investment program states have committed to (i) provide adequate staffing and operational budget for RCTRCs and RRNMUs, and normally (ii) not transfer key staff from the RRNMUs for at least 3 consecutive years, (iii) not

⁴ A panchayat is an institution of self-government constituted for rural areas under Article 243-B of the Constitution of India. The three levels of panchayat comprise gram panchayat at village level, intermediate panchayat at block level, and zilla panchayat/parishad at district level. These panchayats collectively called "panchayati raj institutions."

⁵ Includes both new construction and upgrading to the all-weather standard.

⁶ This standard is relaxed to 6.0 m formation for link roads and all roads in hilly areas; and 3.00 m carriageway width for such roads if daily motorized traffic is below 100.

leave key positions vacant for more than 30 days, and (iv) not transfer more than one key staff member within a 6-month period.

11. Support to RCTRCs will also include the engagement of Second Stage Training Consultant (SSTC) to assist staff in rolling out systematic and large scale training oriented at rural roads. The training will be provided in the innovative apprenticeship mode where over the period of three years the training will be conducted by the RCTRC consultant together with the concerned RCTRC staff, with increasing responsibility given to RCTRC staff. The consulting services will also support RCTRCs in research and compiling best practices and experiences in rural roads and using that material in the training and development of MORD/NRRDA guidelines and manuals.

12. Assistance to the MORD/NRRDA and state governments to comply with administrative requirements inherent to ADB-assisted projects, and additional support in operation, monitoring, evaluation and risk management will be provided through the engagement of Project Implementation Consultant (PICs) engaged and financed by the Government of India, and the Technical Support Consultant (TSC) engaged by NRRDA and financed by ADB.

13. The Institutional Development Component will be supported by Capacity Development Technical Assistance (CDTA) for Institutional Development for Rural Roads Asset Management. This CDTA will support the piloting of RRNMUs and the establishment of the RCTRCs.⁷ Support for RRNMUs will include: (i) developing rural road network management policies, business procedures and associated tools; (ii) providing advisory support in design and procurement process for RRNMU facilities; (iii) providing dedicated rural road network management training; (iv) supporting RRNMUs with the implementation of rural road network management tasks; and (v) monitoring and analysis of RRNMUs performance and lessons learned. Support for RCTRCs will include (i) formulation of the concept, organizational structure, funding mechanisms, business procedures, and staffing requirements of RCTRCs; (ii) providing advisory support in design and procurement of RCTRCs facilities; (iii) providing dedicated training to RCTRC staff; (iv) developing operational plan for the rollout of RCTRCs; and (v) assistance in recruiting the loan-financed RCTRC consultant.

C. Rural Connectivity Investment Program – Tranche 1 (Project 1)

14. **Impact and Outcome.** The long term impact will be improved and sustained connectivity of selected rural communities in investment program states to markets, district headquarters, and other centers of economic activity. The outcome will be improved and sustained connectivity of selected communities in investment program states prioritized by PMGSY for 2012 sanction.

15. **Outputs.** Project 1 will have six outputs: (i) selected priority rural roads prioritized by PMGSY for 2012 sanction are constructed to all-weather standard; (ii) quality of design of RCIP roads is improved; (iii) maintenance of RCIP roads is improved and sustainable; (iv) road safety measures are incorporated into the lifecycle of RCIP roads; (v) qualification and skills of PMGSY engineers, technicians, site supervisors, concerned staff of PRI, design consultants and contractors in the investment program states is improved and maintained; and (vi) effective project management provided.

⁷ Detailed TORs for each component of the CDTA are in Attachments E and F to the FAM accessible from the list of linked documents in Appendix 2.

16. **Road infrastructure development.** This comprises construction of 3,461 km all-weather rural roads that are part of the PMGSY to provide connectivity to all habitations of population of 500 persons (250 or more in hilly or dessert areas, or scheduled tribe areas) or more.

17. **Capacity Building Component.** This component will include (i) support to the establishment of RCTRCs; (ii) support to the establishing of RRNMUs in each participating state; (iii) assistance to the MORD/NRRDA and state governments in implementation of the additional policy, and administrative requirements inherent to ADB-assisted projects; and (iv) additional support in operation, monitoring, evaluation and risk management.

D. Rural Connectivity Investment Program – Tranche 2 (Project 2)

18. **Impact and Outcome.** The long-term impact will be improved connectivity of selected rural communities in the investment program states to markets, district headquarters, and other centers of socio-economic activity. The outcome will be improved accessibility of selected communities in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal.

19. **Outputs.** Project 2 will have four outputs: (i) selected rural roads will be constructed to all-weather standard; (ii) the design quality of rural roads will be improved; (iii) maintenance of the rural roads will be improved and sustained; and (iv) road safety measures will be incorporated into the life cycle of the rural roads.

20. **Road infrastructure development.** About 3,693 km⁸ of all-weather rural roads will be constructed in the investment program states, which will connect around 1,799 habitations.⁹ The project will pilot the use of new construction technologies¹⁰ and the use of local materials will be increased. The adopted all-weather design standard will increase the resilience of communities to the impacts of climate change and road safety. All constructed roads will be maintained under 5-year performance-based maintenance contracts.

21. **Institutional Strengthening.** Project 2 will support: (i) the establishment of RCTRCs and RRNMUs in the investment states which are financed under Project 1, by providing all necessary state-of-the art equipment, system, software and tools,¹¹ and (ii) a project implementation consultant (PIC) will be engaged and financed by the government to assist executing agency and state governments in complying with the administrative requirements inherent to ADB-assisted projects, and provide additional support in operation, monitoring, evaluation and risk management.

E. Rural Connectivity Investment Program – Tranche 3 (Project 3)

22. **Impact and Outcome.** The impact will be improved access to markets, district headquarters, and other centers of socio-economic activities aligned with India's Five Year Plan, 2012-2017. The outcome will be improved and sustained connectivity of selected rural communities in the investment program states.

⁸ List of sub-projects is in Annex 2 of PFR (accessible in Appendix 4).

⁹ Includes new construction and upgrading to the all-weather standard. Adopted design standards are provided in Appendix G of Facility Administration Manual.

¹⁰ Such as cold mix bitumen emulsion, interlocking concrete blocks, and eco-friendly jute geotextile and vetiver grass for soil stabilization and water conservation.

¹¹ One RCTRC and around 6 RRNMUs will be established in each state under the investment program.

23. **Outputs.** Project 3 will have six outputs: (i) selected rural roads are constructed to all-weather standard, (ii) quality of design of RCIP roads is improved, (iii) maintenance of RCIP roads is improved and sustained, (iv) road safety measures are incorporated into the design, (v) institutional capacity strengthened, and (vi) effective project management provided.

24. **Road infrastructure development.** By the end of 2017, Project 3 will construct 6,124 km of all-weather rural roads and connects 1,945 habitations in the investment program states. As intended for the whole investment program, Project 3 will continue the use of new construction technologies and local materials. The adopted all-weather standard will increase the resilience of communities against the impact of climate changes. All roads constructed will include a 5-year performance-based maintenance contract.

25. **Institutional Strengthening.** By the end of 2017, Project 3 will construct 25 RRNMUs in the investment program states. With support from SSTC engaged under Project 1, RCTRCs will carry out training and its certification of at least 4000 PIU staff and 700 PRI, design consultant and contractor staff.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

Project 1

Year	Month	Civil Works	Advance Procurement Activities		
			Civil Works (roads)	TSC	PIC
2009	October			▶ Advertise Request for EOI	
	November				
	December				
2010	January				
	February				
	March			▶ Shortlisting	▶ Advertise Request for EOI
	April			▶ Issue RFP	
	May				
	June			▶ Submission of proposals	▶ Shortlisting
	July				
	August				▶ Submission of proposals
	September				
	October				
	November				
	December			▶ Technical and Financial Evaluation	▶ Technical and Financial Evaluation
2011	January				
	February				
	March				▶ Contract signing
	April				
	May			▶ Contract signing	
	June				
	July				
	August				
	September				
	October		▶ Draft bidding documents prepared		
	November				
	December		▶ DPRs for batch 1 finalized		
2012	January				
	February		▶ Bidding documents finalized		
	March		▶ Invite bids		
	April				
	May		▶ Bid submission		
	June		▶ Technical evaluation		
	July		▶ Financial evaluation		
	August				
	September		▶ Contract signing		
	October		▶ Commencing of works		
	November				
	December				

TSC=Technical Support Consultant, PIC=Project Implementation Consultant.

Project 2

Year	Month	Civil Works (roads)	Advance Procurement Activities	
			Civil Works (roads)	PIC
2012	January			
	February			
	March			
	April	DPRs preparation		
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			
2013	January			
	February			
	March			
	April	DPRs finalized		
	May			
	June		▶ Invite bids	
	July		▶ Technical Evaluation	
	August		▶ Financial Evaluation	
	September		▶ Contract Signing	
	October		▶ Commencement of works	
	November			▶ Start Recruitment
	December			
2014	January			
	February			
	March			
	April			▶ PICs Mobilization
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			

PIC=Project Implementation Consultant.

Project 3

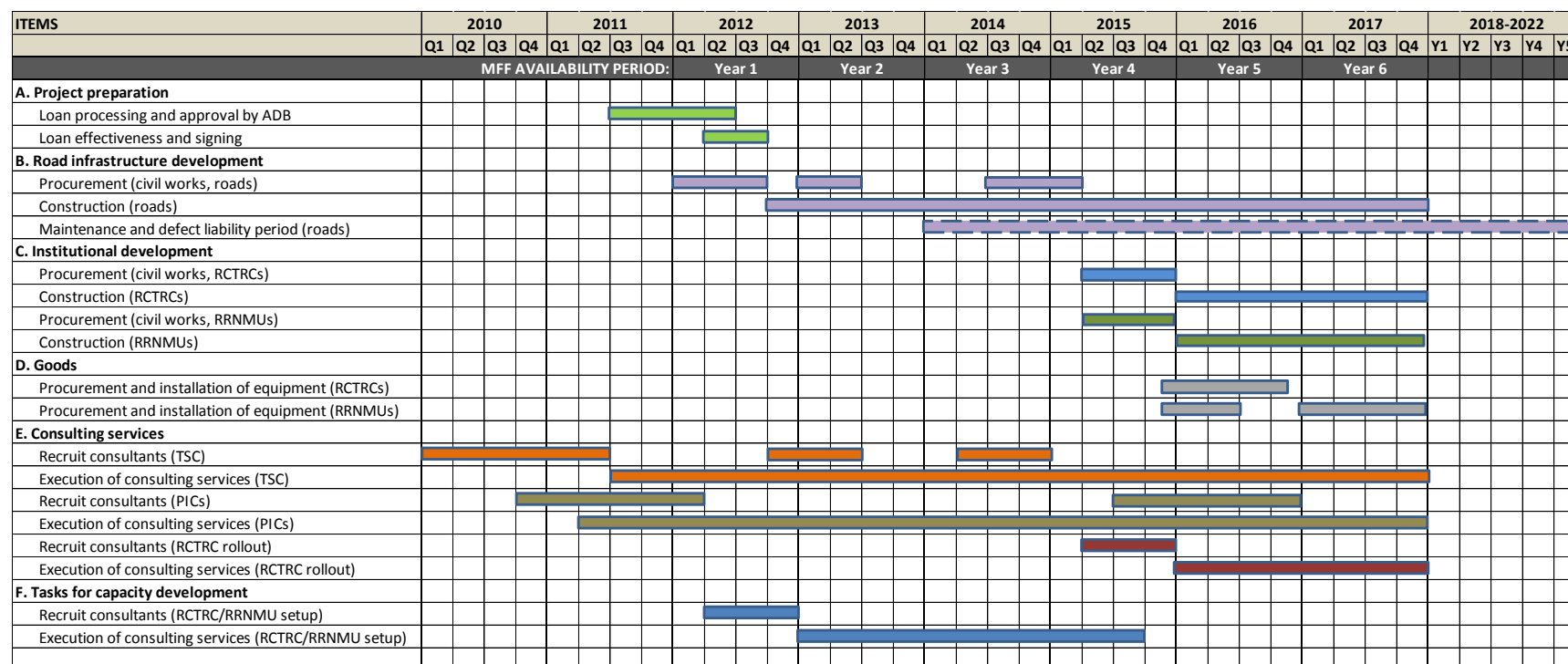
Year	Month	Civil Works (roads)	Advance Procurement Activities	
			Civil Works (roads)	PIC
2013	January			
	February			
	March			
	April			
	May			
	June	DPRs preparation		
	July			
	August			
	September			
	October			
	November			
	December			
2014	January			
	February	DPRs finalized		
	March			
	April			
	May		▶ Invite bids	
	June		▶ Technical Evaluation	
	July		▶ Financial Evaluation	
	August			
	September		▶ Contract Signing	
	October		▶ Commencement of selected works	
	November			
	December			
2015	January			
	February			
	March			
	April			
	May			
	June			
	July			
	August			
	September			
	October			
	November			
	December			

PIC=Project Implementation Consultant.

B. Project Implementation Plan

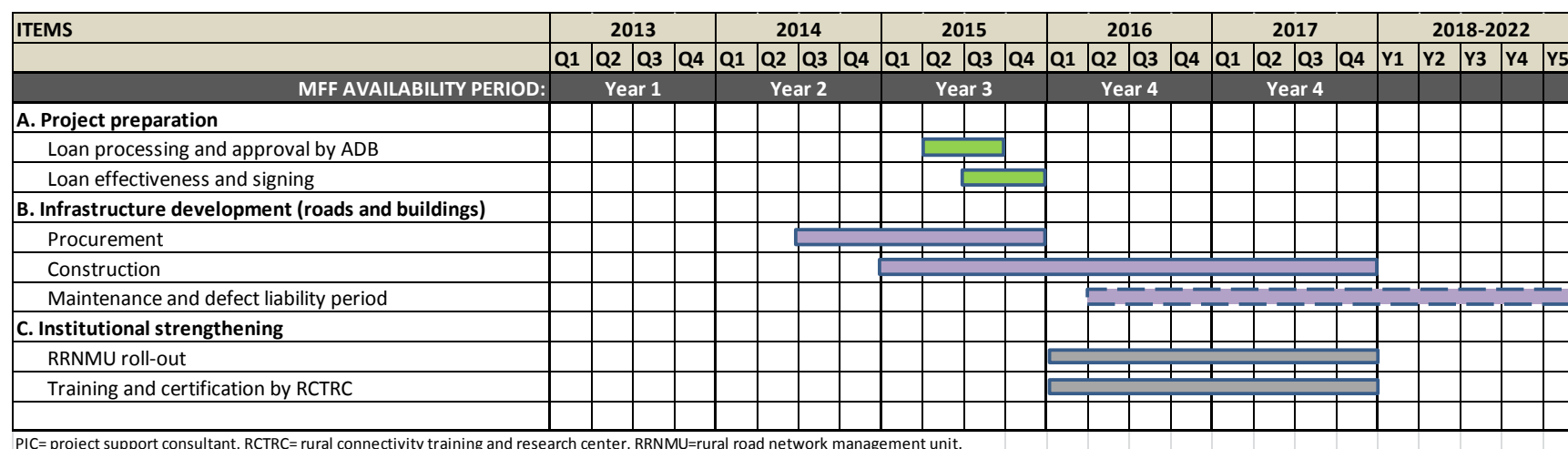
26. Project implementation plan recording key implementation activities on a quarterly basis is provided in Figure 1 below. It will be updated annually and submitted to ADB with contract and disbursement projections for the following year. Project implementation plan for Project 3 is presented in Figure 2.

Figure 1: Project Implementation Plan for the Investment Program



TSC=Technical Support Consultant, PIC=Project Support Consultant, RCTRC=Rural Connectivity Training and Research Center, RRNMU=Rural Road Network Management Unit.

Figure 2: Project Implementation Plan for Project 3



III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations – Roles and Responsibilities

Project Stakeholders	Management Roles and Responsibilities
Executing agency (EA)	<p>Ministry of Rural Development (MORD) at the Central Level including through NRRDA Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal</p> <ul style="list-style-type: none"> • overall coordination of project implementation • financial oversight • interagency coordination • policy decisions (RRNMUs and RCTRCs) • counterpart funding (MORD: capital works) • maintenance funding (investment program states) • provide land and cover design costs, staffing and running costs for RRNMUs and RCTRCs (investment program states) • ensuring project sustainability during post implementation stage • consolidation of the withdrawal applications received from State Rural Road Development Agencies (SRRDAs) and submitting consolidated withdrawal applications to ADB. • coordination with SRRDAs and submitting reports, including the annual report and financial statements to ADB.
Implementing agency (IA)	<p>State Rural Road Development Agencies¹²</p> <ul style="list-style-type: none"> • detailed design and bidding documents • consultant recruitment and procurement of works • preconstruction activities • day-to-day project management • quality assurance of works and services of consultants and counterpart staff • submission of withdrawal applications to NRRDA. • withdrawal applications • submission of project progress reports and other reports as required to NRRDA • submission of the annual report and financial statements to NRRDA. • maintaining project accounts and loan financial records • keeping supporting documents for project financial statements and project accounts.
ADB	<ul style="list-style-type: none"> • monitor and review overall implementation of the project in consultation with the EA/IA including: the project implementation schedule; actions required in terms of poverty reduction, environmental impacts, and social mitigation measures applicable; timeliness of budgetary allocations and counterpart funding; project expenditures; progress with procurement and disbursement; procurement and performance audits; statement of expenditure when applicable; compliance with particular loan covenants; and the likelihood of attaining the project's immediate development objectives. • post on ADB web the updated project information documents and safeguards documents as per disclosure provision of the ADB safeguards policy statement. • timely process withdrawal applications and release eligible funds

¹² The functions of SRRDA are carried out by State Road Board in Assam, State Rural Roads Agency in Odisha, State Rural Development Agency in West Bengal, and Rural Roads Development Authorities in Madhya Pradesh and Chhattisgarh.

B. Key Persons Involved in Implementation

RCIP Coordination Committee (Central Level)

Central-level Coordination Committee will be headed by the Joint Secretary (Rural Connectivity) & Director General (NRRDA).

RCIP Coordination Committees (State Level)

State-level Coordination Committee will be headed by the Secretary of the Project Executing Agency or Chief Executive Officer of the IA.

Executing Agency (Central level)

Ministry of Rural Development	Officer's Name	Mr. Rajesh Bhushan
	Position	Joint Secretary (Rural Connectivity)
	Telephone	+91-11-23384707
	Email address	rajeshbushans@gmail.com
	Mobile	+91-9717048187
	Web	http://www.rural.nic.in
	Office Address	Ministry of Rural Development, Krishi Bhawan, New Delhi
National Rural Roads Development Agency (NRRDA) (Central Level) Ministry of Rural Development	Officer's Name	Dr. I.K. Pateriya
	Position	Director (Technical)
	Telephone	+91-11-41000472
	Email address	ik.pateriya@nic.in
	Mobile	+91-9968120815
	Web	-
	Office Address	5 th . Floor, 15-NBCC Tower, Bhikaji Cama Place, New Delhi-110066
	Officer's Name	Mr. H. Bhardwaj
	Position	Assistant Director (Projects-II)
	Telephone	+91-11-26716930 Ext. 108
	Email address	h.bhardwaj12@pmgsy.nic.in
	Mobile	+91-9899364495
	Web	-
	Office Address	5 th . Floor, 15-NBCC Tower, Bhikaji Cama Place, New Delhi-110066

Executing Agency (Government of Assam)

Public Works Department	Officer's Name	Mr. M.C. Boro
	Position	Commissioner and Special Secretary cum CEO
	Telephone	+91-361-2261678
	Email address	as-guw1@nic.in
	Mobile	+91-9435308982
	Web	http://www.apwd.in
	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	mkrou84@yahoo.com
	Mobile	-
	Web	-
	Office Address	Room No. 317, DKS (Mantralay) Bhavan, Raipur

Executing Agency (Government of Madhya Pradesh)

Panchayat and Rural Development Department	Officer's Name	Ms. Aruna Sharma
	Position	Additional Chief Secretary
	Telephone	+91-755-2551114
	Email address	psprd@mp.gov.in
	Mobile	-
	Web	-
	Office Address	2 nd . Floor, B-Wing, Vindhyachal Bhawan, Bhopal (MP) -462004

Executing Agency (Government of Odisha)

Rural Development Department	Officer's Name	Mr. P.K. Mahapatra
	Position	Principal Secretary
	Telephone	+91-674-2536740
	Email address	rdsec.or@nic.in
	Mobile	
	Web	http://www.orissa.gov.in/rd
	Office Address	Rural Development Dept., Govt. 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	91-33-22424422
	Email address	secy-prd@nic.in , sayrabhdas136@gmail.com
	Mobile	91-9903931373
	Web	-
	Office Address	Dept. of Panchayats & Rural Development, HC-7, Sector-III, Salt Lake, Kolkata - 700106

Implementing Agency (Assam)

Assam State Road Board	Officer's Name	Mr. S.M. Hassan
	Position	Empowered Officer, ASRB & Additional Chief Engineer

Telephone	+91-361-2660079
Email address	eopwrd.asrb-as@nic.in ; as-guw2@nic.in
Mobile	+91-9435734060
Web	http://www.apwd.in
Office Address	PWD (Road), Assam, Chandmari, Guwahati - 781003

Implementing Agency (Chhattisgarh)

State Rural Road Development Agency	Officer's Name	Mr. Sudhir Kumar Agarwal
	Position	Chief Executive Officer
	Telephone	+91-771-2424275
	Email address	cq-itno@nic.in ; cq-ceo@nic.in
	Mobile	+91-9926153203
	Web	http://www.cgrda.gov.nic.in
	Office Address	Vikas Bhawan, Civil Lines, Raipur

Implementing Agency (Madhya Pradesh)

State Rural Road Development Agency	Officer's Name	Ms. Alka Upadhyaya
	Position	Chief Executive Officer
	Telephone	+91- 755-2572207
	Email address	ceomprda@gmail.com ; mp-cexo@nic.in
	Mobile	+91-91-9425009065
	Web	www.mprda.com
	Office Address	5 th Floor, Block II, Paryavas Bhavan, Arera Hills, Bhopal (MP) - 462004

Implementing Agency (Odisha)

State Rural Road Development Agency	Officer's Name	Mr. H.K. Sadangi
	Position	Chief Engineer-III
	Telephone	+91-674-2393418
	Email address	cerw_bbsr@yahoo.com
	Mobile	+91-9437959677
	Web	-
	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
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	Mobile	-
	Web	-

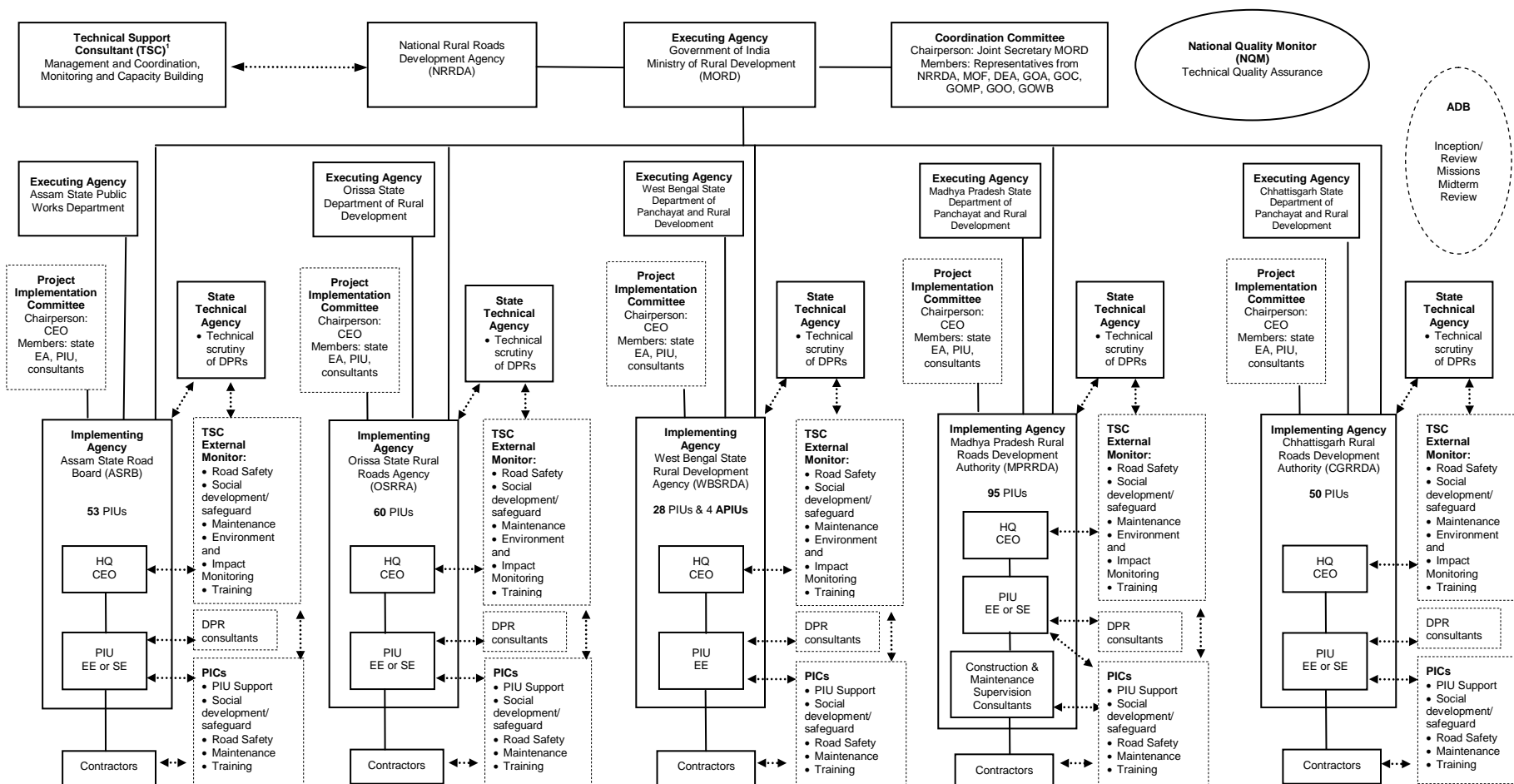
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C. Program Organization Structure



ASRB=Assam State Road Board; CEO=Chief Executive Officer; CGRRDA= Chhattisgarh Rural Roads Development Authority (CGRRDA); DEA= Department of Economic Affairs; DPR=detailed project report (road design); EE=Executive Engineer; GOA=Government of Assam; GOO= Government of Odisha; GOWB=Government of West Bengal; HQ=headquarters; MOF=Ministry of Finance; MORD=Ministry of Rural Development; MPRRDA=Madhya Pradesh Rural Roads Development Authority (MPRRDA); NRRDA=National Rural Roads Development Agency; OSRRA=Odisha State Rural Roads 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.

D. Staffing and Functions of the RRNMUs

27. During the first year of implementation of the Investment Program, one PIU in each investment program state will be converted to the Rural Road Network Management Unit (RRNMU) and 5 more PIUs in each state will be converted to RRNMUs during the third year. Establishment of RRNMUs will be supported by the services of the TA Consultant financed by ADB on the grant basis. The services of the RRNMU consultant will be in three phases: (i) preparatory, including developing business processes, operations manuals, and supply and installation of systems and tools required for RRNMU operations; (ii) carry out day-to-day operations of the RRNMU conducted in apprenticeship mode together with RRNMU staff; and (iii) support RRNMU operations on as needed basis.

28. State governments have appointed staff for the pilot RRNMUs, and will fill 75% of all RRNMU positions with permanent staff by the end of 2016, and 100% by mid-2017. State Governments will identify suitably qualified staff for these positions and, if felt necessary, will provide them with dedicated training in their particular fields.

29. Concurrently with the establishment of pilot RRNMUs, each SRRDA will establish Rural Road Network Management Cells (RRNMCs) in the SRRDA headquarters to oversee the work of RRNMUs. Cells will be established by designating the existing SRRDA staff, on the existing facilities. Initially, it will comprise only core staff, but will grow over time as needed (to also include fully dedicated staff) commensurate with the increase of the number of RRNMUs and mainstreaming of new business processes. The core functions and approximate ultimate staffing arrangements of the RRNMCs are shown below.

Functions and Staffing of Rural Road Network Management Cells at SRRDAs

Staff	No.	Roles
Head of Cell - Chief Engineer	1	<input type="checkbox"/> Reporting to Secretary / Principal Secretary <input type="checkbox"/> External Stakeholder Interface
Superintending Engineer (Rural Road Policy, Planning, and Programming, IT)	1	<input type="checkbox"/> Public Relations Support <input type="checkbox"/> Annual Reporting <input type="checkbox"/> Oversight of RRNMU and RCTRC pilots
Executive Engineer (Rural Road Policy, Planning and Programming, IT),	1	<input type="checkbox"/> Budgeting <input type="checkbox"/> Institutional Development <input type="checkbox"/> Rural Road Maintenance Legislation
Executive Engineer (Rural Road Maintenance, Safety and related Training)	1	<input type="checkbox"/> Rural Road Maintenance Policy <input type="checkbox"/> Key Performance Indicators <input type="checkbox"/> Rural Road Network Classification and Prioritization
Rural Connectivity and Maintenance Planner (AE/AEE)	1	<input type="checkbox"/> Rural Connectivity Demand Projections
Transport Economist (AE/AEE)	1	<input type="checkbox"/> Road & Bridge Maintenance Plans and Budgets <input type="checkbox"/> Liaison with PIUs, RRNMUs, RCTRCs <input type="checkbox"/> Dissemination of results,

30. The core functions and approximate staffing of the RRNMUs are shown below. Specific staffing arrangements will vary in each investment program state. The states will utilize staffing of existing PIUs to fill in positions of RRNMUs to the extent possible.

Functions and Staffing of Rural Road Network Management Units

Staff	No.	Activities
Management		
Executive Engineer (Head of Unit)	1	<input type="checkbox"/> Unit Management
Finance Officer (Budget and Finance)	1	<input type="checkbox"/> Annual Budget Preparation
Accounts Clerks	3	<input type="checkbox"/> Program and Expenditure Control
Computer Operator (Accounts Data Entry)	1	<input type="checkbox"/> Payments and Receipts
Computer Network Administrator	1	<input type="checkbox"/> Accounts keeping and Annual Reporting
Road Planning		
Assistant Executive Engineer (Design Road Safety & QC)	1	<input type="checkbox"/> Road Network Referencing & Mapping
Assistant Engineer (Road Planning & Procurement)	1	<input type="checkbox"/> Road and Bridge Data Collection
Assistant Engineer (Design, Road Safety & QC)	1	<input type="checkbox"/> Road and Bridge Condition Database
Jr. Engineer (Road Planning and Procurement)	1	<input type="checkbox"/> Road Network Mapping
Jr. Engineer (Road Design) DPR, Road Safety	1	<input type="checkbox"/> Road User & Stakeholder Participation
Jr. Engineer (Lab & QC)	1	<input type="checkbox"/> Traffic Surveys and Data Collection
Jr. Engineer (Road Safety & Audit)	1	<input type="checkbox"/> Road Network Status Reporting
GIS Operator (Data and Mapping)	1	<input type="checkbox"/> Monitoring of Axle Loads
Computer Operator (Data Entry)	2	<input type="checkbox"/> Road Network Development Plans & Sub-Project Selection
Laboratory Technicians & Support Staff	4	<input type="checkbox"/> Road & Bridge Maintenance Plans
		<input type="checkbox"/> Annual Work Program Preparation
		<input type="checkbox"/> Transect Walks & Community Participation
		<input type="checkbox"/> DPR Preparation and Management
		<input type="checkbox"/> Road Safety Audit
		<input type="checkbox"/> Project Preparation and Packaging
		<input type="checkbox"/> OMMS Data Updating and Uploading
		<input type="checkbox"/> Maintenance Contract and Work order preparation and packaging
		<input type="checkbox"/> Material Testing and Quality Control
New Link & Upgradation – Construction & Maintenance		
Assistant Executive Engineer (Construction & Maintenance)	3	<input type="checkbox"/> Construction Supervision & Quality Control
Assistant Engineer (Construction & Maintenance)	3	<input type="checkbox"/> Maintenance Supervision and Quality Control
Jr. Engineer	6	<input type="checkbox"/> Contract Administration
Computer Operator (Data Entry)	3	<input type="checkbox"/> Road safety Inspection
		<input type="checkbox"/> Road Inspection and Community participation
		<input type="checkbox"/> Road Condition Monitoring and reporting
		<input type="checkbox"/> OMMS Data Updating and Uploading
TOTAL ESTABLISHMENT	36	

IV. COSTS AND FINANCING

A. Investment and Financing Plans

31. The investment program is estimated to cost \$1,225.30 million equivalent inclusive of civil works, consulting services, equipment, recurrent costs, social mitigation measures, taxes, duties, contingencies, and interest and other charges on the loan during construction. The investment plan is summarized in Table 1.

Table 1: Program Investment Plan
(\$ million)

Item	Amount ^a
A. Base Cost^b	
1 Road infrastructure development component	974.75
2 Institutional development component	42.00
3 Recurrent costs	19.00
Subtotal (A)	1035.75
B. Contingencies^c	148.36
C. Financing Charges during Implementation^d	39.33
Total (A + B)	1,225.30

^a Includes taxes and duties in the amount of \$51.3 million to be financed from government resources, and taxes and duties for certain goods and consulting services in the amount of \$1.0 million to be financed by ADB.

^b In mid-2011 prices.

^c Price contingencies.

^d Includes interest and commitment charges. Interest during construction for the ADB loans) is computed at the 5-year forward London interbank offered rate plus a spread of 0.4% and a maturity based premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year on the undisbursed loan amount.

Sources: Ministry of Rural Development, Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; and Asian Development Bank estimates.

32. The government has requested a multitranche financing facility (MFF) in an amount up to \$800.0 million from ADB's ordinary capital resources to help finance part of the investment program. The MFF will consist of three projects, subject to the government's submission of related PFRs, execution of the related loan and project agreements for each project, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement (FFA). Progress towards achieving the outputs and expected outcomes in the DMFs for the Investment Program and individual tranches will also be decision-making criteria for financing subsequent projects under the MFF.

33. The detailed costs estimate for the investment program is provided below.

Table 2: Component-wise Cost Estimate^a of the Investment Program

No.	Project Component ^b	Total Cost	ADB Financing		Government Financing ^j	
			US\$ million	Percent (%)	US\$ million	Percent (%)
A. Investment Costs						
A1. Road Infrastructure Development						
1	Civil Works (Construction and Upgradation of Roads)	970.75	776.60	80.00	194.15	20.00
2	Civil Works (Utility Shifting)	2.00	0.00	0.00	2.00	100.00
3	Social Mitigation	2.00	0.00	0.00	2.00	100.00
Subtotal (A1)		974.75	776.60		198.15	
A2. Institutional Development ^e						
4	Civil Works (RCTRCs) ^c	3.00	2.40	80.00	0.60	20.00
5	Civil Works (RRNMUs) ^d	15.00	12.00	80.00	3.00	20.00
6	Consultants (RCTRCs) ^f	4.00	4.00	100.00	0.00	0.00
7	Consultants (PIC)	15.00	0.00	0.00	15.00	100.00
8	Consultants (TSC)	2.00	2.00	100.00	0.00	0.00
9	Equipment and software ^g	3.00	3.00	100.00	0.00	0.00
Subtotal (A2)		42.00	23.40		18.60	
Subtotal (A)		1016.75	800.00		216.75	
B. Recurrent costs						
10	Project Management	19.00	0.00	0.00	19.00	100.00
Subtotal (B)		19.00	0.00		19.00	
Total Base Cost (A+B)		1035.75	800.00		235.75	
C. Contingencies ^h						
11	Price Contingencies	148.36	0.00	0.00	148.36	100.00
Subtotal (C)		148.36	0.00		148.36	
D. Financial Charges During Implementation ⁱ						
12	Interest during Construction	39.33	0.00	0.00	39.33	100
13	Commitment Charges	1.86	0.00	0.00	1.86	100
Subtotal C		41.19	0.00		32.84	
Total Project Cost (A+B+C)		1225.30	800.00		425.30	
% Total Project Cost				65.29		34.71

PIC=Project Implementation Consultant, RCTRC= Rural Connectivity Training and Research Center, RRNMU=Rural Road Network Management Unit, TSC=Technical Support Consultant.

^a In mid-2011 prices. Includes taxes and duties in the amount of \$51.3 million to be financed from government resources, and taxes and duties for goods and consulting services in the amount of \$1.0 million to be financed by ADB.

^b In Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.

^c RCTRCs will be state-of-the-art training facilities fully equipped for the purposes of the rural connectivity-oriented training and research. RCTRCs will also include housing blocks for the trainees.

^d All necessary works to establish state-of-the-art field offices for the pilot RRNMUs (including laboratories) in Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal. The field offices will be fully equipped for

the purposes of the rural road network management and will have a high demonstration and replication potential.

- ^e Apart from the Loan financing, ADB will finance consulting services to support the establishment and operation of pilot RRNMUs and RCTRCs under the piggyback CDTA in the amount of \$2.3 million.
- ^f Consulting services to assist RCTRC in rolling out systematic and large scale training.
- ^g Equipment and tools for the pilot RRNMUs (such as road distance meters, data recorders, GIS devices, portable weigh stations, testing equipment, total stations, videoconferencing, satellite TV facilities to connect with RRNMUs, RCTRCs, and mobile field stations, software etc); and state-of-the-art equipment and tools for the RCTRCs, including laboratories, equipment for interactive and distance learning, videoconferencing, satellite TV facilities to connect with RRNMUs, RCTRCs, and mobile field stations, etc .
- ^h Price contingencies calculated on the project by project basis. No price escalation will be used under civil works contracts.
- ⁱ Includes interest and commitment charges. Interest during construction for the ADB loans is computed at the 5-year forward London interbank offered rate plus a spread of 0.4% and a maturity based premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year on the undisbursed loan amount.
- ^j State governments will finance the cost of utility shifting and social mitigation.

Sources: Ministry of Rural Development, Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; and Asian Development Bank estimates.

34. The ADB loan will finance 65.29% of the investment program cost. The Government has allocated its counterpart financing for 34.71% of the investment program cost. The financing plan for the Project is in Table 3.

Table 3: Financing Plan of the Investment Program

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	800.00	65.29
India and States ^a	425.30	34.71
Total	1,225.30	100.00

^a State governments will finance the cost of utility shifting and social mitigation.

Sources: Ministry of Rural Development, Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; and Asian Development Bank estimates.

35. **Indicative tranching plan.** The MFF will finance 3 projects under the MFF. Table 4 below provides the indicative amount and schedule of the first and subsequent tranches.

Table 4: Summary Financing and Tranching Plan of the Investment Program

Source	Project 1 2012	Project 2 2013	Project 3 2015
Asian Development Bank	252.00	275.00	273.00
India and States ^a	89.00 ^b	81.56	245.30
Total	341.00	356.56	518.30

^a State governments will finance the cost of utility shifting and social mitigation.

Sources: Ministry of Rural Development, Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; and Asian Development Bank estimates.

^b This figure will increase to \$98.44 million once the approval of additional 55 packages in Madhya Pradesh under Project 1 is approved.

B. Periodic Financing Request - Project 1

36. **Amount and terms.** The request to finance Project 1 is for a loan of \$252.00 million from the ordinary capital resources of the Asian Development Bank (ADB) provided under ADB's London interbank offered rate (LIBOR)-based lending facility, with a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's LIBOR-based lending facility, a commitment charge of 0.15% per year, and such other terms and conditions set forth in the draft loan and project agreements. The Government of India and each State has provided ADB with (i) the reasons for its decision to borrow under ADB's LIBOR-based lending facility based on these terms and conditions, and (ii) an assurance that these choices were its own independent decision and not made in reliance on any communication or advice from ADB.

37. **Scope.** Project 1 will include:

- (i) Roads (civil works): Assam around (342 km), Chhattisgarh (1,008 km), Madhya Pradesh (1,187 km); Odisha (757 km), and West Bengal (167 km)
- (ii) RRNMUs (civil works and equipment): one facility in each state (5 in total)
- (iii) RCTRCs (civil works and equipment): one facility in each state
- (iv) SSTC to support large scale training
- (v) TSC for monitoring, due diligence, coordination and capacity building
- (vi) PICs for support and due diligence in safeguards, road safety and road maintenance

38. Establishment of RRNMUs and RCTRCs will be supported by a piggybacked TA in the amount of \$2.3 m for institutional development in asset management of rural roads. It will have two components: (i) support to the piloting of RRNMUs, and (ii) support to the establishment of the RCTRCs (with \$1.8 m for RRNMUs support component and \$0.5 m for RCTRCs component).

39. **Implementation period.** Project 1 is expected to be completed by 31 December 2017. Construction of 5 RCTRCs and 5 RRNMU facilities will start after the finalization of the design of the facilities, and will be fully put into operation and equipped by end of 2017.

40. The detailed cost estimates for Project 1 is in Table 5.

Table 5: Component-wise Cost Estimate^a of the Project 1 of the Investment Program

No.	Project Component ^b	Total Cost US\$ million	ADB Financing		Government Financing ^j	
			US\$ Million	Percent (%)	US\$ million	Percent (%)
A. Investment Costs						
A1. Road Infrastructure Development						
1	Civil Works (Construction and Upgradation of Roads)	306.20	244.96	80.00	61.24	20.00
2	Civil Works (Utility Shifting)	0.45	0.00	0.00	0.45	100.00
3	Social Mitigation	0.45	0.00	0.00	0.45	100.00
Subtotal (A1)		307.10	244.96		62.14	
A2. Institutional Development ^e						
4	Civil Works (RCTRC) ^c	2.70	2.16	80.00	0.54	20.00
5	Civil Works (RRNMU) ^d	2.70	2.16	80.00	0.54	20.00
6	Consultants (SSTC) ^f	1.75	1.75	100.00	0.00	0.00
7	Consultants (PIC)	4.50	0.00	0.00	4.50	100.00
8	Consultants (TSC)	0.88	0.88	100.00	0.00	0.00
9	Equipment and Software ^g	0.09	0.09	100.00	0.00	0.00
Subtotal (A2)		12.62	7.04		5.58	
Subtotal (A)		319.72	252.00		67.72	
B. Recurrent costs						
10	Project Management	4.20	0.00	0.00	4.20	100.00
Subtotal (B)		4.20	0.00		4.20	
	Total Base Cost (A+B)	323.92	252.00		71.92	
C. Financial Charges During Implementation ^h						
11	Interest during Construction	16.47	0.00	0.00	16.47	100
12	Commitment Charges	0.61	0.00	0.00	0.61	100
Subtotal (C)		17.08	0.00		17.08	
Total Project Cost (A+B+C)		341.00	252.00		89.00 ^k	
% Total Project Cost				73.90		26.10

PIC=project implementation consultant, RCTRC=Rural Connectivity Training and Research Center, RRNMU=Rural Road Network Management Unit, TSC=technical support consultant, SSTC=Second Stage Training Consultant.

^a In mid-2011 prices. Includes taxes and duties in the amount of \$16.1 million to be financed from government resources, and taxes and duties for goods and consulting services in the amount of \$0.3 million to be financed by ADB.

^b In Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal.

^c RCTRCs will be state-of-the-art training facilities fully equipped for the purposes of the rural connectivity-oriented training. RCTRCs will also include housing blocks for the trainees.

^d All necessary works to establish state-of-the-art field offices for the pilot RRNMUs (including laboratories) in Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal. The field offices will be fully equipped for the purposes of the rural road network management and will have a high demonstration and replication potential.

^e Apart from the loan financing, ADB will finance consulting services to support the establishment and operation of pilot RRNMUs and RCTRCs under the piggyback CDTA in the amount of \$2.3 million.

^f Consulting services to assist RCTRC in rolling out systematic and large scale training.

^g Equipment and tools for the pilot RRNMUs (such as road distance meters, data recorders, GIS devices, portable weigh stations, testing equipment, total stations, videoconferencing, satellite TV facilities to connect with RRNMUs, RCTRCs, and mobile field stations, software etc); and state-of-the-art equipment and tools for the RCTRCs, including laboratories, equipment for interactive and distance learning, videoconferencing, satellite TV facilities to connect with RRNMUs, RCTRCs, and mobile field stations, etc.

^h Includes interest and commitment charges. Interest during construction for the ADB loans is computed at the 5-year forward London interbank offered rate plus a spread of 0.4% and a maturity based premium of 0.20%. Commitment charges for an ADB loan are 0.15% per year on the undisbursed loan amount.

^j State governments will finance the cost of utility shifting and social mitigation.

^k This figure will increase to \$98.44 million once the approval of additional 55 packages in Madhya Pradesh under Project 1 is approved.

Source: Asian Development Bank estimates.

41. The ADB loan will finance 73.90% of the Project 1 of the investment program cost. The Government has allocated its counterpart financing for 26.10% of the investment program cost. The financing plan for the Tranche 1 of the investment program is in Table 6.

Table 6: Financing Plan for the Project 1

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	252.00	73.90
Government	89.00 ^a	26.10
Total	341.00	100.00

Sources: Ministry of Rural Development, Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; and Asian Development Bank estimates.

^a This figure will increase to \$98.44 million once the approval of additional 55 packages in Madhya Pradesh under Project 1 is approved.

C. Periodic Financing Request - Project 2

42. **Amount and Terms.** The request to finance Project 2 is for a loan of \$275.00 million from the ordinary capital resources of the Asian Development Bank (ADB). The loan will have a 25 year term including a grace period of 5 years, (straight-line repayment method) and annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, 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 this, the average loan maturity is 15.25 years and maturity premium payable to ADB is 0.10% per annum.

43. **Scope.** Project 2 will include:

- (i) Roads (civil works): Assam (495.56 kms); Chhattisgarh (429.06 kms); Madhya Pradesh (654.04 kms); Odisha (1,184.06 kms) and West Bengal (930.08 kms).
- (ii) Equipment and software.

44. **Implementation Period.** Project 2 is expected to be completed by 31 December 2017.

45. The detailed cost estimates for Project 2 is presented in Table 7.

Table 7: Component-wise Cost Estimate^a of the Project 2 of the Investment Program

No.	Project Component ^b	Total Cost	ADB Financing		Government Financing	
		US\$ million	US\$ million	Percent (%)	US\$ million	Percent (%)
A. Investment Costs						
A1. Road Infrastructure Development						
1	Civil Works					
	Assam	45.23	36.18	80.00	9.05	20.00
	Chhattisgarh	33.24	26.59	80.00	6.65	20.00
	Madhya Pradesh	45.33	36.26	80.00	9.07	20.00
	Odisha	104.40	83.52	80.00	20.88	20.00
	West Bengal	88.12	70.50	80.00	17.62	20.00
2	Civil Works (utility shifting)	0.36	0.00	0.00	0.36	100.00
3	Social Mitigation	0.36	0.00	0.00	0.36	100.00
	Subtotal (A1)	317.04	253.05		63.99	
A2. Institutional Development						
4	Equipment and Software ^c	14.00	14.00	100.00	0.00	0.00
5	Consultant PIC	4.50	0.00	0.00	4.50	100.00
	Subtotal (A2)	18.50	14.00		4.50	
	Subtotal (A)	335.54	267.05		68.49	
B. Recurrent costs						
6	Project Management	4.46	0.00	0.00	4.46	100.00
	Subtotal (B)	4.46	0.00		4.46	
	Total Base Cost (A+B)	340.00	267.05		72.95	
C. Financial Charges During Implementation ^d						
7	Interest during Construction	5.54	0.00	0.00	5.54	100.00
8	Commitment Charges	0.70	0.00	0.00	0.70	100.00
	Subtotal (C)	6.24	0.00		6.24	
	D. Contingency ^e					
9	Contingency	10.32	7.95	77.00	2.37	23.00
	Subtotal (D)	10.32	7.95		2.37	
	Total Project Cost (A+B+C+D)	356.56	275.00		81.56	
	% Total Project Cost			77.13		22.87

PIC=project implementation consultant, RCTRC= Rural Connectivity Training and Research Center, RRNMU=Rural Road Network Management Unit.

^a Includes taxes and duties of \$13.60 million to be financed from government resources; exchange rate used.

^b In mid-2012 prices.

^c Equipment and tools for the pilot RRNMUs (such as road distance meters, data recorders, GIS devices, portable weigh stations, testing equipment, total stations, videoconferencing, satellite TV facilities to connect with RRNMUs, RCTRCs,

and mobile field stations, software etc); and state-of-the-art equipment and tools for the RCTRCs, including laboratories, equipment for interactive and distance learning, videoconferencing, satellite TV facilities to connect with RRNMUs, RCTRCs, and mobile field stations, etc.

^d Includes interest and commitment charges. Interest during construction for the ADB loans is computed at the 5-year forward London interbank offered rate plus a spread of 0.4% and a maturity based premium of 0.10%. Commitment charges for an ADB loan are 0.15% per year on the undisbursed loan amount.

^e Physical contingencies are computed at 5% of base cost. Price contingencies are computed using annual inflation of 5.5% in 2013, and 5% in the following years.

Source: Asian Development Bank estimates.

46. The ADB loan will finance 77.13% of the Project 2 cost. The Government has allocated its counterpart financing for 22.87% of the Project 2 cost. The financing plan for the Project 2 of the investment program is in Table 8 below.

Table 8: Financing Plan for the Project 2

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	275.00	77.13
Government	81.56	22.87
Total	356.56	100.00

Sources: Ministry of Rural Development, Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; and Asian Development Bank estimates

C. Periodic Financing Request - Project 3

47. **Amount and Terms.** The request to finance Project 3 is for a loan of \$273.00 million from the ordinary capital resources of the Asian Development Bank (ADB). The loan will have a 20 year term including a grace period of 5 years, (straight-line repayment method) and annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, 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 this, the maturity premium payable to ADB is nil.

48. **Scope.** Tranche 3 will include:

- (i) Roads: Assam (486.98 kms); Chhattisgarh (1,055.94 kms); Madhya Pradesh (1,377.86 kms); Odisha (2,565.81 kms) and West Bengal (637.57 kms).
- (ii) Buildings: Assam (6 buildings); Chhattisgarh (4 buildings); Madhya Pradesh (6 buildings); Odisha (5 buildings) and West Bengal (4 buildings).

49. **Implementation Period.** Project 3 is expected to be completed by 31 December 2017.

50. The detailed cost estimates for Project 3 is presented in Table 9.

Table 9: Component-wise Cost Estimate^a of the Project 3 of the Investment Program

No.	Project Component	Total Cost ^b	ADB Financing		Government Financing	
		US\$ million	US\$ million	Percent (%)	US\$ million	Percent (%)
A. Investment Costs						
A1. Road Infrastructure Development						
1	Civil Works					
	Assam	50.54	27.29	54.00	23.25	46.00
	Chhattisgarh	72.28	39.03	54.00	33.25	46.00
	Madhya Pradesh	95.79	51.72	54.00	44.07	46.00
	Odisha	202.87	109.55	54.00	93.32	46.00
	West Bengal	53.25	28.76	54.00	24.50	46.00
2	Civil Works (utility shifting)	0.48	0.00	0.00	0.48	100.00
3	Social Mitigation	0.48	0.00	0.00	0.48	100.00
	Subtotal (A1)	475.69	256.35		219.33	
A2. Institutional Strengthening						
4	Civil Works (RRNMU buildings)	25.00	16.65	66.60	8.35	33.40
Subtotal (A2)		25.00	16.65		8.35	
Subtotal (A)		500.69	273.00		227.68	
B. Financial Charges During Implementation ^c						
5	Interest during Construction	5.50	0.00	0.00	5.50	100.00
6	Commitment Charges	0.70	0.00	0.00	0.70	100.00
Subtotal (B)		6.20			6.20	
Total Project Cost (A+B+C)		506.89	273.00		233.89	
% Total Project Cost				53.86		46.14

RRNMU=Rural Road Network Management Unit.

^a Includes taxes and duties of \$14.5 million to be financed from government resources; exchange rate used.^b In 2015 prices.^c Includes interest and commitment charges. Interest during construction for the ADB loans is computed at the 5-year forward London interbank offered rate plus a spread of 0.5% and a maturity based premium of 0.10%. Commitment charges for an ADB loan are 0.15% per year on the undisbursed loan amount.

Source: Asian Development Bank estimates.

51. The ADB loan will finance 53.86% of the Project 3 cost. The Government has allocated its counterpart financing for 46.14% of the Project 3 cost. The financing plan for the Project 3 of the investment program is in Table 10 below.

Table 10: Financing Plan for Project 3

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	273.00	53.86
Government	233.89	46.14
Total	506.89	100.00

Sources: Ministry of Rural Development, Governments of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; and Asian Development Bank estimates.

D. Allocation and Withdrawal of Loan Proceeds

52. Unless specifically stated otherwise, the following is applicable:

- a. Percentages of ADB Financing: Except as ADB may otherwise agree, each item of expenditure shall be financed out of the proceeds of the Loan on the basis of the percentages set forth in the table attached to Schedule 3 of the Loan Agreement (reproduced in Table 11 below);
- b. Reallocation: Notwithstanding the allocation of Loan proceeds and the withdrawal percentages set forth in the tables attached to Schedule 3 of the Loan Agreement (reproduced in Table 11 below);
 - i. if the amount of the Loan allocated to any category appears to be insufficient to finance all agreed expenditures in that category, ADB may, in consultation with the Government, (i) reallocate to such category, to the extent required to meet the estimated shortfall, amounts of the loan which have been allocated to another category but, in the opinion of ADB, are not needed to meet other expenditures; and (ii) if such reallocation cannot fully meet the estimated shortfall, reduce the withdrawal percentage applicable to such expenditures in order that further withdrawals under such category may continue until all expenditures there under will have been made, and
 - ii. if the amount of the loan allocated to any category appears to exceed all agreed expenditures in that category, ADB may, in consultation with the Borrower, reallocate such excess amount to any other Category.

53. The table provided below sets forth the categories of items of expenditure to be financed out of the proceeds of the Loan and the allocation of amounts of the Loan to each such category:

Table 11. ADB Ordinary Capital Resources Loan (OCR Loan)

CATEGORY			ADB FINANCING
Number	Item	Amount Allocated (\$ million)	Percentage and Basis for Withdrawal From the Loan Account
Project 1			
1	Works	249.30	80 percent of total expenditure
2	Goods	0.10	100 percent of total expenditure
3	Consulting services	2.60	100 percent of total expenditure
4	Unallocated	0.00	
	Total Project 1	252.00	
Project 2			
1	Works	253.05	80 percent of total expenditure
2	Goods	14.00	100 percent of total expenditure
3	Contingency	7.95	
	Total Project 2	275.00	
Project 3			
1	Works	273.00	
1A	Assam	27.29	54 percent of total expenditure
1B	Chhattisgarh	39.03	54 percent of total expenditure
1C	Madhya Pradesh	51.72	54 percent of total expenditure
1D	Odisha	109.55	54 percent of total expenditure
1E	West Bengal	28.76	54 percent of total expenditure
1F	RNNMU Buildings	16.65	66.60 percent of total expenditure
	Total Project 3	273.00	

D. Detailed Cost Estimates by Year

54. Table 12 below provides projections of expenditure accounts in ADB financing by year. Table 13 provides projections of expenditure in ADB financing by year for Projects 1, 2 and 3.

Table 12: Estimated Expenditure Accounts by Year for the Investment Program (\$ million)

No.	Project Component	Total ADB Financing	Projected Expenditures in ADB Financing by years					
			2012	2013	2014	2015	2016	2017
A. Investment Costs								
A1. Road Infrastructure Development								
1	Civil Works (Construction and Upgradation of Roads)	776.60	72.72	152.96	185.12	207.30	114.40	44.10
2	Civil Works (Utility Shifting)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	Social Mitigation	0.00	0.00	0.00	0.00	0.00	0.00	0.00
A2. Institutional Development								
4	Civil Works (RCTRC)	2.40	0.00	0.96	1.44	0.00	0.00	0.00
5	Civil Works (RRNMU)	12.00	0.00	2.40	1.20	2.80	3.60	2.00
6	Consultants (SSTC)	4.00	0.00	1.00	1.40	1.00	0.60	0.00
7	Consultants (PIC)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Consultants (TSC)	2.00	0.36	0.36	0.34	0.34	0.30	0.30
9	Equipment and software	3.00	0.00	0.60	0.90	1.20	0.30	0.00
B. Recurrent costs								
10	Project Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D. Financial Charges During Implementation								
11	Interest during Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Commitment Charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Cost/Projected Expenditures		800.00	73.08	158.28	190.40	212.64	119.20	46.40
% of Total Cost of the Investment Program		100.00	9.14	19.79	23.80	26.58	14.90	5.80

PIC=Project Implementation Consultant, RCTRC= Rural Roads Training and Research Center, RRNMU=Rural Road Network Management Unit, TSC=Technical Support Consultant, SSTC= Single Stage Training Consultant.

Source: Asian Development Bank estimates.

Table 13: Estimated Expenditure Accounts by Year for Projects 1, 2 and 3 (\$ million)

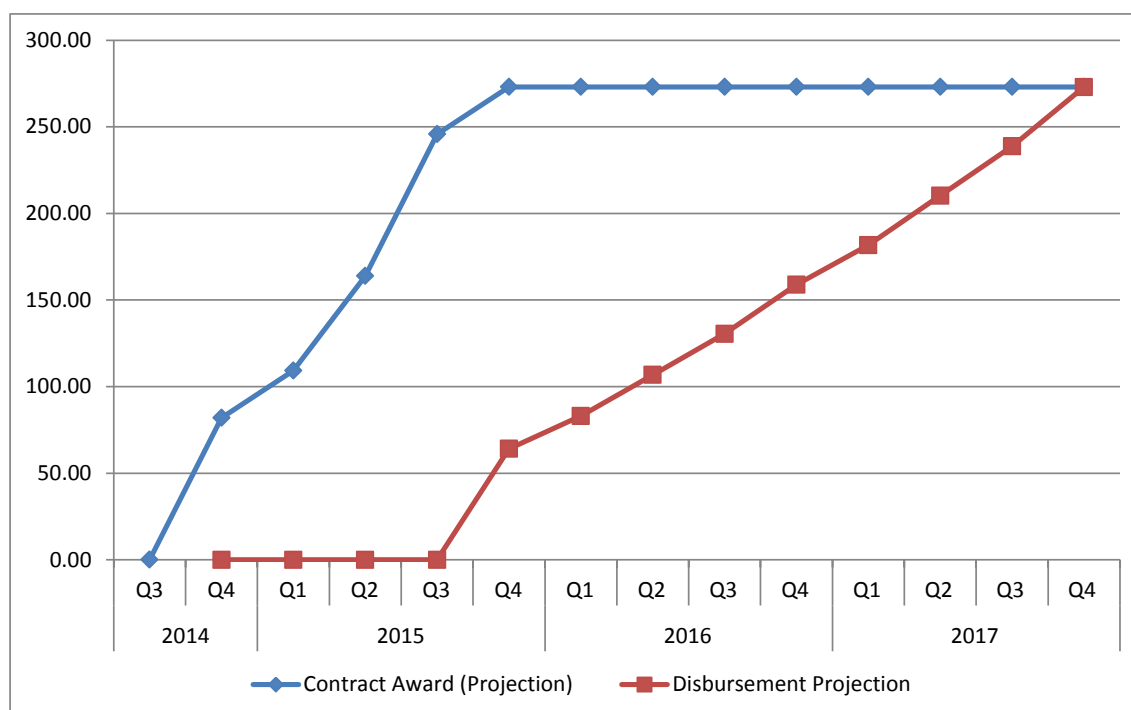
Table for Estimated Expenditure Accounts by Year for Projects 1, 2 and 3 (\$ million)									
No.	Project Component	Total ADB Financing	Projected Expenditures in ADB Financing by years						
			2011	2012	2013	2014	2015	2016	2017
PROJECT 1									
A. Investment Costs									
A1. Road Infrastructure Development									
1	Civil Works (Construction and Upgradation of Roads)	244.96	0.00	0.00	24.50	122.48	97.98	0.00	0.00
A2. Institutional Development									
2	Civil Works (RCTRC)	2.16	0.00	0.00	0.43	1.30	0.43	0.00	0.00
3	Civil Works (RRNMU)	2.16	0.00	0.00	0.43	1.30	0.43	0.00	0.00
4	Consultants (RCTRC)	1.75	0.00	0.00	0.35	1.05	0.35	0.00	0.00
5	Consultants (TSC)	0.88	0.09	0.20	0.20	0.20	0.20	0.00	0.00
6	Equipment and software	0.09	0.00	0.00	0.00	0.00	0.09	0.00	0.00
Total Cost/Projected Expenditures		252.00	0.09	0.20	25.91	126.32	99.49	0.00	0.00
% of Total Cost of Tranche 1		100	0.03	0.08	10.28	50.13	39.48	0.00	0.00
PROJECT 2									
A. Investment Costs									
A1. Road Infrastructure Development									
1	Civil Works (Construction and Upgradation of Roads)	253.05	0.00	0.00	0.00	50.61	101.22	101.22	0.00
A2. Institutional Development									
2	Equipment and software	14.00	0.00	0.00	0.00	4.00	6.00	4.00	0.00
B. Contingency									
3	Contingency	7.95	0.00	0.00	0.00	1.59	3.18	3.18	0.00
Total Cost/Projected Expenditures		275.00	0.00	0.00	0.00	56.50	110.30	108.20	0.00
% of Total Cost of Tranche 2		100	0.00	0.00	0.00	20.54	40.12	39.34	0.00
PROJECT 3									

A. Investment Costs									
A1. Road Infrastructure Development									
1	Civil Works (Construction and Upgradation of Roads)	256.35	0.00	0.00	0.00	0.00	64.13	89.77	102.45
A2. Institutional Development									
2	Civil Works (Construction of 25 RRNMU Buildings)	16.65	0.00	0.00	0.00	0.00	0.00	5.00	11.65
Total Cost/Projected Expenditures		273.00	0.00	0.00	0.00	0.00	64.13	94.76	114.11
% of Total Cost of Tranche 3		100	0.00	0.00	0.00	0.00	23.49	34.71	41.80

Source: Asian Development Bank estimates.

E. Contract and Disbursement S-curve for Project 3

		CONTRACT AWARD		DISBURSEMENT	
		Projection	Cumulative	Projection	Cumulative
		\$ million	\$ million	\$ million	\$ million
2014	Q3	0.00	0.00		
	Q4	81.90	81.90		0.00
2015	Q1	27.30	109.20		0.00
	Q2	54.60	163.80		0.00
	Q3	81.90	245.70		0.00
	Q4	27.30	273.00	64.13	64.13
2016	Q1		273.00	18.95	83.08
	Q2		273.00	23.69	106.77
	Q3		273.00	23.69	130.47
	Q4		273.00	28.43	158.90
2017	Q1		273.00	22.82	181.72
	Q2		273.00	28.53	210.24
	Q3		273.00	28.53	238.77
	Q4		273.00	34.23	273.00
TOTAL		273.00		273.00	



Source: Asian Development Bank estimates.

F. Fund Flow Diagram

55. The following fund flow diagram shows how the funds will flow from ADB and the Government to implement project activities. The fund flow process will be the same for both road and non-road subprojects (RRNMUs and RCTRCs)

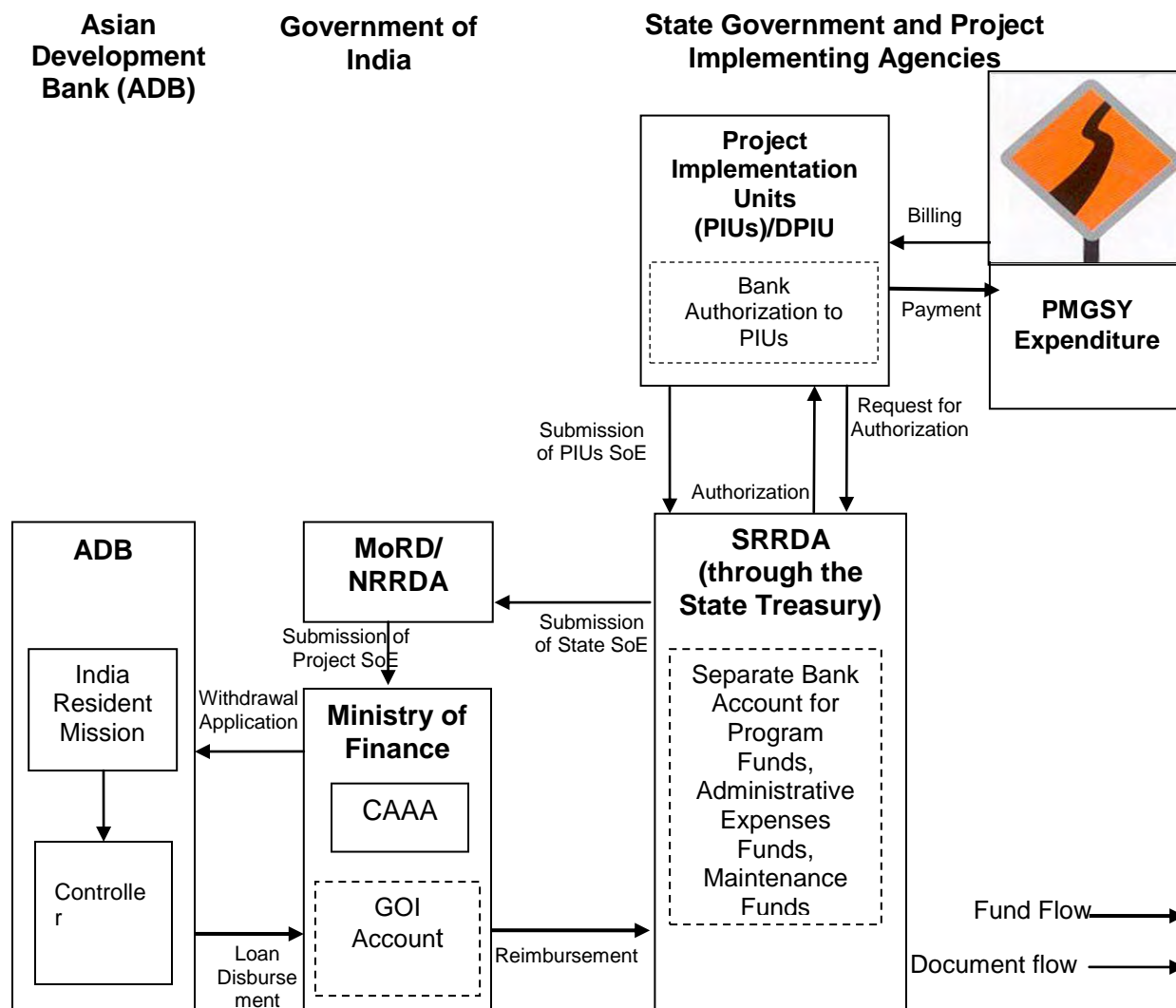


Figure 1: Fund Flow Arrangements for Rural Connectivity Investment Program

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

56. Key findings of the financial management assessment (FMA) undertaken for the RCIP during the investment program preparation, and updated during the preparation of Project 3 based on the implementation of Project 1 and Project 2, are as follows:

A. Funds Flow Arrangements	Funds flow from central to state government is slightly delayed. MORD and DEA will address this issue at the central government level to ensure the smooth transfer of sufficient funds to the states and improve project disbursement.
B. EA/IA Experience	Assessment indicates that the EAs at the central/state level and PIUs have considerable experience in handling similar ADB funded projects.
C. Staffing	<p>The EAs and IAs are staffed with experienced financial officers and staff. All IAs have full-time Financial Controllers. In Assam and Odisha IAs current incumbents are holding two positions.</p> <p>Introduction of regular training/workshops/interactive sessions on financial management under PMGSY and RCIP (including such topics as PMGSY Accounts Procedures, OMMAS, ADB disbursement procedures, etc) for the concerned EA and IA staff would be beneficial, as it will keep staff regularly updated on the financial management and project accounting system as per the PMGSY Accounts Manual, and on audit observations so that any issues found are promptly and properly addressed.</p>
D. Accounting Policies and Procedures	<p>The accounting system for PIUs is based on the public works accounting system. SRRDA is the disbursing authority that issues bank authorization for project expenditure, for PIUs. These accounting systems are documented in the PMGSY Accounts Manual and found acceptable for use under ADB funded projects.</p> <p>The Project Accounts are updated regularly so that monthly reports can be generated and forwarded to the responsible agency (PIUs to Financial Controller under the SRRDA).</p> <p>All investment program states use online management, monitoring and accounting system (OMMAS) for project accounting and reporting. OMMAS is very helpful in timely and effective project management. The records and reports are computerized and systematically updated, enabling timely and accurate reporting of financial information.</p> <p>As per PMGSY Accounts Manual, the bank reconciliation statements should be attached along with every monthly account. It is observed that all SRRDAs in all investment program states do not carry out bank reconciliations on a monthly basis. In some cases the items of differences are reported with substantial delay and even after they are time barred.</p> <p>As per PMGSY accounts manual, an Audit Committee has to be formed by the SRRDAs. WBSRDA and OSRRA have already established the Audit Committees. Other IAs have agreed to establish such committees shortly.</p>

	<p>The records kept at the PIUs take account for all transactions like advances for mobilization, machinery advance etc. The PMGSY accounting system has its own "Chart of Accounts", modeled on the public works system. These procedures meet ADB requirements.</p>
E. Internal and External Audits	<p>EAs and IAs in the investment program states undertake three levels of audit: (i) a concurrent internal audit, (ii) a statutory audit by an independent firm of chartered accountants appointed by the Comptroller and Auditor General of India, and (iii) a transaction audit by the State Accountant General.</p> <p>Statutory audit by an independent firm, in compliance with ADB requirements, is undertaken on an annual basis, and previous audit reports submitted under RRS-I and RRS-II have been generally satisfactory except for a few observations, which are minor and being addressed.</p> <p>Internal audit is conducted at both SRRDA and PIUs levels on a half yearly basis. Cases of late submission and incomplete audited project financial statement (APFS) were found and addressed.</p> <p>Regular transaction audits by the State Accountant General provide observations which are typically addressed by SRRDAs in a timely manner. Recent transaction audit by the State Accountant General provided observations concerning Assam SRRDA, like delay in preparation of annual accounts, systematic accounts, which are currently being addressed.</p> <p>Based on assessment, it can be concluded that overall the audit arrangements in RCIP EAs and IAs are generally satisfactory; however, EAs and IAs are recommended to increase the capacity such as training in preparing APFS that comply with ADB requirements to ensure moderate to negligible risks in the financial management.</p>
F. Reporting and Monitoring	<p>Timely reporting and quality information is essential for the smooth monitoring of the project. OMMAS prepares and generates financial reports, on a monthly and annual basis, component-wise. The reports generated by OMMAS include financial progress reports which compare actual expenditures with budgeted allocations. EAs and IAs conduct reviews for budget utilization along with physical progress on project related expenditures, including annual reviews at the end of each financial year.</p> <p>Accounting and reporting systems currently in place in SRRDAs generate suitable financial reports including total project expenditure incurred, amount eligible for ADB financing and amount claimed from ADB.</p>

57. Below are the issues identified based on financial management assessment conducted in Project 1 and Project 2, and follow up actions which have been taken by SRRDA & PIUs to address the issues:

Issues Identified in Project 1	Action Taken
Assam shall appoint a full-time Financial Controller. Assam State Roads Board has received the approval for the appointment and full-time Financial Controller will be appointed by 31 st December 2012. Necessary action for the appointment has been agreed and will be taken by OSRRA senior	Full time financial controller has been engaged by Assam State Road Board, Assam and Odisha State Rural Road Agency, Odisha and the financial controllers are in place in the rest of the States.

management so that a senior Accountant General (AG) Officer is appointed, preferably before the start of RCIP. All other States already comply with this requirement;	
Assam shall ensure that OMMAS is fully operationalized at all PIUs early in the start of RCIP. Assam has assured and is taking steps to resolve the software issues before the start of RCIP, with assistance from NRRDA, Centre for Development of Advanced Computing under Ministry of Communications & Information Technology;	OMMAS is fully operationalized at all PIU's in the State of Assam.
Investment program states shall introduce regular training/ workshops/interactive sessions on financial management under PMGSY and RCIP (including such topics as PMGSY Accounts Procedures, OMMAS, ADB disbursement procedures, etc) for the concerned EA and IA staff. Such training/ workshops/interactive sessions shall be scheduled on a quarterly basis for around one-third of PIUs each month. ¹³ Financial Controller of SRRDA shall take responsibility for conducting such training/workshops /interactive sessions;	Financial Controllers of SRRDAs will impart the training on the regular basis on PMGSY accounts procedures, OMMAS and ADB disbursement procedures.
Bank reconciliation should be carried out on a monthly basis by all the investment program states and attached along with every monthly account. The items of differences should be reduced by regular updating accounts, viz., the cheques not presented within its valid period, be recorded in accounts, soon after it becomes time barred. All SRRDAs have agreed to comply and will start regular bank reconciliation process under RCIP; and	Bank reconciliation is being carried out on a monthly basis by all investment program states and attached along with every monthly account.
Audit Committees shall be established in all states except WBSRDA and OSRRA, where they already exist. SRRDAs have agreed and decided to establish Audit Committees shortly. Audit Committee shall appoint the internal auditor and statutory auditor, with the terms of references provided in PMGSY Accounts Manual and guidelines thereto, issued by NRRDA. The Committee shall also take oversight of the auditor, during the audit process. The Audit Committee shall consider all audit reports (Audit Reports by Auditor General, Internal Audit Reports and Statutory Audit Reports) and place its observations and recommendations (action to be taken) before the Executive Committee of the Nodal Department of the State Government.	The committees are established. The Internal Audit Reports and the Statuary Audit Reports are prepared by the Chartered Accountant engaged by the respective States. The Internal Audit Report and Statuary Audit Report are reviewed by the Director (Finance) in NRRDA and observations or recommendations, if any, are sent to State Government.

¹³ For example, for 45 PIU, 15 PIU shall be called for a meeting each month. Thus, every PIU will be trained/updated every 3 months).

Issues Identified in Project 2	
MORD release the advance to the state governments to make payments to contractors. It was observed that these funds is inadequate to cover the expenditure incurred during a certain billing period which delays the progress of the work by the contractors and consequently disbursement achievement.	MORD to ensure release of funds based on the estimate and past utilization of funds. If this is resolved, progress and disbursement performance will be improved.

58. **Risk Analysis:** During the implementation phase, the IAs might face some risks that can generally be divided in two main categories: (i) country level, and (ii) organization/project level. Timely release of funds to RCIP is important since it is funded on the reimbursement basis. Financial management risks shall need to be considered and updated throughout the life of the RCIP. Risk mitigation measures shall also be updated accordingly. The Risk Assessment and Mitigation Measures are listed below:

Risk	Risk Assessment*	Risk-Mitigation Measures to mitigate risks
<i>Inherent Risk</i>		
1. Country-specific Risks	M	NRRDA shall ensure the timely release of funds in sufficient amount. Accordingly state shall ensure timely release of counterpart funds to the projects as per loan covenants since the project is on reimbursement basis. A covenant to be added in the loan agreement.
2. Entity-specific Risks	N	SRRDAs and PIUs have implemented ADB financed project in similar earlier projects. Capacity of PIUs to be enhanced by regular training/workshops/interactive meetings at SRRDAs. These interactive meeting at each SRRDA shall be scheduled, on a quarterly basis for one-third of PIUs. The responsibility of this interactive session shall be of Financial Controller of SRRDA.
3. Project-specific Risks	N	
Overall Inherent Risk	N	
<i>Control Risk</i>		
1. Implementing Entity	M	Organizational capacity augmentation with the induction of experienced staff will support the existing organizational structure.
2. Funds Flow	M	Timely availability of counterpart funds in sufficient amount will be ensured by implementing the proposed funds flow arrangements.
3. Staffing	M	Dedicated and qualified accounting and financial management staff at SRRDA/PIUs level shall be recruited for the vacant positions.
4. Accounting Policies and Procedures	N	The Accounting Policy and Procedures are already in place. PMGSY Accounts Manual is applied by all EAs and IAs.
5. Internal Audit	N	Internal auditor shall be appointed by all SRRDAs for the Project on a continuous basis in all the states.
6. External Audit	N	Audit of the project accounts will be done by the Auditor empanelled by Comptroller & Auditor General of India and in accordance with PMGSY Guidelines which is acceptable to ADB.
7. Reporting and Monitoring	N	NRRDA shall regularly report in accordance with ADB requirements on inherent adequate control mechanisms.

Risk	Risk Assessment*	Risk-Mitigation Measures to mitigate risks
8. Information Systems	M	OMMAS, the Computerized Double Entry system is already working in RCIP with a few exceptions.
Overall Control Risk	M	

* H – High, S – Substantial, M – Moderate, N – Negligible or Low.

B. Disbursement

59. The Loan proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2015, as amended from time to time) and detailed arrangements agreed upon between the Borrower and ADB.¹⁴ The project is funded by ADB on reimbursement basis. The statement of expenditure (SOE) procedure will be used to reimburse eligible expenditure. 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. Any individual payment to be reimbursed under the SOE procedure shall not exceed the equivalent of \$100,000.

60. 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 US\$100,000 equivalent. Individual payments below this amount should be paid by the EA/IA and subsequently claimed to ADB through reimbursement, unless otherwise accepted by ADB. This arrangement has been implemented for Projects 1 and 2 with no impact on disbursement, hence retained for Project 3.

61. 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. All disbursements under government financing will be carried out in accordance with regulations of the respective State Governments.

C. Financial Accounting and Auditing

62. MORD and SRRDAs will maintain separate project accounts and records for all expenditures incurred on the investment program from all sources and separately for each tranche. Each SRRDA is required to maintain separate RCIP project accounts and records. The project financial statements from SRRDAs shall be consolidated by NRRDA.

63. The SRRDAs will cause the detailed project financial statements to be audited in accordance with International Standards on Auditing and/or in accordance with the Government's audit regulations by the CAG or any private external auditor empanelled and assigned to the audit by the CAG, acceptable to ADB. The audited project financial statements will be submitted to ADB in English language within 6 months from the end of the fiscal year. The annual audit report will include audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in

¹⁴ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf

accordance with the applicable financial reporting framework; (ii) whether loan proceeds have been utilized for the purposes as per ADB Loan / Project Agreement; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; (iv-a) with respect to SOEs, adequate supporting documentation has been maintained to support claims to ADB for reimbursements of expenditures incurred; and (iv-b) except for ineligible expenditures as detailed in the audit observations, if any, appended to this audit report, expenditures are eligible for financing under the Loan Agreement. If a management letter is used by the auditor, a copy shall be submitted to ADB. Internal audit continues to be undertaken by SRRDAs and sample internal audits shall be conducted by MORD.

64. 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.

65. The government, MORD and SRRDAs have been made aware of ADB's approach on delayed submission, and the requirements for satisfactory and acceptable quality of the audited financial statements.¹⁵ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the recipient), or for additional support to be provided to the auditor, if the audits conducted are not 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.

66. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011)¹⁶. After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days from the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES¹⁷

A. Procurement Capacity Assessment of Investment Program States

67. **Summary of the Procurement Assessment.** Regular procurement reviews conducted by ADB review missions throughout the implementation of RRS-II in investment program states, dedicated missions of the procurement experts, and reviews by the PPTA consultant confirm that arrangements for the procurement of civil works under PMGSY in all investment program states are adequate and proved successful under RRS-II. The agreed procurement procedure

¹⁵ ADB Policy on delayed submission of audited project financial statements:

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

¹⁶ Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>.

¹⁷ No consulting services will be financed under Tranche 2.

has been followed in the implementation of Projects 1-5 under RRS-II. Procurement assessment confirmed that guidelines of NRRDA have been followed by all states for procurement of works, and fundamentals of the process are in place with some variation in each state complying to the states-specific procurement rules. E-procurement as assessed and approved by ADB is being used in all investment program states. Adequate advertisement procedures and delineation of duties between bid evaluation, recommendation for award, and approval of contract award are in place in all states.

68. Risks and Recommendations for Mitigation of Risks. There are some risks associated with the introduction of changes to the Standard Bidding Document (SBD), as compared to the SBD used under RRS-I and RRS-II, and under PMGSY in general. These changes have been introduced to further improve the process as agreed between ADB and EA/IAs for RCIP implementation. Accordingly, ADB will take more proactive approach to ensure the proper uptake and understanding of modified SBD by all concerned, including prior review of SBD and first contract specific bidding documents (BD) in each state, prior reviews of technical and financial evaluation for the first 3 contracts for each state under each Tranche, and regular procurement audits at around 20%, 70% and all contract awards in each state under each Tranche. 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 RCIP. All these measures will reduce anticipated risks to a low to negligible level. Detailed procurement process adopted under RCIP is described in Section C.

B. Advance Contracting and Retroactive Financing

69. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (2015, as amended from time to time) (ADB's Procurement Guidelines)¹⁸ and ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) (ADB's Guidelines on the Use of Consultants).¹⁹ The borrower, EAs and IAs have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the investment program.

70. Withdrawals from the loan account may be made for reimbursement of eligible 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 in connection with Works, consulting services, and equipment, subject to a maximum amount equivalent to 20% of the loan amount.

C. Procurement of Goods, Works and Consulting Services²⁰

71. All procurement of goods and works financed wholly or in part by ADB will be undertaken in accordance with ADB's Procurement Guidelines (2015, as amended from time to time). Bidders will be post qualified by applying single-stage; two-envelope bidding procedure. Procurement of civil works for construction of RRNMU and RCTRC facilities will be following the National Competitive Bidding (NCB) procurement process based on ADB standard bidding document for Procurement of Works-Small. For the road construction or upgradation, investment program states will be following NCB procurement process similar to the one approved by ADB for RRS-II, including advance contracting and retroactive financing provisions

¹⁸ Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

¹⁹ Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

²⁰ No consulting services will be financed under Tranche 2 and Tranche 3.

of the Framework Financing Agreement (FFA). Standard PMGSY bidding document (improved in agreement with ADB) and electronic mode of procurement will be used for all road construction contracts.²¹ Bidders will be post qualified by applying single-stage; two-envelope bidding procedure. Contracts will include civil works and post construction routine maintenance and defect liability over five years.^{22,23} Contract packaging for goods (to equip RRNMUs and RCTRCs) will be determined during the implementation of the investment program and will be procured through NCB if the estimated amount is between \$100,000 and \$3,000,000; and shopping if the estimated amount is less than \$100,000. Further details are specified in the Procurement Plan provided in the Attachment A.

72. 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 standard bidding document prior to the start of procurement under RCIP; and, subsequently, bidding documents for one contract package in each state prior to the start of procurement under each project;
- (ii) ADB will review technical bid evaluation reports for the first three civil work contract packages under each Tranche in each state prior to the financial bid opening (summary reporting form on technical bid evaluation is in Attachment H);²⁴
- (iii) 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 first three civil work contract packages to ADB for clearance before the contract award (summary reporting form on financial bid evaluation is in Attachment I);²⁵
- (iv) If ADB finds financial bid evaluation for the first three contract packages 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 facto approval 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 inspection;²⁶ (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 (reporting form is in Attachment

²¹ Approval of e-TS for NCB in all states was granted by ADB in 2009-2011.

²² Two sets of BDs will be used: separate BD introducing detailed performance standards for maintenance and associated procedures for payments linked to the performance will be used in RRNMU districts.

²³ The packaging under RCIP was done considering that (i) procurement involves construction of rural roads scattered throughout the states/districts, and in remote areas; (ii) each contract includes a 5-year road maintenance following the completion of the construction, and this will need involvement of local labor from the nearby communities. Accordingly, using around 1,970 NCB contracts for a total value of around \$990 million is deemed more economical and efficient instead of combining bids into more sizeable packages that would enable the use of the ICB mode of procurement, and reduce the number of contracts to be managed. The approach adopted to packaging under RCIP follows the common approach to packaging adopted under nationwide PMGSY being implemented in 29 states across India and proved effective over more than 10 years of implementation. Adequate number of PIUs matching the contract packaging both under PMGSY and RCIP are in place.

²⁴ 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 three civil work contract packages under the Tranche is obtained.

²⁵ Each investment program state may proceed 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 first three civil work contract packages under the Tranche is obtained.

²⁶ Original documentation on the procurement process may be kept at PIUs, however, the copies of the documentation shall be kept at SRRDA Headquarters to enable easy access for review and auditing.

- J); and (c) SRRDA will promptly inform ADB on achieving the award of 20%, and 70% of contracts under each project for conducting procurement audits;
- (v) The procurement processes and contract awards under each project will be audited in each state as part of the performance audit (i) upon the award of at least 20% of contracts in the state being audited, and (ii) upon the award of at least 70% of contracts in the state being audited. The latter procurement audit under each Tranche will likely be combined with procurement audits for a subsequent project;
- (vi) If any contract award is found to be unacceptable, ADB may refuse to finance the contract.

73. Procurement of civil works for construction of RRNMU and RCTRC facilities will follow the same approval process as adopted for road construction and upgradation with the following change: only one technical bid evaluation report and financial bid evaluation report will undergo prior review by ADB under in each state under each project. Similar procedure will also apply to the procurement of goods.

74. Under Project 1, two contract packages for consulting services involving ADB financing will be required for: (i) Technical support, due diligence, impact monitoring and monitoring of the implementation of RCIP (TSC); and (ii) Support to the establishment and rollout of RCTRCs, including large scale training (RCTRC support). The terms of reference for all consulting services are referred to in Section E. Both the TSC and the SSTC consultant will be engaged following prior ADB review and using the quality- and cost-based selection (QCBS) method with a quality-cost ratio of 90:10.

75. Over the first year of the Investment Program, the TSC services will be provided by the TSC consultant engaged under Projects 4-5 of RRS-II. Time slicing will be used, so that after the closure of Project 4 the financing of TSC will continue under Project 5 of RRS-II. The recruitment of a national firm to continue the TSC services will start during the first year of RCIP implementation. An estimated 300 person-months national input will be provided by the TSC engaged under RCIP.

76. For the SSTC support, a national firm will be recruited using prior review procedures. An estimated 232 person-months national consultant input will be provided by the SSTC consultant.

D. Procurement Plan

77. The procurement plan is in Attachment A and describes the threshold and review procedures of all procurement of goods, works and consulting services to be undertaken for the Investment Program. The procurement plan will be updated at least once every 18 months or whenever change in the procurement arrangements is required and agreed.

E. Consultant's Terms of Reference

78. The terms of reference of the consultants engaged under Project 1 are provided in the following Attachments:

- (i) TOR for PIC: Attachment B
- (ii) TOR for TSC: Attachment C
- (iii) TOR for SSTC consultant (loan financed): Attachment D
- (iv) TOR for RRNMU and RCTRC support (piggybacked CDTA): Attachment E

VII. SAFEGUARDS

A. Social

79. **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, which will require narrow strips of land to be made available outside the existing road. In such cases, the voluntary land donation system will be used. The system has been widely used under PMGSY and other rural development schemes across India and proven effective. Therefore, eminent domain will not be exercised under this project.

80. The PMGSY voluntary donation and participation procedures were refined with the guidelines of the state-specific CPFs prepared to comply with the ADB's *Safeguards Policy Statement* (2009). The CPFs have been disclosed on ADB website since the MFF approval²⁷ and a general CPF outlined is included in Attachment M. 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 goal of the transect walks and consultation process was 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, structure partial or complete).
- (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 negotiated transactions (i.e. voluntary donations).
- (iv) To assist (i.e. "link") affected vulnerable households to government poverty alleviation and employment programs.

81. **Social Safeguards Compliance of Project 3:** As per CPF requirements, transect walks have been conducted for all roads proposed under Project 3. It is expected that impacts minimization and inputs provided by transect walks participants will be reflected in the updated DPRs to the extent possible. This will be supplemented by design reconnaissance exercise by the design consultants.

82. For the preparation of Project 3, the socio-economic census surveys were conducted by PICs, and identified 2,675 affected persons, among whom 823 are considered vulnerable. According to the sample reviewed by the TSC, (i) impacts were limited to narrow strips of land and external sections of structures (boundary walls, fences, and in some instances verandahs), no affected person would be physically relocated as a result of voluntary donations; (iii) no affected individual would lose over 5% of his/her land. According to the TSC review, MoUs on voluntary donation were obtained for each individual affected by the project. The linkages of the identified 823 vulnerable affected persons to state and national employment and poverty alleviation schemes will be conducted during the implementation of the project, monitored and reported on in the annual Social Monitoring Reports. The Social Compliance Report for each state has been disclosed on ADB website.²⁸

83. Compliance with the CPF for ongoing Projects 1 and 2 has also been assessed,

²⁷ <http://www.adb.org/projects/40423-013/documents>

²⁸ <http://www.adb.org/projects/40423-053/documents>

confirming that the preparation and implementation followed the guidelines of the CPF and that there were no outstanding claims related to voluntary donation. However, around 600 vulnerable households remain to be linked to government programs. The Projects 1 and 2 Due Diligence Report, which combines findings for all the investment program states, is disclosed on ADB website.²⁹

84. TSC also verified that all selected sites for the pilot RRNMU and RCTRC buildings under Project 1 are on government land allocated to the SRRDAs. The combined pilot RRNMU and RCTRC Social Compliance Report has been disclosed on ADB website. For the construction of RRNMU buildings under Project 3, the social safeguards checklist (Attachment F) will be filled out, verified by PICs, and submitted to TSC for verification prior to awarding the works. Compliance this will be reported by TSC in the annual Social Monitoring Reports.

85. Each investment program state will ensure that, subsequent to 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.

86. The implementation of the CPF will be monitored closely. All SRRDAs have appointed focal persons to monitor and manage social safeguards under RCIP. The internal monitoring will be carried out by PIUs with the support of PICs. In addition to CPF documents, the PICs will keep consolidated records of all APs, VAPs, structures and other assets affected and Memorandums of Understandings with affected individuals. The PIUs/PICs will also closely monitor and document grievances and their resolution. External monitoring will continue to be carried by the TSC, which will review completed CPFs with site verifications for a minimum representative sample of 10% of the roads in each investment program state under Project 3. This will include an assessment of the grievance mechanism efficiency and resolution.

87. **Indigenous people.** Through the census survey, Scheduled tribes (STs) and Scheduled Castes (SCs) 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 to any of the STs and SCs in the areas. There will be no impact on their tribal and cultural identity. In contrary, they will receive similar benefits from the investment program as the non-scheduled tribe households, by providing connectivity to habitations and increasing access to better facilities in health, education, and markets. This has also been confirmed by the TSC subsequent review of the due diligence process. Moreover, the CPF has special provisions for all scheduled tribe households to ensure that their living standards are not adversely affected as a result of land donation or in the event of any loss of non land asset and impacts on their livelihoods. 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 GOI and the related investment program state pertaining to land transfer will be followed.

B. Environmental

88. **Environmental assessment.** Investment program states will follow the provisions of the RCIP environmental assessment and review framework (EARF), Environmental Code of Practice (ECOP) checklists will be completed by PICs based on site visits for all road subprojects including bridges longer than 50 m. The completed ECOP checklists will be reviewed by the TSC with site verifications for a minimum representative sample of 10% of the

²⁹ <http://www.adb.org/projects/40423-053/documents>

roads in each investment program state under each tranche. Based on the completed ECOP checklists state level IEE reports and standard Environmental Management Plans (EMP) for all road subprojects will be prepared by the TSC. The standard EMP will be attached to the bidding document while the road specific EMPs will be available and provided to contractors together with the DPRs. Information on the location of specific environment issues and number of trees, ponds, utility structures etc. will be taken from the ECOPs and added to the standard EMP to convert it into road specific EMPs. For non-road subprojects IEE reports and EMPs will be prepared separately in house or by the DPR consultants.

89. **Ensuring implementation of environmental standards.** The standard EMP will be attached to the bidding documents. SRRDAs will prepare and provide contractors with subproject specific EMPs, to enable them to estimate and include the cost required for implementing the EMP in their bids.

C. Grievance Redress Committee

90. Grievances, if any, will be considered as a village level by the Village Grievance Redressal Committee (VGRC) consisting of all members of Gram Panchayat, with Lekhpal of Gram Sabha as Secretary; and Pradhan, Up-Pradhan of Gram Panchayat as the Chairman and Vice-Chairman respectively. It is mandatory that 30% of VGRC members are women. The VGRC shall act as the village level grievance committee, and will meet for addressing grievances before design approval as well as during construction works until completion. Residual grievances shall be addressed through a Grievance Redressal Committee (GRC) at the district level, comprising:

- (i) Executive Engineer of the PIU
- (ii) Sub-collector of Revenue Department
- (iii) Member of Zilla Parishad³⁰
- (iv) Member of the grievance committee of the concerned GP
- (v) Representatives of APs will be active participants in the proceedings of grievance redressal

91. The PIC will monitor the establishment of the GRCs for each road and the TSC will provide an assessment on compliance with this provision in the annual Social Monitoring Report.

VIII. GENDER AND SOCIAL DIMENSIONS

A. Gender

92. Gender analysis was carried out as part of social and poverty assessment and gender action plan prepared. It was found that due to the improved connectivity to nearby towns and villages, the investment program will improve access of women to health and educational services. Improved connectivity will contribute to the increase rate of safe child deliveries, and reduce the maternal and pre-natal deaths and the mortality of children. Better transport services will open up opportunities for more girls to enroll into schools, universities and various educational institutions outside of their villages. Women noted that presently they mostly go on foot, often on earthen tracks which are impassable in the rainy season, and better roads would make access safer, faster and more comfortable. Besides the increased use of motorized transport, all-weather roads will offer more opportunities to avail of non-motorized transport and

³⁰ It is mandatory for 33% of the Zilla Parishad (district level) to be women.

better use the government's program providing bicycles to female school students. This will in turn reduce school dropouts of female students.

93. **Gender mainstreaming features of the investment program.** A Gender Action Plan has been developed for the investment program. However, Tranche-specific GAPs have been developed to reflect the scope of work at stake.

94. **Gender mainstreaming features of Project 3.** A specific GAP for Project 3 has been formulated to reflect gender-specific activities and targets that are relevant to this project. The GAP for Project 3 is provided below. The GAP progress will be monitored quarterly by the PIU/PIC as per template in Attachment L and state analytical report will be submitted annually. The TSC will provide a GAP assessment, highlighting lessons learned upon project completion.

GENDER ACTION PLAN – PROJECT 3

Activities	Indicators and Targets	Responsibility	Time Frame
Output 1. Selected rural roads are constructed to all-weather standard.			
1.1 Hire women workers in road construction. Ensure equal wages for equal work.	At least 33% of workers hired in road construction works are women.	PIU/ Contractor	Y1 – onwards
1.2 Ensure that contract documents prohibit the hiring of child labor.	Explicit provision prohibiting child labor is evident in project contracts.	PIU/ contractor	Y1 - onwards
1.3 Ensure that affected female-headed households ³¹ are linked to national and state-sponsored government poverty alleviation programs	All affected vulnerable female households are identified in the project area and directly benefit from appropriate mitigation measures, and/or linked to poverty alleviation/livelihood restoration programs.	PIU/PIC. TSC will monitor	Y1 - onwards
Output 2. Quality of design of RCIP roads is improved			
2.1 Consider the specific needs of vulnerable users (elderly, women, children, and disabled) in the design and modification of roads, wherever applicable.	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
2.2 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	PIU, PIC, ZP, GP, PRI	Project preparation
1.3 Women are represented in Grievance Redress Committees (GRCs).	At least 30% members in GRCs are female.	PIU, PIC.	Project preparation and Y1 - onwards
Output 4. Road safety measures are incorporated into the design			
4.1 Ensure the communities' participation in road safety awareness campaigns.	<ul style="list-style-type: none"> ▪ At least 50% of schools along subproject roads and targeted settlements benefit from safety awareness sessions. ▪ At least 40% of students participating in the sessions are girls. 	PIC,TSC, PIU	Y1
Output 6. Effective project management provided			
6.1 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
6.2 GAP Monitoring and Reporting	<ul style="list-style-type: none"> ▪ Gender specialist in each PIU is appointed/recruited for implementation and monitoring of GAP. ▪ Gender focal point appointed in each PIU ▪ GAP progress update is prepared and reported annually. ▪ Combined GAP completion report highlighting lessons 	PIU, PIC, TSC	Y1 - onwards

³¹ Affected Female-Headed Household: affected household who are in the vulnerable category as defined by the Community Participation Framework.

	learned submitted upon project completion		
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GP = Gram Panchayat, 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 Centre, RRNMU = Rural Road Network Management Unit, TSC = Technical Support Consultants, ZP = Zilla Parishad.

B. Health and Labor

95. The incidence of HIV/AIDS is not anticipated to rise as a result of the project. 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 Gender Action Plan. Provisions in the works contract will be included to: (i) carry out HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction; (ii) follow and implement all statutory provisions on labor (including not employing or using children as labor, equal pay for equal work), health, safety, welfare, sanitation, and working conditions; and (iii) maximize employment of females and local poor and disadvantaged persons for construction, provided that the requirements for efficiency are adequately met. The PIUs will coordinate with State AIDS Control Society (SACS) and other public health agencies to carry out HIV/AIDS awareness programs for labor and dissemination of information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

A. Design and Monitoring Frameworks

96. The design and monitoring framework (DMF) for the investment program, Project 1, Project 2 and Project 3 are included in Attachment K.

B. Monitoring

97. **Project performance monitoring:** The achievement of the project performance targets will be assessed following the DMF. SRRDAs assisted by the TSC, PICs, and other consultants as required will establish and assist with the implementation of a project performance management system (PPMS) in each state. PPMS will include detailed methodology of data collection and analysis ensuring statistical validity, isolation of compounding factors and comparison with baseline and control data. As a minimum, the indicators will be monitored before and after construction/project, both on the subprojects and control roads.

98. Indicators to be monitored may include, but not be limited to the following: (i) number of newly connected habitations (total, by districts, and size); (ii) length of roads constructed/upgraded (total, by district, by habitation size, terrain etc); (iii) traffic volume and travel time on constructed roads; (iv) periods of construction (by road length, terrain etc), amounts and frequencies of variation orders, frequencies and durations of holding up of civil works by rural communities (by causes, including instances of holding up of civil works due to the omissions in design); (v) pavement condition index on RCIP roads under 5 year maintenance; (vi) percentage of DPRs for RCIP roads undergoing road safety audits (RSAs) and amended following RSAs of DPRs; (vii) percentage of existing roads undergoing RSAs and percentage of existing roads improved following RSA recommendations; (viii) number of PIU staff, PRI representatives, DPR consultants and contractors trained by RCTRCs, etc.

99. TSC will also establish a system for the monitoring of socio-economic indicators in the selected habitation served by RCIP roads as compared to the unconnected habitations, such as (i) poverty rates, (ii) number of maternal and infant deaths, (iii) number of total vs. 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 RCIP roads, etc. TSC will conduct baseline surveys at the outset of each Tranche.

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

101. The results of the performance monitoring will be carefully documented and made accessible to MORD, NRRDA, ADB and the states. The TSC will establish a practice of annual presentation to MORD, NRRDA, and ADB on the key performance indicators of the Investment Program.

102. Compliance monitoring: Compliance with loan covenants will be monitored through ADB's project administration missions—including project inception mission to discuss and confirm the timetable for compliance with the loan covenants; project review missions to review

the compliance with particular loan covenants and, where there is any noncompliance or delay, discuss proposed remedial measures with the EAs; and mid-term review mission if necessary to review covenants to assess whether they are still relevant or need to be changed, or waived due to changing circumstances.

103. State level safeguard monitoring and reporting. SRRDAs will be responsible for internal monitoring of the social and environment aspects of the Investment Program. Each SRRDA will have a focus safeguard person to provide oversight on the implementation of safeguards in a respective state. The PIU with the support of the PICs will monitor the implementation of CPFs and EMPs. Specifically in the monitoring of the implementation of EMPs by the contractor, PIU with the support of the PICs and 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 the support from the TSC, for submission to NRRDA 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, namely (i) number of AP and VAP, including those who need to be included in any government sponsored programs, and (ii) woman participation in construction activities in each state, based on the experience in Project 1 and Project 2.

104. National level safeguard monitoring and reporting. The TSC will perform the task of the 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 six months. The TSC will submit periodic and monitoring reports to SRRDAs, NRRDA and ADB including the annual social and environmental monitoring reports for disclosure on the ADB website.

105. Responsibilities for environmental and social monitoring. The following entities will have responsibility of implementing environmental measures:

(i) Contractor:

- Implementation of all mitigation measures included in the EMP attached to the bidding documents and the road specific EMP included with the DPR
- Bear all costs for EMP implementation and include costs in the bid BOQ for 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) PIU:

- Review and verify the ECOP checklists prepared by the PIC
- Monitoring 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 that all MoUs for land donations are obtained

(iii) PIC:

- Conduct transect walks, carry out public consultations and prepare ECOP checklists for each and every road and bridge that is longer than 50m for all non-sample roads
- Prepare road specific EMP based on the standard EMP prepared by TSC and information collected in the ECOP checklists and the DPR

- Conduct regular monitoring of EMP implementation by the contractor
- Provision of technical guidance to the contractor where necessary
- Prepare monitoring reports covering pre-construction, during construction and operation stages and submit to PIU
- Monitor that Project 3 implementation is conducted according to CPF requirements.
- Monitor the implementation of the Gender Action Plan, and submit annual GAP monitoring report (as per the template in Attachment L)

(iv) **SRRDA**

- Review and approve all ECOP checklists and IEE reports (to be done by the concerned focal person for environment safeguards)
- Prepare annual environmental monitoring reports for submission to NRRDA and ADB for disclosure on the ADB website
- Review and approve due diligence reports prepared by the TSC for ongoing sub-projects at the time of preparation for follow on tranches and forward to NRRDA
- Ensure that standard EMP is attached to the bidding documents and road specific EMP is attached to the DPRs
- Obtain all project related statutory clearances and permits where relevant
- Coordinate with local agencies (such as the local Panchayats) and schemes (such as MGNREGA) for implementation of selected relevant environment mitigation measures

(v) **TSC:**

- Conduct due diligence for at least 10% of all ECOP checklists that are prepared by the PIC
- Based on the approved ECOP 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
- Provision of 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 to SRRDA.
- Prepare annual social and environmental monitoring reports for submission to NRRDA and further submission to ADB for disclosure on their websites.

C. Evaluation

106. ADB inception missions will be fielded within 3 months after the legal agreements for the Investment Program and each 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 achievement of project objectives. NRRDA at the central level and SRRDAs at the state level will monitor the implementation of the Investment Program in accordance with the schedule and time-bound milestones, and keep ADB informed of any significant deviations that may result in the milestones not being met. Within 6 months of physical completion of each of the Projects under the investment program, NRRDA will submit a project completion report to ADB.³²

³² Project completion report format available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>.

D. Reporting

107. Disaggregated data for all output and outcome indicators will be updated and reported quarterly. States through MORD/NRRDA will provide ADB with (i) quarterly progress reports submitted within 45 days after the end of each quarter in a format consistent with PPMS, DMF and will provide information necessary to update ADB's project performance reporting system;³³ (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan, and (d) updated implementation plan for the next 12 months; and (iii) a project completion report within 6 months of physical completion of each Project under the Investment Program. To ensure viability and sustainability, project accounts and the APFS, together with the associated auditor's report, will be adequately reviewed (as outlined in Section V).

108. For civil works, progress will be reported on a regular basis by PIUs through the OMMAS. The SRRDAs will submit to MORD/NRRDA, through the relevant state government, monthly progress reports. Based on these reports, MORD, with assistance from NRRDA, will include in the quarterly progress reports all required information on the progress in the 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.

109. As far as environmental and social safeguards and GAP reporting is concerned, the following reports will be submitted: (a) annual social and environmental monitoring reports, (b) annual GAP monitoring reports and GAP completion report highlighting lessons learned.

E. Stakeholder Communication Strategy

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

Project Documents	Means of Communication ^a	Responsible Party	Frequency	Audience(s)
Project Information Document (PID)	ADB's website	ADB	initial PID no later than 30 calendar days of approval of the concept paper; quarterly updates afterwards	General Public
Design and Monitoring Framework (DMF)	ADB's website	ADB	draft DMF after fact-finding mission for the investment program and each tranche	General Public
Initial Environmental Examination Reports (IEEs)	ADB's website PMGSY website	ADB	post fact-finding mission for the investment program and each tranche	General Public, project-affected people in particular
Community Participation Frameworks (CPFs)	ADB's website PMGSY website	ADB	post fact-finding mission for the investment program and each tranche	General Public, project-affected people in

³³ ADB's project performance reporting system is available at:
<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

Project Documents	Means of Communication^a	Responsible Party	Frequency	Audience(s)
				particular
Summary Poverty Reduction and Social Strategy (SPRSS)	ADB's website	ADB	post fact-finding mission for the investment program and each tranche	General Public, project-affected people in particular
Environmental and Social Safeguard Compliance Reports	ADB's website	ADB	post fact-finding mission for investment program and each tranche	General Public, project-affected people in particular
Social Safeguards Due Diligence Report of ongoing Tranches	ADB's website	ADB	post fact-finding mission for investment program and each tranche	General Public, project-affected people in particular
Gender Action Plan	ADB's website	ADB	post fact-finding mission for investment program	General Public, project-affected people in particular
Legal Agreements	ADB's website	ADB	no later than 14 days of Board approval of the project	General Public
Documents Produced under Technical Assistance	ADB's website	ADB	within 2 weeks of completion	General Public
Facility Administration Manual	ADB's website	ADB	After loan negotiations	General Public
Social Monitoring Reports	ADB's website	ADB	annually	General Public, project-affected people in particular
Environment Monitoring Report	ADB's website	ADB	annually for category B projects	General Public, project-affected people in particular
Major Change in Scope	ADB's website	ADB	within 2 weeks of approval of the change	General Public

^a PMGSY website will have a hyperlink to the ADB website where all these documents will be posted.

X. ANTICORRUPTION POLICY

111. The Government, MORD, NRRDA, governments and SRRDAs of each investment program state were 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 investment program or each of its projects.³⁴ In this regard, investigation of government officials, if any, would be requested by ADB to be undertaken by the government.

112. 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 states and implementing agencies and all contractors, suppliers, consultants,

³⁴ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

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.

113. 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. 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 or 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

114. 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.³⁵ 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.

XI. ACCOUNTABILITY MECHANISM

115. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism.³⁶

116. Grievance redress mechanism as established by investment program states under PMGSY and improved under RRS-II will continue to be in place throughout the investment program. Land management committees and dedicated grievance redress committees will be in place to receive and resolve complaints, as well as to act upon stakeholders' reports of irregularities on project related matters, including grievances concerning land donation procedures. Investment program states and NRRDA will widely publicize the existence of this mechanism to ensure that stakeholders are aware that a venue is available to address concerns or grievances relating to fraud, corruption, abuse, and any other aspects of project implementation.

³⁵ ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

³⁶ For further information see: <http://compliance.adb.org/>.

XII. RECORD OF FAM CHANGES

117. All revisions/updates during course of implementation should be recorded and retained under this Section to provide a chronological history of changes to implemented arrangements recorded in this FAM.

ATTACHMENTS

Attachment A:	Procurement Plan
Attachment B:	Outline Terms of Reference – Project Implementation Consultant
Attachment C:	Outline Terms of Reference – Technical Support Consultant
Attachment D:	Terms of Reference – Second Stage Training Consultant (SSTC)
Attachment E:	Terms of Reference – Consultant for Institutional Development for Rural Road Asset Management
Attachment F:	Social Safeguards Checklist for RRMNU and RCTRC
Attachment G:	Design standards under RCIP
Attachment H:	Form for reporting on Technical Bid Evaluation (for prior ADB review for the first 5 contracts under each Tranche in each investment program state)
Attachment I:	Form for reporting on Financial Bid Evaluation (for prior ADB review for the first 5 contracts under each Tranche in each investment program state)
Attachment J:	Form of certified summary sheet reporting on the main aspects of the bid evaluation and contract award for all contract packages
Attachment K:	Design and Monitoring Frameworks
Attachment L:	GAP Progress Update Format
Attachment M:	Outline Community Participation Framework

Attachment to Procurement Plan: Details of Civil Works Proposed under Project 3

A. Road Infrastructure Development Component

State: ASSAM

No	Division/ District	Block	Road Name	Length (Km)
1	Baksa	Baksa	Santapara to Sutiapara	2.000
2	Baksa	Dhamdhama	Nayabasti MV School to Simlabari	4.150
3	Baksa	Gobardhana	Mayangpara to Barangabari	3.000
4	Baksa	Goreswar	T01 to Magurmari ChRN road to Magurmari	2.000
5	Baksa	Goreswar	T01 to Ramgaon (Ramgaon to Bhergaon)	2.000
6	Baksa	Goreswar	T01 to Jalthagpara (Jalthanpara to Nidhowa)	2.000
7	Baksa	Nagrijiuli	Singrabari Road	2.550
	Sub Total			17.45
8	Barpeta	Bajali	Bhogpur to Sarupeta (Sarupeta Tanglapara rd)	1.910
9	Barpeta	Chakchaka	Kamargaon to Dwartara	2.010
10	Barpeta	Mondia	Kamalpur to Chanmari	2.030
	Sub Total			6.17
11	Bongaigaon	Boitamari	Ghilaguri- II to Ravapara	2.000
12	Bongaigaon	Boitamari	Katasbari to Kanarabeel	1.230
13	Bongaigaon	Dangtol	Borsangaon to Dosimapara	2.350
14	Bongaigaon	Dangtol	Dholagaon to Noagaon	2.100
15	Bongaigaon	Dangtol	Chipansila to Chipansila hill road	1.000
16	Bongaigaon	Dangtol	Bongaigaon to Mechapara	2.000
17	Bongaigaon	Dangtol	Fulkumari to Bhitar Chengmari	1.560
18	Bongaigaon	Dangtol	Fulkumari (Dhantola) to Ghakpara	2.610
19	Bongaigaon	Dangtol	Ulubari to Jogipara	1.030
20	Bongaigaon	Manikpur	Patiladoha Monakuchi to Baobari	1.322
21	Bongaigaon	Srijangram	Borghola III to Chakrabhum (Chakrabhum to Borghola road -Dharampur Boorghola road)	0.520
22	Bongaigaon	Srijangram	Borghola II (Kamarpara-II) to Khamarpara-I	3.200
23	Bongaigaon	Srijangram	Amguri (Khamarpara-II to Khamarpara-II (Sastar)	3.200
24	Bongaigaon	Srijangram	Bhuyanpara, Chakrabhum	2.670
25	Bongaigaon	Srijangram	Kerkhabari-I to Kerkhabari-II	1.100
26	Bongaigaon	Srijangram	Thakuranipara Kharagaon to Kaimari Loharpara	1.000
27	Bongaigaon	Srijangram	Charipunia-II to Charipunia -I	2.100
28	Bongaigaon	Tapattari	Bechimari to Tinkonia Part-I (up to Khoragaon)	2.500
29	Bongaigaon	Tapattari	Kabaitari to Mohanapur	1.550
	Sub Total			34.682
30	Cachar	Borkhola	S J Road to SK road	1.123
31	Cachar	Kalain	Bhairavpur VI to Natanpur	1.250
32	Cachar	Katigora	Chandinagar to Leverputa (Harinagar baiyerper east Sobodh nagar to Haritika Sadirkhal)	4.481
33	Cachar	Katigora	T04 to Harinagar IV (Sadirkhal khelma II to Haritika I)	3.407
34	Cachar	Katigora	Hariangar III to Saidpur (Haritika I to	2.122

No	Division/ District	Block	Road Name	Length (Km)
			Salimbad)	
35	Cachar	Narsingpur	T02 to Bishnupur FV	2.500
36	Cachar	Rajabazar	Kankpur I to Pachim Diksa (Chatradayal to Harinagar Via Nutan Chandra Paschim Diska)	8.100
37	Cachar	Rajabazar	T06 to Harinagar	2.381
38	Cachar	Tapang	Kwarpar to Sahapur (Chibita Bichita III to Chibita Bichita I)	5.005
	Sub Total			31.564
39	Darrang	Pachim Mangaldai	Bezpara no1 to NH 52	0.800
40	Darrang	Pachim Mangaldai	Bezpara no2 to MPK road	0.840
41	Darrang	Pachim Mangaldai	NA Howly to NH 52 (Dhula Chapai Road)	1.900
42	Darrang	Pachim Mangaldai	Ganakpara to MPK road	2.000
43	Darrang	Pachim Mangaldai	Hengerajhar to Kanaichuba	1.755
	Sub Total			6.65
44	Dhubri	Agomoni	NH31 to Choto Dighaltari	1.750
	Sub Total			1.75
45	Goalpara	Balijana	Rajapara to Tisimpur	1.500
46	Goalpara	Balijana	Birubari to Keotpara	1.500
47	Goalpara	Balijana	Solmari to Matia	2.200
48	Goalpara	Balijana	Goalpara (Mission) to Dwarka Rabhapara-II	2.500
49	Goalpara	Balijana	Gojapara (MES) to Mojai Rabhapara	2.500
50	Goalpara	Kuchdhowa	NH 37 to Dighli	1.500
51	Goalpara	Kuchdhowa	Mowamari to Bandarsree II	2.000
52	Goalpara	Kuchdhowa	Lela to Guwabari	4.600
53	Goalpara	Kuchdhowa	Dabli Barpathar to Barmatia	1.500
54	Goalpara	Kuchdhowa	Lela to Bandarsree	1.000
55	Goalpara	Kuchdhowa	GD road to Mandalgram (Khara-I)	2.500
56	Goalpara	Kuchdhowa	NH 37 ti Charaimari	1.500
57	Goalpara	Matia	Sri Surjagiri to Lalabori	2.000
58	Goalpara	Matia	Bamunpara to Ganakpara	2.000
59	Goalpara	Rongjuli	Adokgiri NEC to Kothakuthi	1.200
60	Goalpara	Rongjuli	Adokgiri NEC to Chekowari no 1	1.600
	Sub Total			31.89
61	Kamrup	Bihdia Jajikona	Sutargaon to Dhulara (T04 to Dhulara)	2.000
62	Kamrup	Bongaon	Bamunigaon to Nijbogai	1.600
63	Kamrup	Kamalpur	Barmaroi to Dauduar	1.000
64	Kamrup	Rampur	T02 to Abhipara (Abhipara road)	1.200
65	Kamrup	Rangia	NH 31(Bhatkuchi) to Kekohati (Bhatkuchi Borkhata Dhamdhama Road)	2.000
	Sub Total			7.93
66	Karbi Anglong	Bokajan	T05 to Mentisso (Mentisogaon to NEC road)	3.081
67	Karbi Anglong	Bokajan	T04 (Sainilangso quarry road) to Kania bey	7.414
68	Karbi Anglong	Chinthong	3rd Km of BH road to Barpathar	1.500
69	Karbi Anglong	Chinthong	T07 to Mousalding (17th KM of UKT road to Mousolding)	11.950

No	Division/ District	Block	Road Name	Length (Km)
70	Karbi Anglong	Nilip	Santilangso to Chatiana (Langhup Teron Gaon)	5.177
71	Karbi Anglong	Rongkhang	77th KM of SH35 to Langparpan	4.500
	Sub Total			33.189
72	Karimganj	North Karimganj	NH 151 to Suprakandi (Fakirabazar to KL road via Nayabazar)	1.000
73	Karimganj	North Karimganj	T03 to Nayagram (Maizgram to Shyama Prasad pur)	3.516
74	Karimganj	Patherkandi	T07 to Durlovpur Pt-V (Kanaibazar Sonatola road to Durlovpur via Satghori)	1.410
75	Karimganj	R K Nagar	L029 to Chunatirgul (RK Nagar to Dolugang)	2.388
76	Karimganj	South Karimganj	T01 to Nagpanchak (Telekhalepar to Jatkan)	2.001
77	Karimganj	South Karimganj	T05 to Moujkuri Pt-I (Kaliganj Khagail road to Mourkarni)	1.309
	Sub Total			11.624
78	Kokrajhar	Dotma	17 to Beltari (Batabari to Beltari)	2.473
79	Kokrajhar	Dotma	108 to Ouguri (Mahendrapur to Ouguri)	3.780
80	Kokrajhar	Dotoma	NH-31 C to Kalaigaon	2.800
81	Kokrajhar	Dotoma	Maoriagaon to Umanagar	2.550
82	Kokrajhar	Dotoma	36 to Binnyachara (Chakapara to Binnyachara)	4.000
83	Kokrajhar	Gosaigaon	SH-1 to Padmapukur (Dhuburi Kachugaon road)	2.250
84	Kokrajhar	Gosaigaon	2 to Boalkumari (Aminkata to Boalkumari)	2.880
85	Kokrajhar	Gosaigaon	74 to Serfanguri (Oxiguri to Sherfanguri)	2.100
86	Kokrajhar	Hatidhura	Mallikapur -II to Kerlingpur	2.520
87	Kokrajhar	Hatidhura	46 to Anandapur ((Milikapur to Anandapur)	2.800
88	Kokrajhar	Hatidhura	66 to Latamari Rangapur to Latamari)	1.900
89	Kokrajhar	Kachugaon	004 (Anthabari) to Gumabil	0.950
90	Kokrajhar	Kachugaon	Srirampur to Shyamaguri	4.300
91	Kokrajhar	Kachugaon	105 to Bongaon FV (Jonali gaon to Bongaon)	1.410
92	Kokrajhar	Kokrajhar	NH 31 C to North Bashbari (Karigaon to North Bashbari)	3.270
	Sub Total			38.513
93	Lakhimpur	Bihpuria	Kachikata Bagan to Kachikata Bagan (Rajabari to Kachikata Bagan)	1.500
94	Lakhimpur	Bihpuria	Chinatoli to Bengena ati Road (Chinatoli Jamuguri road)	8.040
95	Lakhimpur	Karunabari	6568 Grant to Meneha	2.025
96	Lakhimpur	Karunabari	Rongajan to Rongajan NH 52 to Kachajuli Mirigaon via Rongajan)	1.950
97	Lakhimpur	Karunabari	Tekelabora to Kherbori (Singia to Kherbari via Dakhinawa hat)	3.160
98	Lakhimpur	Lakhimpur	Gubarichali to Gubrisali No.1	4.300
99	Lakhimpur	Lakhimpur	NH 52 to Somani (T04 to Christan Chapori)	8.500
100	Lakhimpur	Narayanpur	Hologuri to Hologuri (Simoluguri Arimora PWD to Hologuri)	0.630
101	Lakhimpur	Narayanpur	Charaidoloni to Notgaon No.2 (Charaidoloni Vill road)	2.056
102	Lakhimpur	Narayanpur	Uttar Katoni no 1 to Uttar Katoni No1 (Uttar Katoni Station feeder road)	1.000

No	Division/ District	Block	Road Name	Length (Km)
103	Lakhimpur	Narayanpur	Gosaibari to Kachari Borpathar (Borkhamti Kinapather Road)	3.300
104	Lakhimpur	Narayanpur	Dhemagar No1 to Dhemagar No.1 (Rampur Dhemagar Rajgarh Road)	1.500
105	Lakhimpur	Narayanpur	Ghugura to Ghugura (Deolia Chengelijan to Borpathar Road)	1.200
106	Lakhimpur	Narayanpur	Khalihamari No1 to Nidhan Chowra (Dhalpur Khalihamari Road)	2.000
107	Lakhimpur	Narayanpur	Dagaon to Mornoiguri (Dhalpur Bazar to Akadhari Road)	4.340
108	Lakhimpur	Narayanpur	Borkhet Bongali no 2 to Borkhet Bongali No.2	1.500
109	Lakhimpur	Narayanpur	Bordewri to Dikrong Chapori No.1 (Narayanpur Block to Temera Mirigaon)	4.240
110	Lakhimpur	Narayanpur	Deotola to Dustimukh (Dustimukh Deotola rd)	1.650
111	Lakhimpur	Narayanpur	Simaluguri No2 to Rajgarh (Simaluguri Kamalpur Rajgarh road)	6.140
112	Lakhimpur	Nowboicha	Khalihamari (Bilotia) to Khalihamari (NH 52 to Bilotia via Khalihamari)	1.300
113	Lakhimpur	Nowboicha	Pukhuri Paria no 1 to Hariohdalani (NH52 to NO 2 Sonapur Phukan Dalani)	3.360
114	Lakhimpur	Nowboicha	NH 52 to Ranabari (Dologhat Kathal pukhuri tp No 2 Sonapur via Ranabari)	3.040
	Sub Total			63.794
115	Morigaon	Bhurbandha	01 M29 to Patrabori	5.640
116	Morigaon	Bhurbandha	Rangadaria to Dighalipathar	2.000
117	Morigaon	Bhurbandha	Charaihagi to Hekenamara	1.500
118	Morigaon	Laharighat	03-M-01 to Rajabori (Niz Gerua to Rajabari)	0.800
119	Morigaon	Mayong	04 M-78 to Da hati Makaria (Dharamtul to Meruagaon via Mantibari)	4.000
120	Morigaon	Mayong	04-M-79 to Naldhara	2.000
121	Morigaon	Mayong	04-M-79 to West Belaguri (Chenimari to West Beloguri)	1.810
122	Morigaon	Mayong	214 to Kasha Chilla (Raja Mayang to Kashashila)	2.000
123	Morigaon	Mayong	151 to Charubari Pather (Katahguri to Charubari Pather)	4.000
124	Morigaon	Mayong	Burgaon No 1 to Kawrihagi	2.500
	Sub Total			27.62
125	Nagaon	Bajiagaon	Jatia Pather to Borjuri (Jatia Pather to KA road)	0.720
126	Nagaon	Barhampur	Matiapar to Chapanallah Jiajuri (Niz Chapanalla to Matia pather road)	3.012
127	Nagaon	Barhampur	Nalbari to Jiajuri	0.902
128	Nagaon	Barhampur	Purani gudam gaon to NH 37 (Purani Gudam to Khoundor Chuk)	0.550
129	Nagaon	Dhalapukhuri	Mosoka to Panch bhandar road	1.527
130	Nagaon	Dhalpukhuri	Jorang Pather to Laskar Pather Bajar	1.200
131	Nagaon	Jugijan	West Hatimara to Nabhanga	1.880
132	Nagaon	Jugijan	Uttarmatikhola to Hojai Tumpreng road	1.600
133	Nagaon	Jugijan	Pub solmarijan to Alinagar (Pub Soaloni to Pun Soaloni road)	2.076

No	Division/ District	Block	Road Name	Length (Km)
134	Nagaon	Jugijan	Thikadar Basti to Kachari Basti (Rajapukhuri to Thikadar Basti via Kachari Basti)	1.999
135	Nagaon	Jugijan	Pub Bagori to Dimaru road	0.902
136	Nagaon	Kaliabar	Deupani to NH 37 (Deupani Basti Road)	1.032
137	Nagaon	Kaliabar	Darigaji to Kuwaritol road	2.022
138	Nagaon	Khagarijan	Borbheti Kachamari road to Uttar Simaluguri	0.840
139	Nagaon	Khagarijan	Nagaon Juria to West Herapatty No.2	1.320
140	Nagaon	Khagarijan	Nagaon Dhing road to Cholahati Sonai bridge	1.530
141	Nagaon	Pakhimaria	NH 37 to Majpathori Bahuachuk	2.283
142	Nagaon	Pakhimaria	Dakhinpat Kampur road to Kachariguri	2.240
143	Nagaon	Paschim Kaliabar	Nalani Mikir gaon to Napani TE (Sari sabari)	3.090
144	Nagaon	Paschim Kaliabar	Mikirgaon to KA road	5.111
145	Nagaon	Paschim Kaliabar	Rekapahar to Kelliden pt-II (Napani missa road)	6.000
146	Nagaon	Rupahihat	Kandhulimari to Barpaka-II	1.250
	Sub Total			43.728
147	Sibsagar	Lakwa	Maibela to Gelgeli	1.600
148	Sibsagar	Lakwa	Dhodar ali to Rajabari	1.000
149	Sibsagar	Lakwa	Dhodar ali to Sonowal (Kaliamati ali)	0.950
150	Sibsagar	Nazira	Gahorichowa gaon to Borphukan ali (Borbari ali)	1.000
151	Sibsagar	Nazira	Kaliapani to Chutiagaon (Kaliapani Baruah ali)	0.800
152	Sibsagar	Nazira	Singhaduar to Bor Ali (Singha Duar Ali)	1.000
153	Sibsagar	Nazira	Sukafanagar to Charaideo Rajamaidam (Sukafa Ali)	1.750
154	Sibsagar	Nazira	Shreepur to 137 th Km of Dhodar ali (Nimanagarh Ali)	3.050
155	Sibsagar	Nazira	Santipur to Sreepur (Udoipur Ali)	4.100
156	Sibsagar	Nazira	Luthuri Gaon to Ramani ali (Luthuri Ali)	0.800
157	Sibsagar	Nazira	Tairi Gaon to Bor ali (Lakhimi Ali No 3)	0.950
158	Sibsagar	Nazira	Selengpathar to Phulanibari Krishipam	1.200
159	Sibsagar	Nazira	Moinating to Mechipur Ali	1.200
160	Sibsagar	Nazira	Satishgarh to NEC road	1.400
161	Sibsagar	Pachim Abhaypur	Purani Tawkak to Lalati Pather No 3 (Bekadalang Road)	1.500
162	Sibsagar	Pachim Abhaypur	Mathurapur to Chinglopathar (Chinglupather Kacharigaon road)	4.000
163	Sibsagar	Sapekhati	Dhodar ali to Kuwaripather (Dharam Pather No 1)	1.500
164	Sibsagar	Sonari	Rangabam to Khamungaon (Kamun Pohuchungi road)	2.500
165	Sibsagar	Sonari	Jajali Pachali to Kacharibam (Kacharibam Rd)	1.200
166	Sibsagar	Sonari	Dabokatia to Rangabam (Bahbari road)	0.750
	Sub Total			32.259
167	Sonitpur	Chayduar	NH 52 to Bholaguri	2.500
168	Sonitpur	Baghmora	Dhemajibari to NH 52	5.840
169	Sonitpur	Balipara	Hahchara Napam to Khelmati	2.000
170	Sonitpur	Balipara	Moidongpur to Ansumi	1.200

No	Division/ District	Block	Road Name	Length (Km)
171	Sonitpur	Behali	Serelia to Kuhiarbari	2.000
172	Sonitpur	Behali	NH 52 to Kachamari	1.500
173	Sonitpur	Borchala	NH 52 to Natunpam	2.520
174	Sonitpur	Dhekiajuli	Natun Basti to Maz Roumari	1.500
175	Sonitpur	Dhekiajuli	Katanibari to Bhergaon	1.465
176	Sonitpur	Naduar	Borigaon to Uparkari	2.606
177	Sonitpur	Naduar	Panigaon to Dholaibil	2.478
178	Sonitpur	Pub Chayduar	Dolouguri to Subansiri	2.000
179	Sonitpur	Pub Chayduar	Pahukata to Tihulabari	1.500
	Sub Total			29.109
180	Tinsukia	Guijan	Rongagora to Dinjan Chapori	3.000
181	Tinsukia	Guijan	Boruaholla to Gandhia Nahorani	8.150
182	Tinsukia	Guijan	Gobindapur to Changmaigaon	7.620
183	Tinsukia	Kakopathar	Kako Borali Road (Borachuk to Tezipather)	7.800
	Sub Total			27.482
184	Udalguri	Kalaigaon	Ganakpara to Balipota	5.310
185	Udalguri	Kalaigaon	Puthiakhat to Puthimari	6.000
186	Udalguri	Khoirabari	Dolonghat Tini Ali (Gomthapara) to MM road at Kendra (Gomthapara to Namkhola road)	6.800
187	Udalguri	Khoirabari	Sareng to Bahmula (Bahmula Bainara road)	3.000
188	Udalguri	Mazbat	Hatimara to Phurabari	3.670
189	Udalguri	Mazbat	Dakhin Chuba to Udalguri Jungle	1.000
190	Udalguri	Mazbat	Nepalipara to Garobasti	2.500
191	Udalguri	Rowta Charali	Balisia Jungle Mouja to Oubari Jungle	1.000
192	Udalguri	Rowta Charali	Dhansiri No 2 to Rowta Chari ali (Station)	1.000
193	Udalguri	Rowta Charali	Mohanpur Lawdang	1.000
194	Udalguri	Rowta Charali	Moudubi No1 to Gormara	1.000
195	Udalguri	Rowta Charali	Rongagorah to Kajiamati	1.500
196	Udalguri	Udalguri	Garobasti to Golmagaon (Golmagaon Khorang road)	7.800
	Sub Total			41.58
	TOTAL			486.984

State: CHHATTISGARH

No	Division/ District	Block	Road Name	Length (Km)
1	Bilaspur	Gourella	Chuktipani Bazardand To Chutkipani Bahrijhorki	3.08
2	Bilaspur	Kota	Amagohan To Mohali Pandarpani	3.87
3	Bilaspur	Kota	Katra Rd To Bargawa Lusada Kedadand	1.44
4	Bilaspur	Marawahi	Semardarri Rd Bhatatikara To Bagiha Tola	4.50
5	Bilaspur	Bilha	Bitkuli Pondi Hathini Road	3.18
6	Bilaspur	Bilha	Bilha - Dodki Kwanchhi	4.50
7	Bilaspur	Bilha	T010 - Aithulkapa	1.86
8	Bilaspur	Bilha	Murkuta - Nawagaon H	3.25

No	Division/ District	Block	Road Name	Length (Km)
9	Bilaspur	Bilha	L091 - Khairkhundi	1.35
10	Bilaspur	Bilha	L022-Belpara Limha Patharapali	2.01
11	Bilaspur	Bilha	Beltara - Barbhatha-Bel	1.20
12	Bilaspur	Bilha	Mohatrai - Chumkunwa	2.41
13	Bilaspur	Bilha	Kadar - Kunwa	7.32
14	Bilaspur	Bilha	Kadar - Limatri	5.40
15	Bilaspur	Bilha	L091 - Sarvandevari	4.04
16	Bilaspur	Bilha	T04-Bahatarai Parsahi Rd	6.40
17	Bilaspur	Kota	Kota Ratanpur To Chherkabandha	2.82
18	Bilaspur	Kota	Kurwar To Navadih	3.03
19	Bilaspur	Kota	Amagohan To Khongsara Basti	2.01
20	Bilaspur	Kota	Kurdur To Bagdhar Via Sargod	20.30
21	Bilaspur	Kota	Rmkk Road To Kunvajati	1.56
22	Bilaspur	Kota	Banki Ghat To Kota Ratanpur Road	1.20
23	Bilaspur	Lormi	Amlidih To Koilari	3.50
24	Bilaspur	Lormi	Khektara To Nathelapara	2.37
25	Bilaspur	Lormi	Tekanpara To Kota Lormi Road	1.37
26	Bilaspur	Lormi	Lormi Mungeli MDR To Khapridih	0.75
27	Bilaspur	Lormi	Budhwara To Tulasaghat	1.20
28	Bilaspur	Lormi	Bhaskara To Khairakhurd	1.50
29	Bilaspur	Mungeli	Bicharpur To Uslapur Singhanpur	6.30
30	Bilaspur	Mungeli	Bhurka To SH 26	5.97
31	Bilaspur	Mungeli	Birgahani To Mdr Takhatpur To Pathariya	0.72
32	Bilaspur	Mungeli	Reunta To MDR Mungeli Nandghat Road	2.31
33	Bilaspur	Mungeli	Kodukapa To MDR Nadghat Road	1.30
34	Bilaspur	Mungeli	Aurabandha To MDR Nandghat Road	1.14
35	Bilaspur	Mungeli	Chichesara To Mungeli	3.90
36	Bilaspur	Mungeli	Tulsikapa To SH26	2.60
37	Bilaspur	Mungeli	SH 26 Road Chhuiha	2.42
38	Bilaspur	Mungeli	Bhumiyapara To SH26 Bijatarai	1.98
39	Bilaspur	Mungeli	Bijhori To SH 26	1.30
40	Bilaspur	Pathariya	T03 - Hathkera	2.25
41	Bilaspur	Pathariya	L036 - Umariya	7.32
42	Bilaspur	Pathariya	Main Road - Rambod Kokedi	2.01
43	Bilaspur	Pathariya	T04 - Sawatpur	5.55
44	Bilaspur	Takhatpur	Ganiyari To Pondi	3.36
45	Bilaspur	Takhatpur	Kotaghutku Road To Padaripar	1.20
46	Bilaspur	Takhatpur	Araiband Approach Road	4.00
47	Bilaspur	Takhatpur	Khapari To Modhe Road	1.00
48	Bilaspur	Takhatpur	Amane To Bija Kargird	2.31
49	Bilaspur	Takhatpur	Bhunda To Pathara	1.32
50	Bilaspur	Takhatpur	Navapara To Satti Para	1.32
51	Bilaspur	Takhatpur	Uslapur To Pondi Road	1.38
52	Bilaspur	Takhatpur	Pali To Butena	1.92
53	Bilaspur	Takhatpur	Savada Bra To Pura	2.55
	Sub Total			164.85
54	Durg	Bemetara	Bahinga - Karhi Road	2.90
55	Durg	Bemetara	Main Road NH12a - Joung	2.65
56	Durg	Bemetara	Mohrenga - Pausari	2.50

No	Division/ District	Block	Road Name	Length (Km)
57	Durg	Bemetara	Main Road - Atriya	1.45
58	Durg	Berla	Bachedi - Khumiguda	3.00
59	Durg	Berla	Main Road - Hathpan Road	2.20
60	Durg	Dhamdha	Main Road To Parsada	6.40
61	Durg	Dhamdha	Dondki - Dewarkona Road	2.23
62	Durg	Dhamdha	Kanharpuri - Jataghara Road	2.90
63	Durg	Dhamdha	Main Road T13 - Kandai Road	1.50
64	Durg	Dhamdha	Main Road Girhola - Ghikudiya Road	2.15
65	Durg	Dondi	Bhandaritola - Lakhmatola Road	1.76
66	Durg	Durg	Nikum - Masabhat Road	3.50
67	Durg	Nawagarh	Murkuta - Jhanki Road	3.50
68	Durg	Nawagarh	Boerkachra Amlidih - Thengabhat	4.33
69	Durg	Nawagarh	Main Road Mohtara - Andhiyarkhor Road	1.35
70	Durg	Nawagarh	Kodiya - Bhaismuda Road	2.15
71	Durg	Patan	Gadadih Marra Road - Bodal Road	0.80
72	Durg	Patan	Main Road - Chulgahan	1.00
73	Durg	Patan	Main Road - Guruwaindhih Road	0.70
74	Durg	Patan	Ausar - Jharmokhali Road	2.50
75	Durg	Saja	Main Road - Mاتيya	2.10
76	Durg	Saja	Theika - Bhanora Lalpur	2.45
77	Durg	Saja	Main Road - Kehka	1.55
78	Durg	Saja	Kanhera - Rampura Road	3.53
79	Durg	Saja	Main Road - Dehri Road	2.25
80	Durg	Saja	Mohgaon - Budhwara	0.75
	Sub Total			64.1
81	Jangir- Champa	Dabhara	T05 To Bijani	2.65
82	Jangir- Champa	Malkharada	T01 To Bokrel	3.50
	Sub Total			6.15
83	Dhamtari	Nagri	Sahnikhar to Latiyara	2.60
	Sub Total			2.6
84	Jashpur	Bagicha	L030 To Dobh (Vr)	6.00
85	Jashpur	Bagicha	Chhiropara To Tr 11	7.50
86	Jashpur	Bagicha	Mahadeo Jabala To Tr 12	11.00
87	Jashpur	Bagicha	Turrikona To Tr 02 MDR	5.00
88	Jashpur	Bagicha	Ghoghar To L54	1.30
89	Jashpur	Bagicha	Judwain To Tr10 MDR (01tr-09)	7.95
90	Jashpur	Duldula	Jamchuwa To T04 Makaribandha Duldula Road	5.70
91	Jashpur	Duldula	Judwain Ambatoli To L 45 Salamali	6.65
92	Jashpur	Duldula	Ranibandh - Makribandha	9.60
93	Jashpur	Duldula	Mayurchundi - L- 38	3.00
94	Jashpur	Jashpur	Jashpur To Dodkachoura (04I-50)	1.65
95	Jashpur	Kansabel	Titapakar To T07 Pandripani	5.80
96	Jashpur	Kansabel	Marhatoli To T06 Karmatoli (05I-43)	6.00
97	Jashpur	Kansabel	Semarkachhar To Tr-04 (Vr)	2.16
98	Jashpur	Kansabel	Koranga To Kunjara (Vr57)	3.10
99	Jashpur	Kansabel	Mdiajhariya To T02 Nh 78	2.50

No	Division/ District	Block	Road Name	Length (Km)
100	Jashpur	Kansabel	Dumartoli To Sabadmunda Kansabel Road	4.20
101	Jashpur	Kunkuri	Lodhaamba - L-38 Harradand	6.20
102	Jashpur	Manora	Lakwakona - Sonkyari	23.23
103	Jashpur	Pathalgaon	Chandarpur To Tr03	6.00
104	Jashpur	Pathalgaon	Karrajore To Tr07	4.00
105	Jashpur	Pathalgaon	Tamta - Bathanpara	2.40
106	Jashpur	Pathalgaon	Hardijhariya To Tr07	1.63
107	Jashpur	Pathalgaon	L-87 - Tihalisarai	7.10
108	Jashpur	Pathalgaon	Tr-04 To Karadand	2.50
109	Jashpur	Pathalgaon	Tr-01 - Makkapur	1.75
110	Jashpur	Pathalgaon	Darrimahua To Tr01	2.60
111	Jashpur	Pathalgaon	Bangoda - Tr-05	1.65
112	Jashpur	Pathalgaon	Khamgada - L-74	2.60
	Sub Total			150.77
113	Mahasamund	Bagbahara	T 01 Tendukona To Dokarpali	3.05
114	Mahasamund	Bagbahara	T02 Mungaser To Firgi	6.35
115	Mahasamund	Basna	Bizrabhata Tr 01 Tukda To Dhama Ghutkuri	1.20
116	Mahasamund	Basna	Kudekel To Potapara	2.20
117	Mahasamund	Basna	Tr 04 To Birsinghpali S	1.35
118	Mahasamund	Basna	Tr 03 To Rupapali	4.55
119	Mahasamund	Basna	Tr 04 To Karnapali	4.95
120	Mahasamund	Basna	Tr 03 Bandabari To Bamhanidih	3.80
121	Mahasamund	Basna	Tr 03 Bade Sajapali To Bhuthabahara	4.30
122	Mahasamund	Basna	Tr 03 Bade Sajapali To Harda	4.10
123	Mahasamund	Basna	NH 6 To Badetemari	2.52
124	Mahasamund	Mahasamund	NH 6 To Khadsa	1.90
125	Mahasamund	Mahasamund	NH6 Kuhari To Pasid ODR	1.50
126	Mahasamund	Mahasamund	Amora T05 To Kachhardih	1.95
127	Mahasamund	Mahasamund	NH 6 To Dumarpali	2.65
128	Mahasamund	Pithora	Lr 066 To Nawagaon Kala	1.55
129	Mahasamund	Pithora	T 12 To Saragtora	3.40
130	Mahasamund	Pithora	MDR Bagbahara Rd Tendukona To Udarlami	5.85
131	Mahasamund	Pithora	Bamhani To Kesaripur	2.35
132	Mahasamund	Pithora	Tr 10 Bhurkoni To Kolda	8.10
133	Mahasamund	Pithora	Tr 10 To Faroda	7.65
134	Mahasamund	Pithora	T 11 To Bartunda	1.55
135	Mahasamund	Pithora	NH 6 To Gauriya	4.80
136	Mahasamund	Pithora	Katangtarai To Chhoteloram	4.75
137	Mahasamund	Pithora	NH6 To Loharindongari	1.50
138	Mahasamund	Saraipali	NH 6 To Bandimal	8.30
139	Mahasamund	Saraipali	T 03 To Sahajpani	8.95
140	Mahasamund	Saraipali	Baloda To Gerra	5.00
	Sub Total			110.12
141	Raigarh	Baramkela	T03 To Jhal	16.40
142	Raigarh	Baramkela	T-03 To Karapi	16.00
143	Raigarh	Baramkela	Bishnupali Sonabala To Dulopali	1.60
144	Raigarh	Baramkela	Dongaripali Jhal To Amapali	1.05
145	Raigarh	Baramkela	T05 To Marodarha	2.25

No	Division/ District	Block	Road Name	Length (Km)
146	Raigarh	Baramkela	T06 Katangpali Sariya To Kandola	1.65
147	Raigarh	Baramkela	T-05 To Bade Amakoni (Vr3)	3.00
148	Raigarh	Baramkela	Sariya Sankara Road To Tora	9.50
149	Raigarh	Dharamjaigarh	L035 To Baghni para	5.45
150	Raigarh	Dharamjaigarh	T06 To Jamabeera	3.00
151	Raigarh	Dharamjaigarh	Bandhanpur Sajapali T-04 - Chitamara	7.30
152	Raigarh	Dharamjaigarh	L050 (Potiya) - Bhagdahi	7.75
153	Raigarh	Dharamjaigarh	Dharamjaigarh Pathalgaon Raod T05 - Uraonpara	3.52
154	Raigarh	Dharamjaigarh	L035 - T02 To Darogapara	2.40
155	Raigarh	Dharamjaigarh	Sohanpur Road - Gidhakhota	4.55
156	Raigarh	Dharamjaigarh	Dharamjaigarh Kapu Rd (T-03) - Branchpara	1.50
157	Raigarh	Dharamjaigarh	Bandhapali Dongabhawna Rd To Gadainbahri	2.05
158	Raigarh	Dharamjaigarh	Katrapara To Jaroliama	4.73
159	Raigarh	Dharamjaigarh	T- 010 To Medarmar Colony	1.50
160	Raigarh	Dharamjaigarh	L 044 - Dhondhagaon	3.60
161	Raigarh	Dharamjaigarh	Bandhanpur- Chantipali Road - Salkheta	2.10
162	Raigarh	Kharsia	Kurrubhatta To Tendumudi	0.60
163	Raigarh	Lailunga	Ghatgaon To Patelpara	3.30
164	Raigarh	Lailunga	Kesala To Khairbahar (Vr78)	2.40
165	Raigarh	Lailunga	Lamdand - Kaharchua	1.60
166	Raigarh	Lailunga	Keshla Main Road To Saraimal	1.00
167	Raigarh	Pussore	Pussore Borodipa NH 200 Lohakhan	2.65
168	Raigarh	Pussore	Nawapara Lara To Mahlol	1.50
169	Raigarh	Pussore	Pussore Badebhandar Road Bunga To Nawapara-B	4.70
170	Raigarh	Pussore	Raigarh Kankatora To Renaglpali	2.00
171	Raigarh	Pussore	Kodatarai Surajgarh To Nawapali W	2.07
172	Raigarh	Pussore	Nawapara Lara To Basanpali	4.00
173	Raigarh	Sarangarh	Raigarh Sarangarh Road Tokhursi	2.55
174	Raigarh	Sarangarh	Sarangarh Shiverinarayan Road To Kalmi	1.00
175	Raigarh	Sarangarh	Hardi Dhuta Chharra Pindri To Khaira Bade	1.00
176	Raigarh	Sarangarh	T-06 To Ghatara	4.50
177	Raigarh	Sarangarh	L-049 To Dabgaon	2.50
178	Raigarh	Sarangarh	T-06 To Baigindih (Vr5)	4.50
179	Raigarh	Sarangarh	Sarangarh Shiverinarayan Rd To Paraskhol	0.90
180	Raigarh	Sarangarh	T-09 To Silyari	2.00
181	Raigarh	Sarangarh	T-06 To Chawarpur (Vr6)	2.70
182	Raigarh	Tamnar	Hukara Dongamahua T-02 To Tihalirampur (Vr01)	2.00
183	Raigarh	Tamnar	Hukra Dongamahua To Lamdarha	2.20
184	Raigarh	Tamnar	Saraipali To Darama	1.75
185	Raigarh	Tamnar	Aamagha T- Kachkoba To Nayapara (Vr3)	1.75
186	Raigarh	Gharghoda	Gharghoda Dharamjaigarh To Bulekera	3.80
187	Raigarh	Raigarh	Raigarh Kolaibahal Road To Dumarpali E	4.02
188	Raigarh	Raigarh	Sambalpuri Kolaibahal Road To Sapnai	1.95
189	Raigarh	Raigarh	Dhanager Bhupdeopur Rd To Hardi Jharia	3.00

No	Division/ District	Block	Road Name	Length (Km)
190	Raigarh	Raigarh	Raigarh Kolaibahal Rd To Bade Attarmuda	1.75
	Sub Total			170.59
191	Raipur	Balodabazar	Dhobadih To Deori	4.10
192	Raipur	Balodabazar	SH 22km To Chhuiya	0.75
193	Raipur	Balodabazar	Balodabazar To Koliyari Saloni	1.55
194	Raipur	Balodabazar	Khamhariya To Bhairwadih	2.00
195	Raipur	Balodabazar	SH 33km To Lawanband	0.90
196	Raipur	Balodabazar	Balodabazar 28km To Bemetara	2.05
197	Raipur	Balodabazar	Risda To Puran	2.30
198	Raipur	Bhatapara	Rampur To MDR	0.80
199	Raipur	Bhatapara	Semariya To Datrengi	1.80
200	Raipur	Bhatapara	Koni Via Bagbudwa To Kodwa	1.10
201	Raipur	Bhatapara	Sendri To Khaparadih	2.00
202	Raipur	Bhatapara	Kesla To Lachchhanpur	2.25
203	Raipur	Bhatapara	Mopar To Arjuni	3.00
204	Raipur	Bhatapara	Akoli To Lewai	5.05
205	Raipur	Bhatapara	Bharatpur To Mopka	2.25
206	Raipur	Bhatapara	Pasid To Khapari	1.85
207	Raipur	Bhatapara	Nawagaon To Khamhariya	2.25
208	Raipur	Bilaigarh	Tundri To Maldiya	3.60
209	Raipur	Bilaigarh	Pipardula To Manpasar	2.10
210	Raipur	Bilaigarh	Beltikari To Pandripani	1.95
211	Raipur	Bilaigarh	Churla To Tendumudi	2.25
212	Raipur	Bilaigarh	Bisanpur To Nagardha	2.50
213	Raipur	Bilaigarh	Barbhata To Deoraha	2.40
214	Raipur	Gariaband	Gariaband To Khatti	5.30
215	Raipur	Kasdol	Mudhipar To Piparchhedi	3.15
216	Raipur	Kasdol	Nardha To Navrangpur	2.00
217	Raipur	Kasdol	Kasdol Kurkutti Road To Dhamalpura	0.80
218	Raipur	Kasdol	Kasdol Aurai To Damjhar	1.20
219	Raipur	Kasdol	Deopur To Thakurdiya	20.90
220	Raipur	Kasdol	Dhaurabhata To Bamhani	4.00
221	Raipur	Kasdol	Chhachhi To Amakhoha	5.75
222	Raipur	Pallari	Bhawanipur To Rewadih	4.18
223	Raipur	Pallari	Balodi To Odan	2.50
224	Raipur	Pallari	Datan To Gatapar Bbazar	4.10
225	Raipur	Pallari	SH09 Km 64 To Patharidih	2.13
226	Raipur	Pallari	T02 Balodi To Ahamadpur	3.73
227	Raipur	Pallari	Binouri To Gatapar	2.10
228	Raipur	Pallari	Junwani To Deogaon	0.90
229	Raipur	Pallari	Datan Sakari To Aurashi	1.10
230	Raipur	Pallari	Pandariya Dotopar Amera Bhalookona 13 Km To Achholi	5.90
231	Raipur	Pallari	Datan Sakari To Aurashi	1.00
232	Raipur	Pallari	Lakadiya	4.50
233	Raipur	Pallari	12t04 Km 17 To Malpuri	1.30
234	Raipur	Pallari	Gidkera To Saiha Bazar	3.50
235	Raipur	Pallari	Muswadih To Semharadih	3.00
236	Raipur	Pallari	Bhairwadih To Bijradih	1.04

No	Division/ District	Block	Road Name	Length (Km)
237	Raipur	Rajim	Kosamkhunta To Khapari	2.70
238	Raipur	Rajim	Pokhara - Raksha	1.55
239	Raipur	Simga	Suhela Kathiya Road Km 2 To Ameri	1.65
240	Raipur	Simga	Diggi To Matiya	4.55
241	Raipur	Simga	Darchura To Manhora	3.07
242	Raipur	Simga	Kachlon To Kirwai	4.30
243	Raipur	Simga	Nh200 Km 54 To 14t02 Km 6	1.75
244	Raipur	Simga	Tildabandha To Newari	1.60
245	Raipur	Simga	Kathiya To Bhalesur	4.70
246	Raipur	Simga	Pounsari To Lanja	0.85
247	Raipur	Chhura	Mongra - Birnibahara	6.08
248	Raipur	Chhura	Kantakhusari To Rajpur Via Dharampur	4.50
249	Raipur	Chhura	Dadargaon To Chhatarmadai O Via Kothigaon	2.60
250	Raipur	Chhura	Rakshi To Nawadih	2.40
251	Raipur	Chhura	Bamhani To Nawadih	2.50
252	Raipur	Deobhog	Kadalimuda - Dhungiyamuda	1.80
253	Raipur	Deobhog	Dhurwapara - Bhatarabahali	4.50
254	Raipur	Deobhog	Jhiripani To Dahigaon (Vr-660)	1.02
255	Raipur	Deobhog	Karlaguda To Dhungiyamuda (Vr-686)	1.02
256	Raipur	Deobhog	Latapara To Fudelpara	2.10
257	Raipur	Deobhog	Kodobhata To Khwaspara (Vr-672)	2.00
258	Raipur	Deobhog	Dohel To Podaguda (Vr-697)	1.00
259	Raipur	Deobhog	Sargibahali To Limpara (Vr-678)	2.40
260	Raipur	Deobhog	Sh2b To Dhodhara	1.00
261	Raipur	Mainpur	Bhatapani - Kuchenga	3.95
262	Raipur	Mainpur	Chanabhata To Urmal	2.03
263	Raipur	Mainpur	Kachharpara To Sarnabahal	2.75
264	Raipur	Mainpur	Sh2b - Beharadih	1.15
265	Raipur	Mainpur	Shobha - Kareli	1.98
266	Raipur	Mainpur	Bargaon To Mongaradih	2.75
267	Raipur	Tilda	Chicholi To Keotara Via Gourkheda	2.25
268	Raipur	Tilda	Tulsi M To Sarfonga	2.63
	Sub Total			216.01
269	Surguja	Ambikapur	Bilaspur Road Dhanwar Road (SH 2a) Rd228.6 K.M. To Khaliwa Khas	3.00
270	Surguja	Lakhanpur	Belkharikha To Turna Baigapara	2.50
271	Surguja	Lundra	NH 78 Katni Gumla Rd To Silsila Uparpara	2.80
	Sub Total			8.3
272	Bastar	Bakawand	Badepara Talnar To Khaspara Chitalur	7.20
273	Bastar	Bakawand	Bakawand To Bhirinda	3.80
274	Bastar	Bastanar	L036-Gaytaparairpa To Pujariparairpa	2.55
275	Bastar	Bastar	Farsaguda Chhurawand Road- Khaspara Khadka Vhaya Jamgaon	8.80
276	Bastar	Bastar	Farsaguda To Patelpara Chhurawand	7.50
277	Bastar	Darbha	NH 16 Pakhnar Road 9 Km To Koikimari	0.95
278	Bastar	Darbha	Manjhiguda To Khaspara	0.80
279	Bastar	Darbha	Darbha Chandameta Road To Thotapara	1.20
280	Bastar	Darbha	J K Road Rd 26 Km To Budagibhata	5.90

No	Division/ District	Block	Road Name	Length (Km)
	Sub Total			38.7
281	Kanker	Durgukondal	Kewti Pakhanjur To Marrampani	2.20
282	Kanker	Koelibeda	Bande To Haridaspur	2.80
283	Kanker	Koelibeda	2 Km of Govindpur Markanar To Vijaynagar	2.35
284	Kanker	Koelibeda	Janakpur To Krishnanagar	1.50
285	Kanker	Koelibeda	Vishrampur To Alor	0.90
286	Kanker	Koelibeda	49 Km of Bhanpratappur Bande Road Badgaon To Badepara	1.40
287	Kanker	Koelibeda	Sankanrnagar To Padenga	1.90
288	Kanker	Koelibeda	Roopnagar To Jagannathpur	6.00
	Sub Total			19.05
289	Korba	Kartala	T04 To Kasipani	2.10
290	Korba	Kartala	L052 To Jhinka	6.60
291	Korba	Kartala	T01 To Dongama	4.10
292	Korba	Katghora	Dipka Ring Road To Binjhari	2.60
293	Korba	Katghora	Darri To Mohariyamuda	1.50
294	Korba	Korba	T01 Chirra To Along	1.60
295	Korba	Korba	T01 To Dadarpara	4.25
296	Korba	Korba	T09 To Narbada	3.25
297	Korba	Korba	L023 To Dhanpuri	3.50
298	Korba	Korba	T02 Batati To Darga	4.60
299	Korba	Korba	L054 To Daldalipara	1.20
300	Korba	Korba	T08 Ajgarbahar To Gaurbora	4.30
301	Korba	Pali	L047 To Bagaihapara	3.20
302	Korba	Pali	L048 To Bhelwadongri	1.70
303	Korba	Pali	L039 To Hardipara	2.55
304	Korba	Pali	L046 To Duggupara	1.50
305	Korba	Pali	T02 To Sadakpara	1.70
306	Korba	Podiuproda	L021 To Dhauramuda	3.15
307	Korba	Podiuproda	T05 To Barra	4.00
308	Korba	Podiuproda	T02 To Kodwari	6.05
309	Korba	Podiuproda	T02 To Nawapara	1.80
310	Korba	Podiuproda	T03 To Babupara Thotanpara	2.30
311	Korba	Podiuproda	L0100 To Bagdharidand	2.30
312	Korba	Podiuproda	T04 To Khamarpara	1.05
313	Korba	Podiuproda	T02 To Junapara	2.00
314	Korba	Podiuproda	T03 To Lalmatiya	1.35
315	Korba	Podiuproda	L0104 To Chuhari	3.85
316	Korba	Podiuproda	T07 To Mengadhi	5.05
317	Korba	Podiuproda	T02 to Khamharmuda	5.10
318	Korba	Podiuproda	L095 To Bagharidand	3.30
319	Korba	Podiuproda	T04 To Jambahar	4.15
320	Korba	Podiuproda	T06 to Manjhwarpada	9.00
	Sub Total			104.7
	TOTAL			1055.94

State: MADHYA PRADESH

No	Division/ District	Block	Road Name	Length (Km)
1	Ashoknagar	Chanderi	L088-L085 to Lidhorakalan	3.50
2	Ashoknagar	Chanderi	L045-T002 to Goraseharai	2.10
3	Ashoknagar	Ashoknagar	L123-T008 to Bawadikheda	3.60
4	Ashoknagar	Ashoknagar	L089-T006 to Jamakhedi	2.00
5	Ashoknagar	Ashoknagar	L125-T008 to Kudai	4.10
6	Ashoknagar	Ashoknagar	L065-T003 to Rajebamora	2.60
7	Ashoknagar	Ashoknagar	L084-T005 to Bamuriya Foot	3.20
8	Ashoknagar	Ashoknagar	L070-L067 to Sijawat	1.60
9	Ashoknagar	Ashoknagar	L077-T004 to Tarawali	1.20
10	Ashoknagar	Issagarh	L055-L054 to Manak Chock	3.80
11	Ashoknagar	Issagarh	L071-T003 to Imjhara	4.00
12	Ashoknagar	Issagarh	L105-T005 to Khemkhedi	3.00
13	Ashoknagar	Issagarh	L130-T005 to Hinotiya Foot	5.50
14	Ashoknagar	Issagarh	L106-L105 to Pipariya	3.10
15	Ashoknagar	Issagarh	L041-L040 to Piprol	2.40
16	Ashoknagar	Issagarh	L117-L116 to Cheerkheda	4.50
17	Ashoknagar	Mungaoli	L134-L 133 to Piparia	2.7
18	Ashoknagar	Mungaoli	L139-L 138 to Semri Piprai	4.00
19	Ashoknagar	Mungaoli	L070-T05 to Bhesonakala (Baibani)	1.40
20	Ashoknagar	Mungaoli	L053-T-03 to Ruhana	1.40
21	Ashoknagar	Mungaoli	L024-T-01 to Kenwara	3.50
22	Ashoknagar	Mungaoli	L021-T-01 to Pyasi (Piprai)	5.40
23	Ashoknagar	Mungaoli	L039-T-03 to Chiroli	4.40
24	Ashoknagar	Mungaoli	L052-T-03 to Bamman Khiria	2.20
Sub Total				75.2
1	Betul	Betul	Tahali to Devthan	3.80
2	Betul	Betul	Jogli Gondra Road to Ratamati Khurd	2.15
3	Betul	Betul	Lapajhiri to Gehuras	2.85
4	Betul	Ghodadongri	Ghuggi to Chopna	2.25
5	Betul	Ghodadongri	Vikrampur to Ghughari	1.55
6	Betul	Amla	Parsoda to Rambhakhedi	1.50
7	Betul	Amla	Amla Bordehi Road to Rateda Khurd	1.45
8	Betul	Amia	Tarodakala to Kacharboh	2.85
9	Betul	Amla	Barangwadi to Kothiya Raiyat	4.20
10	Betul	Amla	Somlapur to Pastlaimal	4.25
11	Betul	Multai	Multai Bordehi Road to Temjhira (B)	2.50
12	Betul	Multai	Barkhed - Jam Road to Siladehi	1.50
13	Betul	Multai	Mahatpur to Khadakwar	2.20
14	Betul	Multai	Jam to Buwalkhapa	3.00
15	Betul	Multai	Mulitai Chhmdwara Sn to Dunai	1.85
16	Betul	P. Pattan	Bisnoor Jogikheda (T-07) Road to Kunda	2.80
17	Betul	P. Pattan	Masod-Ghan Road to Khediramoshi	1.00
Sub Total				41.7
1	Bhind	Raun	Jaitpura Guda Road to Lidhora	1.15
2	Bhind	Raun	Ucha Road to Lachoor	2.40
3	Bhind	Lahar	Ajnar Road to Rohani Singh Ka Pura	3.00

No	Division/ District	Block	Road Name	Length (Km)
4	Bhind	Lahar	Lahar Amayan Road to Dhohar	2.00
5	Bhind	Lahar	Lahar Seoda Road to Harpura	0.90
6	Bhind	Lahar	Kuthar Road to Khurd	2.20
7	Bhind	Lahar	Daboha Khajuri Road to Dharampura	2.20
8	Bhind	Lahar	Daboha Khajuri Road to Bagheri	4.00
9	Bhind	Lahar	Ratanpura Alampur Road to Chadraua	5.00
10	Bhind	Mehgaon	Jawasa Piphadi Road to Shayampura	2.30
11	Bhind	Mehgaon	Gawalior Etawa Road to Gishakpura	1.20
12	Bhind	Mahegaon	Gawalior Etawa Road to Vijaypura	1.25
13	Bhind	Mehgoan	Javasa Pipahadihed Road to Kheriya	1.55
14	Bhind	Mehgoan	Mehgaon Murena Road to Tejpora	2.80
15	Bhind	Gohad	Charenta (Karwas) Road to Madanpur	3.25
16	Bhind	Gohad	Gohad Mou Road to Silhona	2.10
17	Bhind	Gohad	Badagarh Road to Bankepura	2.20
18	Bhind	Gohad	Guhiser Road to Adupura	1.50
19	Bhind	Gohad	Ratva Road to Gumara	3.80
	Sub Total			44.8
1	Chhatarpur	Bijawar	Ragoli to Auriya	3.10
2	Chhatarpur	Bijawar	T-10 to Dilari	1.85
3	Chhatarpur	Rajnagar	Ganj Jhamtulli to Rampura	2.15
4	Chhatarpur	Rajnagar	Rajnagar Chhatarpur to Kota	4.50
5	Chhatarpur	Rajnagar	Benigunj Road to Bamnora	3.70
6	Chhatarpur	Badamalhara	Awarmata Road to Sorai	1.78
7	Chhatarpur	Badamalhara	Tikamgarh Shahgarh Road to Amarwan	2.88
8	Chhatarpur	Badamalhara	Dharampura to Piprakala	1.80
9	Chhatarpur	Badamalhara	Badamalhara Ghuwara to Baraj	1.70
10	Chhatarpur	Badamalhara	Dhanguwan to Hardhota	3.15
11	Chhatarpur	Chhatarpur	T-10 to Sigon	1.00
12	Chhatarpur	Chhatarpur	T-06 to Gonchi	2.20
13	Chhatarpur	Chhatarpur	T-01 to Shaymra	3.60
14	Chhatarpur	Chhatarpur	T-02 to Palotha	1.65
15	Chhatarpur	Chhatarpur	T-09 to Piprokala	2.40
16	Chhatarpur	Chhatarpur	T-03 to Ataniya	3.28
17	Chhatarpur	Laundi	Laundi Mahoba to Itwa	1.00
18	Chhatarpur	Nowgong	T 10 (Joran) to Deotha	4.93
19	Chhatarpur	Nowgong	T 09 to Thatthewra	0.75
	Sub Total			47.42
1	Chhindwara	Parasia	Kachram To Damuamal	2.13
2	Chhindwara	Sousar	Satnur T01 T0 Malegaon	6.70
3	Chhindwara	Harrai	Tharwa To Chhata	5.35
4	Chhindwara	Harrai	L110 Kamthi Kareli Rd To Karaghat	3.03
5	Chhindwara	Chourai	Bamanwara To Mour	2.08
6	Chhindwara	Mohkhed	Hirawadi-Dhagdiyamal Road (L027) To Chourai	1.30
7	Chhindwara	Parasia	Chhabadi To Bijori Khurd	2.60
8	Chhindwara	Sousar	Borgaon To Jamlapani -2	2.45
9	Chhindwara	Pandhurna	Pandhurna(T04) To Kamthikhurd	2.00
10	Chhindwara	Junnardeo	Bilawar Kala To Junapani	4.00

No	Division/ District	Block	Road Name	Length (Km)
11	Chhindwara	Junnardeo	Bhamanwara To Ramnagri	2.23
12	Chhindwara	Junnardeo	Bilawarkhurd To Patniya	1.80
13	Chhindwara	Junnardeo	Dungariya Bhardagrah (Chunrichougan) to Brajpura	3.53
14	Chhindwara	Junnardeo	Unchetemru (T13) To Dhannor	2.83
15	Chhindwara	Junnardeo	Barelipar To Dhamniya	1.30
16	Chhindwara	Junnardeo	T05 (Nimoti) To Mandla	2.09
17	Chhindwara	Junnardeo	Ghurrekhurremau To Harrapathar	3.95
18	Chhindwara	Chourai	Main Road Km 112 (Salkani) To Bilanda	2.10
19	Chhindwara	Chourai	T01 To Hathni	2.10
20	Chhindwara	Chourai	T01 Kunda To Bichhuwa	1.30
21	Chhindwara	Mohkhed	Jam To Umriyadalel	0.90
22	Chhindwara	Chhindwara	T10 To Chhabri	3.00
	Sub Total			58.76
1	Datia	Bhander	I.P.S. Road To Charai (Tendot To Semaha)	3.75
2	Datia	Bhander	Bhander Sarsai Road (Khiriya Sahab) to Novai (Bhander Sarsai Road to Novai)	2.00
3	Datia	Bhander	Bhander Rd. To Sahjoura (Berachh to Ajitpura)	4.00
4	Datia	Seondha	Kulaith Rd.To Jaswantpura (Indergarh Pichore Road To Jaswantpura)	4.95
5	Datia	Seondha	Senthri (Parsodagujer) Road to Fatehpur	2.25
6	Datia	Seondha	Datia-Seondha Mau (Ikona) Road To Thaili	2.25
7	Datia	Seondha	Bhaguapura Alampur Road To Maliyapura (Datia Mau Road To Maliyapura)	3.20
8	Datia	Seondha	Unchiya Tiraha To Jaura (Indergarh Kamad Road (Bagpura) Road To Jaura)	2.90
	Sub Total			25.3
1	Dewas	Dewas	Tolapura (Siroliya) To Sutarkheda	6.35
2	Dewas	Dewas	Mirkhedi To Khatamba (Kankund)	4.10
3	Dewas	Dewas	Sumarkheda To Maxi Rd 18 Km	1.02
4	Dewas	Dewas	Nagora To Tigariya Road	1.60
5	Dewas	Sonkach	Nanadharakhedi To Nevari Road	1.83
6	Dewas	Sonkach	Kachnariya To Rajapur Road	0.75
7	Dewas	Sonkach	Baroli To Babai Road (Oad)	2.10
8	Dewas	Sonkach	Kharsi (Pardi Kheda) To Bhopal Road	1.10
9	Dewas	Tonkhurd	Vijaygarh Muriya To Chaubara Road	2.87
10	Dewas	Tonkhurd	Jasmiya To Ratankhedi	2.38
11	Dewas	Bagli	Udainagar To Patadiya (Seevanpani)	3.50
12	Dewas	Bagli	Premgarh (Bawadikheda) To Udaynagar Punjapura	4.30
13	Dewas	Bagli	Sadipura Road To Bavaliya	3.80
14	Dewas	Bagli	T-06 (Punjapura) To Kewtiapani	1.40
15	Dewas	Bagli	Badiamandu Road (Mana Pipaliya) To	2.90

No	Division/ District	Block	Road Name	Length (Km)
			Dhekiya (Mendia)	
16	Dewas	Bagli	Pandutalao To Bhadak (Sitapuri)	4.00
17	Dewas	Khategaon	Mola To Sannod (Sukardi)	3.75
18	Dewas	Khategaon	Kana Bujurg To MDR(T05) (Rajor)	2.40
19	Dewas	Khategaon	Guradiya To NH-59 A	1.88
20	Dewas	Kannod	MDR To Chichhi (Pangri)	1.30
21	Dewas	Kannod	Nanasa To Amoda (Surani)	3.90
22	Dewas	Kannod	Kusmaniya To Devsinghiya (Kitiya)	2.00
23	Dewas	Kannod	MDR To Bamni Bujurg	2.70
24	Dewas	Kannod	MDR (Dabri Bujurg) To Mehndul	3.10
25	Dewas	Kannod	Kataphod (Bhayli) To Chorwra	1.90
26	Dewas	Kannod	Kannod To Nagjhiri (Raipura)	3.50
27	Dewas	Kannod	MDR To Nayapura	3.10
	Sub Total			73.53
1	Guna	Bamori	L085-T-04 Sen Board Hamirpur To Churela	1.20
2	Guna	Bamori	L089-T-04 Sen Board Hamirpur To Baniyani Hamirpur	2.30
3	Guna	Bamori	L095-T-05 Fatehgarh-Lakhnakhedi Rd To Bhilkheda	5.20
4	Guna	Chachoda	L111-T-09 Kumbraj-Badod Sanai Rd To Jhareda	3.70
5	Guna	Chachoda	L108-T-08 Kumbraj-Miragwas Rd To Amlya	2.20
6	Guna	Chachoda	L064-T-06 Chachoda Manohar Thana Rd To Piplyamoti	1.50
7	Guna	Chachoda	L066-T-06 Chachoda Manohar Thana Rd To Maheshpura	2.00
8	Guna	Chachoda	L143-T-010-Barod-Chhabra Rd To Behdabeh	1.20
9	Guna	Chachoda	L031-T-01 Khatoli-A.B.Road To Sagar	2.80
10	Guna	Chachoda	L070-T-07 Chachoda-Miragwas To Kusmpura	1.50
11	Guna	Chachoda	L043-T-03 Binagnaj-Teligaon To Suthaliya To Barkhua	4.00
12	Guna	Chachoda	L084-T-011 Kubmraj-Batawada Rd to Kanakhedi	2.80
13	Guna	Chachoda	L093-L-081 Dedla To Muhansakhurd	3.80
14	Guna	Guna	L139-T-01 A. B. Road To Agra	8.40
15	Guna	Guna	L031-L-030 Manpur To Punamkhedi	3.60
16	Guna	Raghogarh	L135-T-04 A.B. Raod-Janjali-Maksudangarh- Banskhedhi To Karela	4.50
17	Guna	Raghogarh	L107-T-04 A.B. Raod-Janjali-Maksudangarh- Banskhedhi To Kherkheda	2.00
18	Guna	Raghogarh	L119-T-05 Ukawad-Naseerpur-Suthaliya Road To Mahuakheda	3.10
	Sub Total			55.8
1	Hoshangabad	Babai	Babai-Nasirabad Rd. (Ganera) to Gondalwada	2.200

No	Division/ District	Block	Road Name	Length (Km)
2	Hoshangabad	Babai	SH-22 To Bamhori Kalan	1.750
3	Hoshangabad	Babai	SH-22(Guradiya) To Kanskhedha	3.100
4	Hoshangabad	Babai	SH-22 To Meghli	1.350
5	Hoshangabad	Hoshangabad	Silari To Rupapur	2.700
6	Hoshangabad	Hoshangabad	Dolariya-Tigaria Road To Kharkhedi	1.075
7	Hoshangabad	Kesla	Itarsi-Dharamkundi Rd. To Nazarpur	4.500
8	Hoshangabad	Pipariya	SH-19 To Dabka	4.250
9	Hoshangabad	Pipariya	SH-22 (Hathwas-Kareli) Rd. To Tada	3.500
10	Hoshangabad	Pipariya	SH-19 (Seoni) To Sarra Kishore	1.725
11	Hoshangabad	Pipariya	SH-22 To Mahalwada	1.900
12	Hoshangabad	Pipariya	SH-22 To Rajola	1.250
13	Hoshangabad	Pipariya	SH-22 To Semri Randhir	2.950
14	Hoshangabad	Seoni Malwa	Dhamasa To Temla Kalan	2.150
15	Hoshangabad	Seoni Malwa	Seoni Malwa Rd. To Khal	1.850
16	Hoshangabad	Seoni Malwa	Seoni Malwa Rd. To Pathada	3.400
17	Hoshangabad	Sohagpur	SH-22 To Khapa Rd. To Singwada	3.450
	Sub Total			43.1
1	Jabalpur	Kundam	T07 To Dadargawan	2.00
2	Jabalpur	Kundam	T03 To Sanjari	2.00
3	Jabalpur	Panagar	Beerner To Saraswahi	0.95
4	Jabalpur	Patan	MDR 1 To Khairi	0.51
5	Jabalpur	Shahpura	L-049 Gadapiariya(NH-12) To Katangi	2.25
6	Jabalpur	Jabalpur	Purwa To Junwani	1.10
7	Jabalpur	Kundam	T07 To Batai	4.15
8	Jabalpur	Kundam	T-02 To Khari	0.85
9	Jabalpur	Patan	Konikala To Itwa Imlia	4.80
10	Jabalpur	Patan	Sh-37 To Ganj Khamaria	2.80
11	Jabalpur	Patan	MDR To Timari	0.65
12	Jabalpur	Shahpura	Managawan (NH12) To Imaliya 18	3.40
13	Jabalpur	Sihora	Kitola Panumariya To Padriakala	3.20
14	Jabalpur	Sihora	Sihora Silondi Road To Bahtuli	2.65
	Sub Total			31.31
1	Katni	Badwara	PWD Rd To Bhadawar	3.1
2	Katni	Badwara	NH-78 To Chhaphani	3.5
3	Katni	Badwara	Pwd Rd To Gopalpur	6.3
4	Katni	Badwara	Harwah To Nipaniya	1.6
5	Katni	Badwara	SH-14 To Khirheni	1.5
6	Katni	Bahoribandh	Neemkheda To Bhatgawa	1.6
7	Katni	Bahoribandh	Patori To Magela	1.2
8	Katni	Deemar Kheda	Pakariya To Baroda	1.9
9	Katni	Deemar Kheda	Bamhani To Khandwara	10.8
10	Katni	Katni	NH-78 To Khirwa	4.2
11	Katni	V.Garh	Kanti To Padwai	1.1
12	Katni	V.Garh	Chora To Chori	2.5
	Sub Total			39.3
1	Khandwa	Khandwa	Khandwa-Kalmukhi Rd To Baliyapura	3.50
2	Khandwa	Khandwa	Matpur To Jinwania Ala Road	3.60
3	Khandwa	Pandhana	Chickheda To Singot Road	3.50
4	Khandwa	Punasa	Badhani To Narmadanagar- Punasa Rd	2.20

No	Division/ District	Block	Road Name	Length (Km)
5	Khandwa	Punasa	Awaliya (Fv) To Jalwa Bujurg Road	2.83
6	Khandwa	Punasa	Borani To Kenood Road	4.82
7	Khandwa	Punasa	Dait To Mundi Atootkhas Road	2.30
8	Khandwa	Punasa	Dhawadiya To Kothi Road	2.46
	Sub Total			25.21
1	Khargone	Bhagwanpura	Kariyapura To Lalpura	4.90
1	Khargone	Barwah	Bhogawa Nipani To Sanghavi	5.10
2	Khargone	Barwah	Jethway - Berphad Bujurg To Jujakhedi	1.90
3	Khargone	Barwah	Badi Khargone Road To Bandhikhar	1.50
4	Khargone	Barwah	Khandwa Indore S.H.27 To Lohari	4.90
5	Khargone	Barwah	Sainik Nagar To Jamaniya	1.25
6	Khargone	Barwah	Bagod To Methawan	3.80
7	Khargone	Barwah	Padliya Bujurg To Lalpura Road	2.40
8	Khargone	Barwah	Bagod To Dolatpura	1.70
9	Khargone	Barwah	Methwan To Kakatti	3.00
10	Khargone	Barwah	Khedi To Ramkula	3.00
11	Khargone	Barwah	Barud To Nandgaon	1.04
12	Khargone	Barwah	Kundiya To Aroda	2.20
13	Khargone	Kasrawad	Mukandpura To Mathlay	2.70
14	Khargone	Kasrawad	Kasrawad Khurd To Ahilyapura	3.20
	Sub Total			37.69
1	Narsinghpur	Narsinghpur	NH.26 Km. 352 To Agariya	1.00
2	Narsinghpur	Narsinghpur	Ghapindrai To Malhaua	2.10
3	Narsinghpur	Narsinghpur	Bhaiua To Pala	1.10
4	Narsinghpur	Narsinghpur	S.N. 22 Km 76 To Sahajpura	1.00
5	Narsinghpur	Narsinghpur	Ghatpindrai Road To Jhirikhurd	1.60
6	Narsinghpur	Narsinghpur	Nayagaon To Badguan	3.35
7	Narsinghpur	Narsinghpur	Dudwara To Lighari	1.10
8	Narsinghpur	Narsinghpur	Khapa (Dh) To Gheghra	5.50
9	Narsinghpur	Narsinghpur	Ranipariya Rd To Nawalgaon	2.00
10	Narsinghpur	Narsinghpur	Chandpura To Gadariya Kheda	2.80
11	Narsinghpur	Narsinghpur	Kurpa To Jhar-Kurpa	3.00
12	Narsinghpur	Narsinghpur	Nawalgaon To Barurewa	4.40
13	Narsinghpur	Gotegaon	Nagwara To Katkuhi	3.60
14	Narsinghpur	Gotegaon	Simri Bandhi Road To Ankhiwara	1.00
15	Narsinghpur	Gotegaon	O.B. Road To Tikari	1.70
16	Narsinghpur	Gotegaon	Barheta Road To Gadawara Khera	2.75
17	Narsinghpur	Gotegaon	Rohiya Road To Shedpipariya	4.35
18	Narsinghpur	Gotegaon	O.B. Road To Belkhedi	2.77
19	Narsinghpur	Gotegaon	Deonagar To Rajakacchar	3.40
20	Narsinghpur	Gotegaon	Barehta Rd To Andhyari	2.50
21	Narsinghpur	Gotegaon	Kunda Road To Gotegaon Kheda	1.05
22	Narsinghpur	Gotegaon	Jamuniya Road To Muwar	2.40
23	Narsinghpur	Gotegaon	Dhuwa Road To Koregaon	2.90
24	Narsinghpur	Gotegaon	Mehas Road To Umara	1.70
25	Narsinghpur	Gotegaon	O.B. Road To Deogaon	2.80
26	Narsinghpur	Gotegaon	Gourtala To Majni	2.50
27	Narsinghpur	Gotegaon	Chandankheda To Nandiya	3.28
28	Narsinghpur	Kareli	Rakai To Basedi	4.40

No	Division/ District	Block	Road Name	Length (Km)
29	Narsinghpur	Kareli	Sas Bahu (Amheta) To Pipariya (A)	3.75
30	Narsinghpur	Kareli	Singhpur Road To Gwari Kala	2.80
31	Narsinghpur	Kareli	Kosam Kheda To Mehgawan	2.70
32	Narsinghpur	Saikheda	T08 To Sokalpur	4.70
33	Narsinghpur	Saikheda	Saikheda To Khairua	5.50
34	Narsinghpur	Saikheda	Saikheda To Pithras	7.00
	Sub Total			98.5
1	Rajgarh	Narsinghgarh	Eklera Kurawar Road To Sehat Khedi	4.60
2	Rajgarh	Narsinghgarh	Sujalpur - Pachor Road To Karondi	2.30
3	Rajgarh	Narsinghgarh	Sukli To Guradiya	3.00
4	Rajgarh	Sarangpur	AB. Road To Bhura Khedi	3.20
5	Rajgarh	Sarangpur	Chatkiya To Mehrimoti	1.30
6	Rajgarh	Sarangpur	Sarangpur Sandawata Road To Digwad	2.10
7	Rajgarh	Sarangpur	Lima Chouhan To Pathari Jagir	4.50
8	Rajgarh	Sarangpur	Bhiyana To Dedla	2.00
9	Rajgarh	Sarangpur	Khujner (Sarangpur) - Gulawata Road To Echiwada	1.90
10	Rajgarh	Sarangpur	A B Road To Nipaniya Ruwala	1.90
11	Rajgarh	Sarangpur	Mau (A.B. Road) To Dingalpur	3.50
12	Rajgarh	Sarangpur	Padliya - Mata To Bapchya	4.18
13	Rajgarh	Sarangpur	Pachor Machalpur Road To Bhilkheda	2.65
	Sub Total			37.125
1	Ratlam	Piploda	Jaora Amba Road To Ajampurdodiya	2.50
2	Ratlam	Ratlam	Mangrol Road To Kaharakhedi	1.32
3	Ratlam	Jaora	Ringnod To Kamliya	3.70
4	Ratlam	Jaora	Netawali Rola Road To Sujanpura	1.70
5	Ratlam	Piploda	Sherpur To Ummedpura	2.50
6	Ratlam	Ratlam	Dosigaon To Borana	1.28
7	Ratlam	Ratlam	Pritam Nagar To Bhilkhedi	3.20
8	Ratlam	Ratlam	S.B. Road To Aiwaraya	1.67
9	Ratlam	Ratlam	Sarwad To Surjapur	2.63
	Sub Total			20.5
1	Rewa	Rewa	Rewa Tamara Road To Padiya	2.80
2	Rewa	Rewa	Teekar Road To Dhophkhari 299	4.20
3	Rewa	Sirmour	L-083 (Badagawan) To Bela	5.00
4	Rewa	Sirmour	Tilkhan To Guhiya	3.10
5	Rewa	Teonther	Manika To Lokhawar	1.00
6	Rewa	Teonther	Khatkhari Khalan To Khatikhari Khurd	1.00
7	Rewa	Mauganj	Ratangawan To Matiyari	4.00
8	Rewa	Mauganj	Harraimudahan To Umarishripati	4.60
9	Rewa	Gengeo	Lalgaon To Devhata	2.00
10	Rewa	Gengeo	Anterila To Pondi	2.55
11	Rewa	Gengeo	Raghnathganj To Dhabaiya Fauji -255	2.50
12	Rewa	Gengeo	Joraut To Hinauta	2.70
13	Rewa	Hanumana	Khatkhari To (Ghogham) Uskakothar	13.00
14	Rewa	Hanumana	Majhagawan To Alhawa	2.00
15	Rewa	Hanumana	Domodar Garh (Belha) To Koidar	4.00
	Sub Total			54.45
1	Sagar	Malthone	Jhikni To Barodiya	2.13

No	Division/ District	Block	Road Name	Length (Km)
2	Sagar	Khurai	Karaiya Pmgsy App Road To Bilaiya	1.80
3	Sagar	Khurai	Karaiya Pmgsy App Road To Jharai	0.53
4	Sagar	Khurai	MDR To Barkheri	3.20
5	Sagar	Khurai	MDR Dhanora To Karai	2.00
6	Sagar	Khurai	MDR Muriya To Semra Ghat	2.18
7	Sagar	Shahgarh	T 04 To Dhawara	5.58
8	Sagar	Shahgarh	T 05 To Simariya Kala	0.96
9	Sagar	Shahgarh	T 04 To Jalampur	0.80
10	Sagar	Shahgarh	Khatorakala To Lidhora	2.35
11	Sagar	Jaisinagar	Sh15 To Banjariya	1.92
12	Sagar	Jaisinagar	Jaisinagar To Jera	6.20
13	Sagar	Jaisinagar	T02 To Tekapar	1.70
14	Sagar	Jaisinagar	Kallai To Rampura	1.30
15	Sagar	Rehli	Patana To Patti Bargaon	1.70
16	Sagar	Rehli	Samal Khiriyia To Pipargour	1.50
	Sub Total			35.843
1	Seoni	Seoni	Lakhanwada Kedparpur (T20) To Simariya	1.75
2	Seoni	Seoni	Pindrai (T07) To Jorawari	1.50
3	Seoni	Seoni	Hinotiya To Narwakheda	1.70
4	Seoni	Seoni	T-18 Seoni Chhindwada To Chargaon	2.90
5	Seoni	Seoni	Binjhawada NH-7 By Pass (T10) To Patra	3.65
6	Seoni	Seoni	Chandouri Khurd To Nakotiya	3.23
7	Seoni	Seoni	T-21 (Sapapar) To Gadarwara	4.90
8	Seoni	Seoni	NH-7(T01) To Gorakhpur	4.20
9	Seoni	Seoni	Karirat To Gundrai	4.24
10	Seoni	Seoni	Seoni Amarwada (T21) To Panjra	4.10
11	Seoni	Seoni	Jamuniya To Bineki	2.10
12	Seoni	Seoni	NH-7 Chandanwadakhurd (T02) To Bisapur	1.10
13	Seoni	Seoni	Gopalganj To Datni	1.85
14	Seoni	Seoni	Marjhor To Sakarda	2.10
15	Seoni	Seoni	Bandol To Pipariya	2.43
16	Seoni	Seoni	Singori To Katarwara	0.80
17	Seoni	Seoni	NH-7 Chandanwada Khurd (T02) To Bandra	0.70
18	Seoni	Seoni	Thanwari (T02) To Radhai	2.20
19	Seoni	Seoni	Potalpani To Jatlapur	3.63
20	Seoni	Seoni	Lakhanwada (T18) To Pindrai	3.20
21	Seoni	Barghat	Lalpur (T04) To Ulat	2.77
22	Seoni	Dhanora	Khirkhiri(Amo) To Amoli	3.90
23	Seoni	Ghansore	Karithoon To Roto	4.20
24	Seoni	Ghansore	Kudwari To Chamarwah	2.60
25	Seoni	Keolari	Jhitara To Sindradehi	1.20
26	Seoni	Keolari	Jhola To Bhadutola	1.05
27	Seoni	Keolari	Sunwara To Khapa	0.78
28	Seoni	Lakhnadone	T-01 To Mohgaon Khurd	3.40
	Sub Total			72.175

No	Division/ District	Block	Road Name	Length (Km)
1	Shajapur	Shujalpur	Bankakhedi To Harrai Kalan Road	3.80
2	Shajapur	Shujalpur	Kamalia To Nandsura Road	0.55
3	Shajapur	Kalapipal	Sadan Khedi To Kalapipal Kurawar Road Km16	2.00
4	Shajapur	Kalapipal	Kohara To Kalapipal Kurawar Road Km2	2.20
5	Shajapur	Kalapipal	Bisamkhedi To Arandia	4.50
6	Shajapur	Agar	Malikhedi To Pat - Agar Road (Km. 119)	2.50
7	Shajapur	Agar	Badgon To Pat - Agar Road (Km, 111/8)	3.10
8	Shajapur	Agar	Kalmoi To Chandan Gaon	2.42
9	Shajapur	Agar	Agar - Sarangpur Road Km. 30 To Mathurakhedi	2.22
10	Shajapur	Susner	Dehriya Soyat To Diwankhedi	1.75
11	Shajapur	Susner	Indore - Kota Road (Km. 160/8) To Mangishpur	2.55
12	Shajapur	Susner	Mehatpur To Patpada	2.35
13	Shajapur	Susner	Maina To Kalriya	1.73
14	Shajapur	Susner	Indore - Kota (Km.146/4) To Kadia	1.00
15	Shajapur	Susner	Indore - Kota (Km. 155/4) To Nipaniya	2.00
16	Shajapur	Nalkheda	Gujarkhedi To Eklera	2.20
17	Shajapur	Nalkheda	Bagawad To Kakadiya To Nanakhedi Gurjar	3.50
18	Shajapur	Nalkheda	Kachanariya To Bisani	2.30
	Sub Total			42.67
1	Shivpuri	Badarwas	L030 Sajai To Gagoni	4.70
2	Shivpuri	Badarwas	Amhara Dehrada Isagar Road (L038) To Bhagoriya	1.20
3	Shivpuri	Badarwas	L051 (Deharda Isagar Road) To Bamorekhurd	2.00
4	Shivpuri	Badarwas	L060 Ab Road To Banskheda	3.70
5	Shivpuri	Badarwas	L061 Ab Road To Rijodi	5.00
	Sub Total			16.6
1	Singrauli	Waidhan	Gadahra To Rajbandh	1.750
2	Singrauli	Waidhan	Pondi Path To Kamai	5.50
3	Singrauli	Waidhan	Gadahra To Chokara	2.40
4	Singrauli	Waidhan	Hardi Road To Dhatura Phokara	6.04
5	Singrauli	Waidhan	Khatkari To Barauha	1.20
6	Singrauli	Chitrangi	Geer To Badnai	5.40
7	Singrauli	Chitrangi	Khatai To Chikani	4.40
8	Singrauli	Chitrangi	Barmani To Lotan	2.60
9	Singrauli	Chitrangi	Dhani To Pipari	5.80
10	Singrauli	Chitrangi	Ghoghara To Agrahawa	5.05
11	Singrauli	Chitrangi	Bagaiya To Sirgudi	10.05
12	Singrauli	Chitrangi	Mohgadhi Road To Butwa	5.725
13	Singrauli	Chitrangi	Deora To Piparjhar	4.41
14	Singrauli	Chitrangi	Kulhiya To Akla	3.40
15	Singrauli	Chitrangi	Katarihar Road To Saketi	7.00
16	Singrauli	Chitrangi	Ghoghara To Patehara	2.00

No	Division/ District	Block	Road Name	Length (Km)
17	Singrauli	Chitrangi	Mohariya Road To Gairuai	3.62
18	Singrauli	Chitrangi	Bagaiya Road To Gawardehi	5.34
19	Singrauli	Deosar	Main Road To Bamhani Alias	3.45
20	Singrauli	Deosar	Parsohar To Jaghat	1.70
21	Singrauli	Deosar	Nayatola To Madraich	5.775
22	Singrauli	Deosar	Saraundha To Daudol	1.525
23	Singrauli	Deosar	Parsohar To Chandreh	3.50
24	Singrauli	Deosar	Saraundha To Bhaisahun	7.10
25	Singrauli	Deosar	Gajaradai To Patharidah	3.65
26	Singrauli	Deosar	NH-75 (Atarwa) To Songarh	4.625
27	Singrauli	Deosar	Saraundha To Madwa	1.025
28	Singrauli	Deosar	Jhundihawa To Ghaghitola	2.600
29	Singrauli	Deosar	Kundwar To Sanda	7.230
30	Singrauli	Deosar	NH-75 To Langhadand	2.500
	Sub Total			126.365
1	Ujjain	Badnagar	Badanagar Runija Road To Pitlawdiya	1.60
2	Ujjain	Badnagar	Badnagar Kesor Road To Birgodanadu	1.63
3	Ujjain	Badnagar	Badanagar Runija Road To Maswadiya Dhar	5.75
4	Ujjain	Badnagar	Amlawad Bhika To Jamalpura	2.10
5	Ujjain	Badnagar	Bhidawad To Rawadiya Kalan	3.10
6	Ujjain	Khachrod	Barthoon To Bramhankheda	5.33
7	Ujjain	Khachrod	Madawada To Barlai (Khachrod Road To Barlai)	5.05
8	Ujjain	Khachrod	Khachrod Ratlam Road To Nandwasla	2.97
9	Ujjain	Khachrod	Banjari Road To Kutlana (Batlawadi Ghudawan Road To Kutlana)	2.05
10	Ujjain	Khachrod	Kadiyali To Sekdi Sultanpur (Part-I)	1.25
11	Ujjain	Ujjain	Kadacha To Kadchhali	2.20
12	Ujjain	Ujjain	Bolasa To Khokariya	4.50
13	Ujjain	Ujjain	Dewas Road To Bolasa	2.45
14	Ujjain	Ujjain	Ujjain To Kankariya - Chirakhan To Brijrajkhedi	3.05
15	Ujjain	Ujjain	Tajpur To Umriya - Jagir	4.05
16	Ujjain	Ujjain	Harnawada To Kasampur	4.10
17	Ujjain	Ujjain	Ring Road To Nahariya	0.90
18	Ujjain	Ujjain	Ujjain - Maxi To Khajuria - Kumawat	1.95
19	Ujjain	Ghattiya	Malikhedi To Kalesar	1.05
20	Ujjain	Ghattiya	T 05 (Outer Ring Road) To Utesara	1.85
21	Ujjain	Mahidpur	Makla Borkheda Now Road To Khedliya Manpur	0.90
212	Ujjain	Mahidpur	Araniya Najik Mahidpur Marg To Bagala	3.50
223	Ujjain	Mahidpur	Bolkheda Now (C) to Mahudiya - Lasudiya Goyal (C)	7.80
24	Ujjain	Mahidpur	Lasudiya Mansoor To Khajuriya Mansoor	2.60
235	Ujjain	Tarana	Rupakhedi Laxmipura Road To Tilawdi	1.40
246	Ujjain	Tarana	Tarana-Ujjain-Road To Rajpura	2.45
275	Ujjain	Tarana	Kanthadi To Godadi	1.50

No	Division/ District	Block	Road Name	Length (Km)
268	Ujjain	Tarana	Rupakhedi Laxmipura Road To Mundli	1.10
279	Ujjain	Tarana	Kanasiya To Laxmipura Rupakhedi To Palduna	0.50
2830	Ujjain	Tarana	Rawan Khedi To Tejla Khedi	3.50
2934	Ujjain	Tarana	Tarana To Sala Khedi	2.50
302	Ujjain	Tarana	Rupakhedi Laxmipura Road To Bijan Kheda	1.50
313	Ujjain	Tarana	Laxmipura To Rupakhedi To Pankhedi	0.75
324	Ujjain	Tarana	Kapeli To Umrajher	3.20
335	Ujjain	Tarana	Barkheda To Surajpura	0.75
346	Ujjain	Tarana	Tarana Berchhi Sunwa Goun	3.65
357	Ujjain	Tarana	Pat - Rupakhedi Road To Pipliya Bazaar (Dhabala Hardu To Khaka-Nisultan)	2.20
Sub Total				936.273
1	Umaria	Karkeli	Kgrk Road To Karaundi	1.80
2	Umaria	Karkeli	Bandhwatola To Baghwar	2.40
3	Umaria	Karkeli	Kaudiya To Bansa	2.05
4	Umaria	Karkeli	Karaundi To Birhuliya	1.60
5	Umaria	Karkeli	Tammannara To Urdani	6.20
6	Umaria	Karkeli	Amari-Mardari Road To Aaganhudi	1.60
7	Umaria	Karkeli	Pathari Kalan To Bajakund	3.10
8	Umaria	Karkeli	Kgrk Road To Raghobpur	1.10
9	Umaria	Karkeli	Kgrk Road To Sahijana	2.30
10	Umaria	Karkeli	Kgrk Road (Singhpur) To Semariya	2.45
11	Umaria	Karkeli	Birsinghpur To Jhanpi	1.00
12	Umaria	Karkeli	Tammannara To Jamuniya	7.70
13	Umaria	Karkeli	Bilaspur To Manikpur	2.40
14	Umaria	Karkeli	Dhanwahi To Lagwari	5.90
15	Umaria	Karkeli	Karri-Bodli Road To Tikariya	4.50
16	Umaria	Karkeli	Kalda To Bichhiya	3.30
17	Umaria	Karkeli	Uphari To Ujaniya	3.10
18	Umaria	Karkeli	Pathari Kalan To Kataria	1.95
19	Umaria	Karkeli	Patrai To Atariya	3.30
20	Umaria	Karkeli	Tummadar To Amuwari	1.80
21	Umaria	Karkeli	Akhrar To Gura	4.70
22	Umaria	Karkeli	Khalekhatai To Tikurakhatai	3.70
23	Umaria	Karkeli	Baherwah To Barmani	1.30
24	Umaria	Karkeli	Nimha To Chhataini	2.70
25	Umaria	Karkeli	Akhrar Bilaspur Road To Kotalde	2.70
26	Umaria	Karkeli	Majmani Khurd To Ginjari	2.50
27	Umaria	Karkeli	Uchehra To Akmaniha	5.45
28	Umaria	Karkeli	Jhanpi To Tikurapathari	10.70
29	Umaria	Manpur	Dhamokhar Bijauri Road To Mardari	5.45
30	Umaria	Manpur	Semra To Semri	2.20
31	Umaria	Manpur	Karaundi Tola To Dongari Tola	2.51
32	Umaria	Manpur	Bagaiha To Salkhaniya	3.63
33	Umaria	Pali	Goira Road To Parsaura	2.40
34	Umaria	Pali	Chandpur To Baghannara	3.50

No	Division/ District	Block	Road Name	Length (Km)
35	Umaria	Pali	NH 78 To Marwa Tola	1.25
36	Umaria	Pali	S.M.Road To Balbai	1.60
37	Umaria	Pali	Pali Sundar Dadar Road To Kunkuni	0.90
	Sub Total			116.74
1	Vidisha	Nateran	Nateran To Khajuri Das	3.10
2	Vidisha	Nateran	Mahuta To Singrampur	2.20
3	Vidisha	Vidisha	Sunpura Road To Bais	1.25
4	Vidisha	Vidisha	Vidisha-Ahmadpur Rd. To Mungod	4.00
5	Vidisha	Vidisha	Sh-19 (Kagpur) To Kanari	3.30
6	Vidisha	Nateran	Nayagola Road To Narkheda Khadya	2.60
7	Vidisha	Vidisha	Khamkheda To Salaikhedi	3.20
8	Vidisha	Basoda	L165-Rojroo To Grahini	1.70
9	Vidisha	Basoda	L150-Karariya Jajgir To Pawai Kurwai	5.00
10	Vidisha	Basoda	L049-T01 To Kanjna	1.40
11	Vidisha	Basoda	L053-Behlot To Tabakkalpur	4.75
12	Vidisha	Basoda	L135-L134 To Chourawar	4.55
13	Vidisha	Kurwai	L139-T06 To Veerpur	1.98
14	Vidisha	Kurwai	L145-T06 To Pairakhedi	1.28
15	Vidisha	Kurwai	L104-Parsari To Sikandarpur	1.73
16	Vidisha	Kurwai	L026-Layara To Lachayara	6.45
17	Vidisha	Kurwai	L083-Bilakhedi To Simarghan	2.85
18	Vidisha	Kurwai	L101-T05 To Raimoodara	2.05
19	Vidisha	Kurwai	L042-T03 To Shyampur Gudawal	2.15
20	Vidisha	Kurwai	L153-T07 To Girwasa	3.80
21	Vidisha	Kurwai	L137-Mala To Karmedi	5.20
	Sub Total			64.54
	TOTAL			137781.8 636

State: ODISHA

No	Division/ District	Block	Road Name	Length (Km)
1	Balasore I	Nilgiri	Kansa- Kakudipal	2.50
2	Balasore I	Nilgiri	Telipal- Siarimal	1.50
3	Balasore I	Nilgiri	PWD - Khuntapaladiha	1.70
4	Balasore I	Nilgiri	PWD- Bholanal	3.03
5	Balasore I	Nilgiri	PWD- Sarupal	1.50
6	Balasore I	Oupada	PWD Road to Pinchhabania	4.30
7	Balasore I	Oupada	Dimichua - Harichandrapur	2.00
8	Balasore I	Remuna	Kuligaon - Gambharia	2.00
9	Balasore I	Remuna	Bhadrasahi- Gaudgaon	3.40
10	Balasore I	Basta	Kothia - Kuchuli	1.50
11	Balasore I	Balasore	NH 60 - Paramanandapur	3.00
12	Balasore I	Balasore	PWD Road- Kuradiha	2.00
13	Balasore I	Balasore	Salt Road- Dalsusa	2.00

No	Division/ District	Block	Road Name	Length (Km)
14	Balasore I	Balasore	NH60 - Belbaria	3.00
	Sub Total			33.43
1	Balasore II	Bahanaga	R.D. road to Kaharagohiri	5.60
2	Balasore II	Simulia	Dadhibamanpur to Parameswarapur	3.50
3	Balasore II	Simulia	Astia to Biranchipur	5.40
4	Balasore II	Khaira	Chakradharpur (RD road) to Krushnadaspur	3.50
5	Balasore II	Khaira	Soro Kupari PWD Road to Arjunpur	0.70
6	Balasore II	Khaira	Tudigadia to Rafayatpur	5.50
7	Balasore II	Simulia	Bari to Tirukha	3.70
	Sub Total			27.90
1	Bhadrak I	Tihidi	Barsar to Madhupur	5.00
	Sub Total			5.00
1	Bhadrak II	Bhadrak	Asura to Trisalpur	4.50
2	Bhadrak II	Bhadrak	PWD Road to D S Bindha	3.00
3	Bhadrak II	B.Pokhari	Barahanuapada	3.00
4	Bhadrak II	B.Pokhari	T2 to Mudhapada	3.00
5	Bhadrak II	Dhamangar	PWD Road to Dinajpur	3.70
6	Bhadrak II	Dhamangar	PWD Road to Tarabantia	2.70
7	Bhadrak II	B.Pokhari	(A) T2 to Nawarangapur	2.50
8	Bhadrak II	B.Pokhari	(B) T2 to Surubana	3.20
9	Bhadrak II	B.Pokhari	T1 to Sarapada	4.90
10	Bhadrak II	B.Pokhari	T3 to Bankamuhana	4.80
11	Bhadrak II	Chandabali	T3 to Pithiasenda	5.50
12	Bhadrak II	Basudavpur	PWD Road to Mishrapur	4.00
13	Bhadrak II	Basudavpur	(A) L42 to Kuali	5.50
14	Bhadrak II	Basudavpur	(B) T2 to Purusotampur	1.50
15	Bhadrak II	Basudavpur	PWD Road to Samia	1.50
16	Bhadrak II	Basudavpur	Eram Road to Olagada	6.50
17	Bhadrak II	Chandabali	Chardiha to Rajendrapalli	3.20
18	Bhadrak II	Chandabali	T6 to Kandisehi	2.20
19	Bhadrak II	B.Pokhari	T-1 to Uttarbad	4.00
20	Bhadrak II	Chandabali	Dosinga to Oramal	4.00
21	Bhadrak II	Basudavpur	PWD Road to Jignipur	4.00
22	Bhadrak II	Basudavpur	PWD Road to Bhoisahi	4.70
	Sub Total			81.90
1	Bolangir	Aglapur	RD road to Amarmunda (Road-A)	2.00
2	Bolangir	Aglapur	RD road to Pudapadar (Road-B)	3.33
3	Bolangir	Aglapur	N.H.-201 to Danipali (Road-C)	2.00
4	Bolangir	Aglapur	RD road to Pandkital (Road-D)	1.41
5	Bolangir	Belpada	RD Road to Daramunda (Road-A)	3.25
6	Bolangir	Belpada	RD Road to Sunabahal (Road-B)	2.13
7	Bolangir	Bolangir	RD Road to Ramsingha (Road-A)	1.25
8	Bolangir	Bolangir	Baxiundar to Dhobaudar (Road-B)	2.50
9	Bolangir	Bolangir	Mayabarah to Uchhabahal (Road-C)	3.25
10	Bolangir	Bolangir	SH-42 to Bedtenlenpali (Road-A)	3.33
11	Bolangir	Bolangir	SH-42 to Khagsabahali (Road-B)	3.50
12	Bolangir	Bolangir	Bhudimuhan to Santenpali (Road-c)	2.30
13	Bolangir	Deogaon	PWD Road to Jamjharan	4.50
14	Bolangir	Gudvella	Dungibahal to Mandapala	5.20

No	Division/ District	Block	Road Name	Length (Km)
15	Bolangir	Gudvella	P.S Road to Sindurbahali	1.30
16	Bolangir	Khaprakhhol	Nandupala to Tumbipadar	2.30
17	Bolangir	Khaprakhhol	Bhaludunguri to Karlakutna(Road-B)	4.20
18	Bolangir	Khaprakhhol	Kariamal to Dudukipadar(Road-A)	2.30
19	Bolangir	Khaprakhhol	RD Road to Ambapali(Road-B)	3.60
20	Bolangir	Khaprakhhol	RD Road to Brahmani(Road-A)	2.40
21	Bolangir	Loisingha	NH-201 to Banjhipali (Road-A)	1.50
22	Bolangir	Loisingha	NH-201 to Karliput (Road-B)	2.00
23	Bolangir	Loisingha	RD road to Unchhabahali (Road-C)	3.00
24	Bolangir	Patnagarh	PWD Road to Kanheital	4.60
25	Bolangir	Patnagarh	PS Road to Kerbeda (Road-A)	1.45
26	Bolangir	Patnagarh	RD Road to Mandamahar (Road-B)	1.65
27	Bolangir	Patnagarh	RD Road to Bijamugar (Road-C)	1.00
28	Bolangir	Patnagarh	PS Road to Babejore (Road-D)	2.55
29	Bolangir	Puintal	NH-201 to Padiabahar (Road-A)	3.00
30	Bolangir	Puintal	RD Road to Khamarmunda (Road-B)	1.00
31	Bolangir	Puintal	Jamgaon RD to Kasurpali (Road-C)	1.50
32	Bolangir	Saintala	RD Road to Biratkani	1.00
33	Bolangir	Saintala	RD Road to Bhatasar	1.10
34	Bolangir	Saintala	TD RD Road to Jurabandha	0.78
35	Bolangir	Agalpur	RD Road to Gandpali	3.00
36	Bolangir	Khaprakhhol	PWD Road to Bendra	8.30
37	Bolangir	Saintala	Tikrapada RD Road to Dukelcharchar	2.60
38	Bolangir	Puintal	SH-14 to Bhalbuka	2.75
39	Bolangir	Patnagarh	Khuntsamalei to Daitarymunda	2.20
	Sub Total			101.03
1	Titlagarh	Muribahal	Sargul to Bayaudar	1.60
2	Titlagarh	Muribahal	Chanabahar chhak to Ledapadar	2.70
3	Titlagarh	Muribahal	Tentulikhunti to Karlapitha	3.10
4	Titlagarh	Muribahal	Jamkani to Limpara	1.20
5	Titlagarh	Muribahal	Asurmunda Chhak to Dudukapada	2.00
6	Titlagarh	Muribahal	Bijighat to Makhapali via: Sahajpani	1.80
7	Titlagarh	Muribahal	RD Road to Bijighat	4.30
8	Titlagarh	Muribahal	Dumerpada to Barajuri	3.00
9	Titlagarh	Muribahal	Singhpali to Siletpara	2.10
10	Titlagarh	Bangomunda	RD Road to Balkhamar	2.70
11	Titlagarh	Bangomunda	Themera to Utkela	2.05
12	Titlagarh	Bangomunda	PWD Road to Sahajot	4.60
13	Titlagarh	Bangomunda	RD Road to Bahalpadar	4.40
14	Titlagarh	Bangomunda	Barlabahali to Baldha	1.60
15	Titlagarh	Bangomunda	RD Road to Chandaguda	1.50
16	Titlagarh	Bangomunda	Khujenbahar to Dangia	2.40
17	Titlagarh	Bangomunda	Dangia to Bagbahar	2.40
18	Titlagarh	Bangomunda	Khira to Deogaon	5.00
19	Titlagarh	Bangomunda	Pipalmunda to Telipadar	1.80
20	Titlagarh	Bangomunda	SH-16 to Gharla	1.85
21	Titlagarh	Titilagarh	MDR-40 to Thalka	2.22
22	Titlagarh	Titilagarh	NH-217 to Belpada	1.80
23	Titlagarh	Titilagarh	Titilagarh-Ghadar to Chitalal	2.20

No	Division/ District	Block	Road Name	Length (Km)
24	Titlagarh	Titilagarh	Sireikela-Goudtola RD Road to Goidabari	0.60
25	Titlagarh	Titilagarh	SH-16 to Shukhunabhata	1.10
26	Titlagarh	Titilagarh	SH-16 to Kanderā	1.00
27	Titlagarh	Titilagarh	MDR to Badpatrapali	4.20
28	Titlagarh	Titilagarh	L-89 to Beherapada	0.90
29	Titlagarh	Tureikela	Ramod to Mahanilaha	3.50
30	Titlagarh	Tureikela	Salepada to Patimal	3.00
31	Titlagarh	Tureikela	Mandla to Kameimunda	2.30
32	Titlagarh	Tureikela	Dabri to Kandupada	1.80
33	Titlagarh	Tureikela	PWD Road to Bagbahal	2.30
34	Titlagarh	Tureikela	Nandol to Bharuakani	5.50
35	Titlagarh	Tureikela	PWD Road to Halanbhata	7.40
36	Titlagarh	Tureikela	Badadakla to Nagaphena	2.20
37	Titlagarh	Tureikela	Dholmandal to Gabahara	2.80
38	Titlagarh	Muribahal	Janipara to Nuapada	2.00
39	Titlagarh	Muribahal	Dejuri to Padhanmundi	4.50
40	Titlagarh	Tureikela	RD Road to Simanbahal	1.30
41	Titlagarh	Tureikela	Khujen to Bandhanpali	2.00
		Sub Total		106.72
1	Cuttack I	Cuttack Sadar	Paikasahi(Nurpatna) to Chanchapada	5.00
2	Cuttack I	Cuttack Sadar	Paikasahi(Nurpatna) to Chanchapada	5.73
3	Cuttack I	Mahanga	Balipada to Dihigop(0/0 Km to 0/4000Km)	4.00
4	Cuttack I	Mahanga	Balipada to Dihigop(4/000 Km to 9/900Km)	5.90
5	Cuttack I	Mahanga	Balipada to Dihigop(9/900 Km to 15/200Km)	5.30
6	Cuttack I	Cuttack Sadar	Bhoipada to Sadhusahi	6.94
7	Cuttack I	Cuttack Sadar	Bhoipada to Sadhusahi	4.08
8	Cuttack I	Nischintakoili	Kulia to San Routpati	4.87
9	Cuttack I	Nischintakoili	Kulia to San Routpati	3.22
10	Cuttack I	Nischintakoili	Kulia to San Routpati	6.32
		Sub Total		51.34
1	Cuttack II	Narsinghpur	Nuagarh to Bhuska	3.80
2	Cuttack II	Baramba	Badakambilo to Chhanchunia	9.00
		Sub Total		12.80
1	Deogarh	Reamal	Gadiapal to Thianal	4.05
2	Deogarh	Reamal	NH 200 to Panchamahala	2.20
3	Deogarh	Reamal	N.H.200 Rangamatia (Kadalipal)	9.93
4	Deogarh	Reamal	Mahasindhu to Chhachupali	6.09
5	Deogarh	Tileibani	Jharagogua to Raital	4.50
6	Deogarh	Tileibani	Parposi to Tasarada	5.00
7	Deogarh	Tileibani	Jamunali to Manjaribahal	2.20
8	Deogarh	Barkote	Jharabahal to Netrabahal	2.70
9	Deogarh	Barkote	Saida to Rugudakudar	5.45
10	Deogarh	Barkote	Rugudakudar to Pacheripani	5.10
11	Deogarh	Tileibani	Bhaluguha to Surupa	3.10
		Sub Total		50.32
1	Ganjam II	Chatrapur	Chikalakhandi to Jharapokhari	3.50
2	Ganjam II	Digapahandi	PWD road to Gunthapada	4.80
3	Ganjam II	Digapahandi	PWD road to Kukutabandha to Narayanpur	2.30
4	Ganjam II	Digapahandi	PWD road to Ramachandapur	4.30

No	Division/ District	Block	Road Name	Length (Km)
5	Ganjam II	Digapahandi	PS road to Sindhaba to Syamasundarpalli	2.80
6	Ganjam II	Digapahandi	RD road to Nimakhandipentha to Baiganabadi	8.20
7	Ganjam II	K.S.Nagar	PWD road to Ratnapur	2.50
8	Ganjam II	K.S.Nagar	Duhanapalli to Mohanapalli road	2.00
9	Ganjam II	Khallikote	Badapalli to Badabola	2.20
10	Ganjam II	Khallikote	Badapalli to Chakasingi	2.80
11	Ganjam II	Khallikote	RD road to Haripur	6.60
12	Ganjam II	Khallikote	Biripur to Raipada	3.20
13	Ganjam II	Kukudakhundi	PWD road to Ramadhia	11.10
14	Ganjam II	Patrapur	RD road to Parvatipur	4.00
15	Ganjam II	Patrapur	PWD road to Daleswar	2.00
16	Ganjam II	Patrapur	PWD road to Budagada	2.51
17	Ganjam II	Patrapur	PWD road to Patrapur to Mukundapur	5.50
18	Ganjam II	Sanakhemundi	PWD road to Nunilathi to Khairapadar	3.95
19	Ganjam II	Sanakhemundi	SH-17 to Podamari to Buguda	12.16
20	Ganjam II	Sheragada	SH-29 to Nuapalli	1.50
21	Ganjam II	Sheragada	SH-36 to L.N.Pur	2.00
22	Ganjam II	Sheragada	SH-36 to P Karadakana	1.50
23	Ganjam II	Patrapur	RD road to Buratal	7.50
24	Ganjam II	Patrapur	PWD road to Ankuli (GP) Reach-I from 0/0 to 11/60	11.60
25	Ganjam II	Patrapur	PWD road to Ankuli (GP) Reach-II from 11/60 to 32/900	21.30
26	Ganjam II	Rangeilunda	NH-5 to Mishrapalli	1.60
27	Ganjam II	Digapahandi	RD road to Narendraballi	0.70
	Sub Total			134.11
1	Jagatsinghpur	Balikuda	Nuagaon to Samantarapur	2.50
2	Jagatsinghpur	Tirtol	Badjanga to Rankei	2.70
3	Jagatsinghpur	Biridi	Basandra to Bambilo	4.70
4	Jagatsinghpur	Tirtol	K.N.Pur to Itatikiri	3.35
5	Jagatsinghpur	Erasama	Kujanga Noliasahi RD Road - Janardhanpur	1.30
6	Jagatsinghpur	Balikuda	Santho to Alikanta	2.30
7	Jagatsinghpur	Naugaon	Arakhakud to Harispur	5.00
8	Jagatsinghpur	Erasama	Erasama Chatua RD Road (Deika) to Dhobei	3.00
9	Jagatsinghpur	Tirtol	PWD Road 2nd km to Hazipur	2.50
10	Jagatsinghpur	Tirtol	Nuapokhari to Dhunpur	10.10
11	Jagatsinghpur	Balikuda	Kulanpur to Daraba	2.50
12	Jagatsinghpur	Tirtol	Nuapokhari to Dianpur	1.70
13	Jagatsinghpur	Balikuda	Rahana to Prasanpur	2.70
14	Jagatsinghpur	Balikuda	Jaganathpur to Khaleri	2.50
15	Jagatsinghpur	Tirtol	Bisanpur to Nirapoi	2.25
16	Jagatsinghpur	Balikuda	Naharana to Sunadhar	6.70
17	Jagatsinghpur	Erasama	Khatikolda to Ganeswarapur	4.00
	Sub Total			59.80
1	Jajpur I	Dasarathpur	Kayan to Ichhapur	6.32
2	Jajpur I	Korei	N.H.- 5A to Badatrilochanpur	0.75

No	Division/ District	Block	Road Name	Length (Km)
3	Jajpur I	Korei	R.D. Road to Nuagada	3.00
4	Jajpur I	Binjharpur	RD Road to Andhalo	7.50
5	Jajpur I	Dasarathpur	P.W.D. Road to Sidheswarpur	5.00
6	Jajpur I	Sukinda	RD Road to Arjunajhar	5.00
7	Jajpur I	Korei	Rampur Sagadi to Bengamadhapur	1.35
8	Jajpur I	Dasarathpur	PWD Road to Sanadogada	6.00
9	Jajpur I	Dasarathpur	R.D. Road to Jundupur	7.55
10	Jajpur I	Danagadi	Expressway to Jandapal	1.95
	Sub Total			44.42
1	Jajpur II	Dharmasala	R & B road to Krushnaposi	2.35
2	Jajpur II	Dharmasala	RD road Madhusudanpur to Tarasha	3.00
3	Jajpur II	Dharmasala	Bajabati to Khunta	2.95
4	Jajpur II	Dharmasala	R & B road to Majhipatna	2.85
	Sub Total			11.15
1	Dharmagarh	Dharmagarh	P.W.D. Road to Budhimunda	3.30
2	Dharmagarh	Dharmagarh	Palaspani to Beheraguda (Road - A)	3.00
3	Dharmagarh	Dharmagarh	P.S. Road to Hatipakhan (Road - B)	3.36
4	Dharmagarh	Dharmagarh	R.D. ROAD TO Bankimunda (Road - A)	3.21
5	Dharmagarh	Dharmagarh	R.D. Road to Palsapada (Road - B)	2.10
6	Dharmagarh	Dharmagarh	R.D. Road to Ravanguda (Road - A)	1.83
7	Dharmagarh	Koksara	Khuntia to Pipalpada (Road - B)	2.60
8	Dharmagarh	Kalampur	P.W.D. Road to Goud Kenduguda	2.50
9	Dharmagarh	Kalampur	Bijmara to Dumermunda	2.50
10	Dharmagarh	Kalampur	Karmel to Dongriguda (Road - A)	1.29
11	Dharmagarh	Kalampur	Bodelbandha to Tutraguda (Road - B)	2.10
12	Dharmagarh	Jaipatna	R.D. Road to Gopalpur (Road - A)	5.04
13	Dharmagarh	Jaipatna	P.S. Road to Ghumapada (Road - B)	3.03
14	Dharmagarh	Jaipatna	R.D. Road to Bastiguda	4.65
15	Dharmagarh	Jaipatna	R.D. Road to Sagjhore	5.01
16	Dharmagarh	Koksara	Dahagaon To Jharabandha (Road - A)	3.60
17	Dharmagarh	Koksara	Dahagaon To Gitikapadar (Road - B)	1.30
18	Dharmagarh	Koksara	Siuni Nh-201 To Tikrapada	2.91
19	Dharmagarh	Koksara	Gotamunda R.D. Road To Kanakpur	4.50
20	Dharmagarh	Koksara	T05 To Jampada	2.04
21	Dharmagarh	Koksara	Pipaljhapar To Gotamunda (Road - A)	2.25
22	Dharmagarh	Koksara	Bhursaguda To Malpada (Road - B)	2.00
23	Dharmagarh	Koksara	Soniapada To Ladugaon	6.03
24	Dharmagarh	Koksara	Ampani To Karlakhutiapada	4.80
25	Dharmagarh	Jaipatna	P.W.D. Road To Kuhuriguma	5.25
26	Dharmagarh	Jaipatna	Lakhabahali To Jamchuan	5.45
27	Dharmagarh	Golamunda	R.D. Road To Ramchandrapur (Road - A)	1.50
28	Dharmagarh	Golamunda	R.D. Road To Sanjiful Juba (Road - B)	3.95
29	Dharmagarh	Golamunda	Sancherigaon To Jhamjharan (Part - I)	9.09
30	Dharmagarh	Golamunda	Sancherigaon To Jhamjharan (Part - II)	6.06
31	Dharmagarh	Dharmagarh	P.W.D. Road To Bhimkhojpada	3.00
	Sub Total			109.25
1	Kendrapara II	Aul	Tunga To Boulajodi	5.45
2	Kendrapara II	Rajnagar	Hansina To Chakamanipur	12.00
3	Kendrapara II	Rajnagar	R&B Road To Silapokhari	10.50

No	Division/ District	Block	Road Name	Length (Km)
4	Kendrapara II	Pattamundai	Alapua To Nandalalpatna	2.00
5	Kendrapara II	Rajkanika	P.W.D. Road To Badataila	5.90
6	Kendrapara II	Rajnagar	Santhapada To Chakibanka Road	8.00
7	Kendrapara II	Pattamundai	Vedisahi To Banto Road	3.00
8	Kendrapara II	Rajkanika	Irregation Embankment To Madhupada	4.65
9	Kendrapara II	Rajkanika	R.D Road To Gharabhanjahola	6.10
10	Kendrapara II	Aul	R.D. Road To Beta	2.60
11	Kendrapara II	Rajkanika	R.D Road To Bajpur	2.00
12	Kendrapara II	Aul	R.D. Road To Padanipal	5.16
13	Kendrapara II	Pattamundai	Mangarajpur To Deuli	4.10
14	Kendrapara II	Rajnagar	Mahulia To Pokharia Road	2.50
15	Kendrapara II	Aul	Brahmani Ghat To Nalapahi Road	2.52
	Sub Total			76.48
1	Keonjhar I	Keonjhar	N.H.215 to Badudighar Road	3.02
2	Keonjhar I	Keonjhar	Khajuripani-Kumudabahal road	2.82
3	Keonjhar I	Keonjhar	Haladharpur to Dudurapal road	4.02
4	Keonjhar I	Keonjhar	P.W.D. Road to Ramachandrapur road	1.86
5	Keonjhar I	Keonjhar	Manoharpur to Banamalipur road	1.85
6	Keonjhar I	Keonjhar	Patung to Amunipur road	1.62
7	Keonjhar I	Keonjhar	N.H.6 to Mahuldiha road	2.85
8	Keonjhar I	Keonjhar	N.H.215 to Jamunalia road	2.25
9	Keonjhar I	Keonjhar	Kusumita to Upper Kampdihi road	3.85
10	Keonjhar I	Keonjhar	Potala to Biswanathpur	2.40
11	Keonjhar I	Keonjhar	Tangarani(Belaposi)-Mathuramandali	3.25
12	Keonjhar I	Jhumpura	P.W.D. road to Gidhibas road	2.13
13	Keonjhar I	Saharpada	Jamuda to Arjunposi road	2.50
14	Keonjhar I	Saharpada	Purunapani to Talapada road	4.10
15	Keonjhar I	Saharpada	Gurandijodi to Badabaliposi road	6.60
16	Keonjhar I	Saharpada	R.D.Road (Phulpahadi) to Purunapani road	3.30
17	Keonjhar I	Saharpada	Tendra to Hariharpur road	5.50
18	Keonjhar I	Saharpada	Bilabaliposi road to Mangalpur road	4.00
19	Keonjhar I	Saharpada	Padiaposi to Deuliaposi road	3.50
20	Keonjhar I	Saharpada	R.D. Road to Bhagabil road	2.00
21	Keonjhar I	Saharpada	N.Jagannathapur to Hinjalgadua road	4.10
22	Keonjhar I	Ghatgaon	Binida-Fuljhar road	2.87
23	Keonjhar I	Ghatgaon	Ramamchandapur-Ghunjihari road	3.63
24	Keonjhar I	Ghatgaon	Mutapur to Bhagaghar road	5.05
25	Keonjhar I	Ghatgaon	R.D.Road Asanbani road	4.76
26	Keonjhar I	Patna	Putugaon to Tentulikhunti road	2.20
27	Keonjhar I	Patna	Bhalupahadi to Kimirdaposi road	3.00
28	Keonjhar I	Patna	P.W.D. Road to Analadiha road	2.79
29	Keonjhar I	Patna	R.D. Road to padampur road	2.82
30	Keonjhar I	Jhumpura	Chauthia to Jagannathpur road	3.88
31	Keonjhar I	Ghatgaon	Chandposi to Deobandha road (R.D.Road to Badajuli)	2.40
	Sub Total			100.92
1	Keonjhar II	Champua	Unchabali- Rengalbeda	2.10
2	Keonjhar II	Champua	Jally- Tangarpada	6.49
3	Keonjhar II	Joda	PWD Road- Barapada	4.00

No	Division/ District	Block	Road Name	Length (Km)
4	Keonjhar II	Keonjhar-II	PWD Road- Kankana	12.20
5	Keonjhar II	Jhumpura	Mahadevpur -Parbatipur	3.30
6	Keonjhar II	Jhumpura	PS Road- Ranipur	3.10
7	Keonjhar II	Jhumpura	Nayagarh- Saradhapanka	3.90
8	Keonjhar II	Jhumpura	Basantapur -Kaijoda	3.80
9	Keonjhar II	Jhumpura	Nayagarh - Jalpaposi	3.50
10	Keonjhar II	Banspal	Uperkaipur- Mamulaposi	4.30
11	Keonjhar II	Banspal	NH-6 -Lunagarh	6.30
12	Keonjhar II	Banspal	Nayakot - Ambadala	3.80
13	Keonjhar II	Banspal	PWD Road- Kadalibadi	2.50
14	Keonjhar II	Banspal	Phuljhar - Sakari	8.80
15	Keonjhar II	Banspal	NH-6 - Lata	8.00
16	Keonjhar II	Banspal	PWD Road- Kanthada	4.15
17	Keonjhar II	Telkoi	PWD Road-Ramachandrapur	2.00
18	Keonjhar II	Telkoi	PWD Road - Lokanathpur	1.50
19	Keonjhar II	Banspal	Jatra - Ladapani	7.50
20	Keonjhar II	Telkoi	RD Road - Purusottampur	5.50
21	Keonjhar II	Banspal	PWD Road- Panasuan	9.95
22	Keonjhar II	Telkoi	Kaliahata - Kantini	3.70
23	Keonjhar II	Telkoi	Kaliahata- Karangapal	5.15
24	Keonjhar II	Telkoi	RD Road(Deuldiha) - Ragada	8.30
25	Keonjhar II	Champua	Kankada -Nuagaon	2.50
26	Keonjhar II	Champua	Basudevpur- Sunariposi	3.15
	Sub Total			129.49
1	Bhubaneswar	Bolagarh	Badanayapalli to Suanal	4.00
2	Bhubaneswar	Bolagarh	RD road to Ekdalia	2.11
3	Bhubaneswar	Bolagarh	Kalanga to Paikasahi via Phiripirapatna	2.02
4	Bhubaneswar	Bolagarh	Deuli to Talatumba road	2.50
5	Bhubaneswar	Tangi	Nalasingh to Totapada	3.20
6	Bhubaneswar	Balianta	Balipatna RD road to Hotasahi	2.40
7	Bhubaneswar	Balianta	Prataprudrapur to Nuasahi	2.90
8	Bhubaneswar	Balianta	PMC to Bhaichuamandagada	3.30
9	Bhubaneswar	Balianta	Balianta to Chandanbasta	3.25
10	Bhubaneswar	Balipatna	Nariso Meladanda to Chandiapada	2.30
11	Bhubaneswar	Balipatna	Nariso to Badapokharisahi	2.00
12	Bhubaneswar	Balianta	Bisuniapada to Baliama	1.50
13	Bhubaneswar	Balianta	Bhargabi Right Embankment to Terabatia	2.90
14	Bhubaneswar	Balipatna	Dalakasati Sanmachhapur	3.00
15	Bhubaneswar	Balipatna	Madhuban Darada road to Deulapokhari	1.86
16	Bhubaneswar	Balipatna	Bhakarsahi to Naranpur	3.15
17	Bhubaneswar	Banapur	R D road to Kandha Ambajhar	2.00
18	Bhubaneswar	Khurda	Naranagarh Girls High School to Bhogapur	2.16
	Sub Total			46.55
1	Koraput	Koraput	N.H-43 To Chapsil Road	1.85
2	Koraput	Dasmantpur	P.S. Road To Runjaguda	4.50
3	Koraput	Kundra	Dighapur to Gumar	3.00
4	Koraput	Nandapur	PWD (RD) road to Badliguda	4.50
5	Koraput	Koraput	P.W.D Road To Ambagam	2.70
6	Koraput	Lamtaput	RD road to Jodaput	7.50

No	Division/ District	Block	Road Name	Length (Km)
7	Koraput	Nandapur	RD road to Sobhaput	6.70
8	Koraput	Nandapur	RD road to Khadaput Boding	4.50
9	Koraput	Boriguma	NH-43 to Banduguda	10.19
10	Koraput	Kundra	Beheraguda to Katriguda	7.00
11	Koraput	Boipariguda	PWD Road to Kadamguda	2.00
12	Koraput	Lamtaput	RD road to Maliguda via Bandhanpada.	3.60
13	Koraput	Boriguma	Aunli to Majhia	2.08
14	Koraput	Kotpad	Ghatarla to Kusumguda	1.54
15	Koraput	Kundra	RD Road to Nuaguda	1.30
16	Koraput	Lamtaput	RD road to Guneipada.	1.30
17	Koraput	Kotpad	Kharagpur to Kumahandi	5.60
18	Koraput	Lamtaput	RD road to Lamanda	1.20
19	Koraput	Koraput	N.H-43 to Panasput Road	4.60
20	Koraput	Koraput	R.D Road to Daleiput	1.20
21	Koraput	Lamtaput	MDR to Silpeda	1.55
22	Koraput	Jeypore	MDR SH-48 to Bali Pujariput	1.55
23	Koraput	Nandapur	RD road to Khingmung Karanjaguda	4.50
24	Koraput	Dasmantpur	Mujango to Champapadar (Dengajaniguda)	5.20
25	Koraput	Jeypore	MDR SH48 to Singbandha	4.83
26	Koraput	Jeypore	Dhanpur to Targei	2.08
27	Koraput	Kotpad	Batasana to Thakadugulahandi	5.50
28	Koraput	Kundra	Raniguda to Atigam	5.45
29	Koraput	Boriguma	Katharagada to Mankidiatal Road	4.50
30	Koraput	Boriguma	Katharagada to Katahandi Road	5.50
31	Koraput	Kundra	Ghumar to Hatakudupi	2.80
32	Koraput	Kundra	Bagderi to Kantinikunda	4.00
	Sub Total			124.31
1	Sunabeda	Laxmipur	Upperchampi (P.W.D. Road) to Talachampi	3.00
2	Sunabeda	Laxmipur	R.D Road to Kenduwada	2.50
3	Sunabeda	Semiliguda	Sorisapadar(NH-26) to Bhitarkota	11.00
4	Sunabeda	Narayanpatna	P.S Road to Tingnaput	1.80
5	Sunabeda	Laxmipur	P.S. Road to Maligan	2.50
6	Sunabeda	Laxmipur	P.W.D. Road to Niraniguda	2.10
7	Sunabeda	Semiliguda	Bilaput to Bhitarsubai	1.00
8	Sunabeda	Pottangi	Sipaiput(NH-26) to Malkarbandha	3.40
9	Sunabeda	Laxmipur	P.S. Road to Ramijholla	3.00
10	Sunabeda	Laxmipur	P.W.D. Road to Jholaguda	8.00
11	Sunabeda	Pottangi	Jamuguda (NH-26) to Bitra	7.50
12	Sunabeda	Semiliguda	Malimarla to Uppergelaguda	1.50
13	Sunabeda	Semiliguda	N.A.D to Balda	2.60
14	Sunabeda	Semiliguda	P.W.D Road to Adamunda	4.00
15	Sunabeda	Narayanpatna	SH-50 to Pachingi	3.30
16	Sunabeda	Laxmipur	Upperchampi to Jambirijhola (Upper Bilangsil)	6.10
17	Sunabeda	Semiliguda	R.D. Road to Deula	3.00
18	Sunabeda	Semiliguda	Nalco road to Masuriguda (Missinguda)	1.00
19	Sunabeda	Pottangi	R.D. Road to Debaguntha via Sangamguda	3.80
20	Sunabeda	Pottangi	(A) P.W.D. Road (R.D. Road) to Marialpadu	0.95
21	Sunabeda	Pottangi	(B) R.D. Road to Putapadu	0.95

No	Division/ District	Block	Road Name	Length (Km)
22	Sunabeda	Semiliguda	NH-43 (26) to Daleiguda	6.00
23	Sunabeda	Semiliguda	NH-43 (26) to Bileiguda	2.80
24	Sunabeda	Pottangi	R.D. Road(P.W.D Road) to Teda	1.40
25	Sunabeda	Pottangi	Dalapatiguda to Pangiguda via Dusariguda	2.40
26	Sunabeda	Pottangi	(A) NH-43(26) to Sakirai	1.70
27	Sunabeda	Pottangi	(B) NH-43 (26) to Dumuriguda	0.85
28	Sunabeda	Semiliguda	N.H.-43(26) to Kadamguda	2.10
29	Sunabeda	Semiliguda	Charangul to Hanjaraguda	2.30
30	Sunabeda	Semiliguda	Tiapar to Phulbandha	2.00
31	Sunabeda	Semiliguda	Mukhibedi to Challanput	2.60
32	Sunabeda	Pottangi	RD Road to Guntha, Jhankarada via Kapatiguda	4.00
33	Sunabeda	Pottangi	NH-43 (26) to Siura	3.10
34	Sunabeda	Pottangi	P.W.D Road to Upperbandha	1.60
35	Sunabeda	Laxmipur	P.W.D. Road to Bogeipadar	2.00
36	Sunabeda	Narayanpatna	P.S. Road(PMGSY) to Semla	4.25
37	Sunabeda	Narayanpatna	PWD Road to Sabaput, Bisipur	3.10
38	Sunabeda	Bandhugaon	P.W.D.Road to Kesabadhra	1.80
39	Sunabeda	Bandhugaon	P.W.D. Road to Jhumuka	3.00
40	Sunabeda	Bandhugaon	Jarpa (P.W.Droad) to Lundurukana	5.00
41	Sunabeda	Narayanpatna	P.W.D.Road to Khajaguda	2.40
42	Sunabeda	Narayanpatna	P.W.D Road to Dhaiguda	2.50
43	Sunabeda	Narayanpatna	Bijaghati to Keragan	3.00
44	Sunabeda	Laxmipur	P.W.D. Road(P.S Road) to Putsil	4.00
Sub Total				136.90
1	Baripada	Moroda	Bhaliadiha to Sunahaja	7.00
2	Baripada	Moroda	PWD Road to Idor	3.00
3	Baripada	Betnoti	RD Road at Durgapur to Sardiha	4.50
Sub Total				14.50
1	Karanjia	Bangiriposi	Andala to Naikali	7.00
2	Karanjia	Bangiriposi	RD road to Kurkutia	2.00
3	Karanjia	Bangiriposi	RD road to Mahupahadi	1.00
4	Karanjia	Bangiriposi	RD road to Majhigaon	2.30
5	Karanjia	Bangiriposi	RD road to Kundalabani	5.60
6	Karanjia	Bangiriposi	Rayan to Pandubadi	4.50
7	Karanjia	Bangiriposi	Rayan to Ramaharipur	4.50
8	Karanjia	Bangiriposi	MDR-45 to Jamdapal	1.10
9	Karanjia	Bangiriposi	Ghatkuanri to Domuhani	1.10
10	Karanjia	Bisoi	RD road to Chuakankar	2.90
11	Karanjia	Bisoi	NH-6 to Hatichhad	7.60
12	Karanjia	Bisoi	SH-50 to Sunajodia	5.00
13	Karanjia	Bisoi	SH-50 to Gargadi	2.50
14	Karanjia	Bisoi	SH-50 to Banapokharia	2.50
15	Karanjia	Bisoi	Baneikala to Patijhari	4.10
16	Karanjia	Sukruli	RD road to Silmaposi	2.25
17	Karanjia	Raruan	RD road to Purunapani	1.50
18	Karanjia	Jashipur	Gandirabeda chhak (Aski) to Asura	4.10
19	Karanjia	Jashipur	Badasialnai to Sansialnai	2.75
20	Karanjia	Jashipur	Siltia to Banapandugandi	2.88

No	Division/ District	Block	Road Name	Length (Km)
21	Karanjia	Karanjia	PWD road to Baliposi	1.10
22	Karanjia	Karanjia	RD road to Jhatiali	2.25
23	Karanjia	Karanjia	NH-6 to Jarali	3.05
24	Karanjia	Karanjia	NH-6 to Jarasahi	2.05
25	Karanjia	Thakurmunda	Thakurmunda (R D Road) to Niscintpur	4.63
26	Karanjia	Thakurmunda	S.H-53 to Nipania	2.55
27	Karanjia	Thakurmunda	S.H-53 o Padhiarsahi	2.60
28	Karanjia	Thakurmunda	R D Road to khasakudar	2.84
29	Karanjia	Thakurmunda	R D Road to San-Andharikhaman	1.82
30	Karanjia	Thakurmunda	R D Road to Chaulajhari	3.54
31	Karanjia	Thakurmunda	Salchua (Nada) to Karadapal	3.00
	Sub Total			96.61
1	Rairangpur	Bahalda	Fatatanger to Patkadih (Sagjodi)Road	2.50
2	Rairangpur	Bahalda	Tarana to Patramahulpani (Thakurbadi) Road	2.00
3	Rairangpur	Tiring	Jirei to Nandua (Bijaybasa) Road	2.90
4	Rairangpur	Tiring	Rengalbeda to Dhobadhubani (Gobrasol) Road	2.60
5	Rairangpur	Tiring	Nuadihi to Baldapada road	1.50
6	Rairangpur	Tiring	S.H.-50 at Nuagaon to Dakadihi (Dinasasan) road	1.50
7	Rairangpur	Kusumi	O.D.R to Ghadadega road	6.93
8	Rairangpur	Kusumi	R.D. road to Dhakata road(Dova to Ralibeda)	4.70
9	Rairangpur	Kusumi	ODR to Dudhijharan	1.35
10	Rairangpur	Rairangpur	M.D.R to Sanchampouda Road	4.90
11	Rairangpur	Rairangpur	Sundhal to Katupit(N)	8.50
12	Rairangpur	Rairangpur	Guhaldangri to Dublabeda	4.90
13	Rairangpur	Rairangpur	Kuldiha to Kahutuka Road	5.80
14	Rairangpur	Rairangpur	Badgaon to Rehedakocha	2.40
15	Rairangpur	Rairangpur	Gorumahisani to Gidighaty	3.30
16	Rairangpur	Rairangpur	Guhaldangri to Jampani	1.80
17	Rairangpur	Bijatala	Dalki to Badbil road	8.46
18	Rairangpur	Bijatala	R.D road to Kaduani road	4.63
19	Rairangpur	Bijatala	(A)S.H -50(Madansila PMGSYroad) to Sanjharan	3.26
20	Rairangpur	Bijatala	(B)Raihari (N.H - 6) to Jaldiha	3.89
21	Rairangpur	Jamda	R.D Road To Hensda	1.83
22	Rairangpur	Kusumi	R.D. Road to Changbaria road	2.70
23	Rairangpur	Kusumi	R.D road to Badjaidhanposi road	3.09
24	Rairangpur	Bijatala	Chadheipahadi to Balarampur	7.33
25	Rairangpur	Kusumi	ODR to Dighia road (RD Road to Sanjoidanposi)\	1.10
	Sub Total			93.86
1	Nawrangpur	Dabugam	Badaoloma to Khutuluguda	3.50
2	Nawrangpur	Dabugam	RD Road to Barkiguda road	3.03
3	Nawrangpur	Dabugam	PWD Road to Jandriguda road	2.50
4	Nawrangpur	Dabugam	Rabanaguda to Sapadharaguda	2.10
5	Nawrangpur	Kosagumuda	Sana-Amda to Neigaon	4.80

No	Division/ District	Block	Road Name	Length (Km)
6	Nawrangpur	Nandahandi	Bhanjaguda to Poluguda	2.50
7	Nawrangpur	Nandahandi	RD Road to Gajiaguda	2.00
8	Nawrangpur	Nabarangapur	R.D Road to Boxaguda	2.00
9	Nawrangpur	Nowrangpur	RD Road to Kochiaguda	1.55
10	Nawrangpur	Nowrangpur	RD Road to Sonuguda	2.70
11	Nawrangpur	Papadahandi	SH - 39 Jn. To Birisola	3.20
12	Nawrangpur	Papadahandi	Biriguda to Jhidingiguda	1.30
13	Nawrangpur	Papadahandi	RD Road to Kartiguda	11.90
14	Nawrangpur	Papadahandi	Dhansuli to Palasaguda	4.20
15	Nawrangpur	Papadahandi	NH Jn. To Disariguda	1.10
16	Nawrangpur	Papadahandi	Kodabaata to Haradaguda	2.00
17	Nawrangpur	Tentulikhunti	Project road to Nuapujariguda	1.40
18	Nawrangpur	Tentulikhunti	Bhitartmengra to Boriguda	1.50
19	Nawrangpur	Tentulikhunti	RD road to Nuaguda	0.50
20	Nawrangpur	Dabugam	Pakhanaguda to Maniaguda	3.25
21	Nawrangpur	Papadahandi	Ghusarabeda to Ratiguda	5.00
22	Nawrangpur	Papadahandi	Kodabhata to Mundaguda	1.40
23	Nawrangpur	Papadahandi	RD Road Jn. To Sikadaguda	3.50
24	Nawrangpur	Papadahandi	Biriguda to Khutiaguda	3.50
25	Nawrangpur	Papadahandi	Miriguda to Dakribeda	3.50
26	Nawrangpur	Papadahandi	SH - 39 Jn. to Dalchaparaguda	3.80
27	Nawrangpur	Papadahandi	NH Jn. To Minja	4.00
28	Nawrangpur	Papadahandi	PS Road to Kukurabindha	2.50
29	Nawrangpur	Papadahandi	Dongra to Kumbharaguda	4.70
	Sub Total			88.93
1	Nuapada	komna	Batibahal to Sunabeda(Part-A)	10.00
2	Nuapada	komna	Batibahal to Sunabeda(Part-B)	10.00
3	Nuapada	komna	Cherichuan to Kankermanji(Part-A)	9.00
4	Nuapada	komna	Cherichuan to Kankermanji(Part-B)	8.00
5	Nuapada	komna	Kotrabeda to Deosil	8.00
6	Nuapada	Boden	Patdarha to Kathphar(Part-A)	7.00
7	Nuapada	Boden	Patdarha to Kathphar(Part-B)	6.00
8	Nuapada	komna	Sunabeda to Gatibeda	5.00
9	Nuapada	komna	Sunabeda to Jamgaon	6.50
10	Nuapada	komna	Sunabeda to Soseng	8.00
11	Nuapada	Nuapada	SH-3 Sunsunia to Dehenpara	3.90
12	Nuapada	Nuapada	RD Road to Bhalukana	2.00
13	Nuapada	Nuapada	Amodi to Tamkidadar(Road-A)	1.60
14	Nuapada	Nuapada	RD Road to Negipali(Road-B)	2.00
15	Nuapada	Nuapada	RD Road to Sethjampani via Masrangi	4.20
16	Nuapada	komna	Poinr to Anupgad	1.50
17	Nuapada	komna	Komna Nuagaon Road to Patpani	4.00
18	Nuapada	komna	PWD Road to Tukelapada	1.90
19	Nuapada	komna	PWD Road to Bandajore via Barnapat	2.60
20	Nuapada	komna	Chhata to Kotenpara	2.30
21	Nuapada	komna	Kurumpani-Lakhna Road to Thakurpali	2.10
22	Nuapada	komna	Thango to Mawalbhata	5.00
23	Nuapada	Khariar	Vijaypur to Gordhuapadar	2.50
24	Nuapada	Khariar	SH-16 to Sandohel	1.40

No	Division/ District	Block	Road Name	Length (Km)
25	Nuapada	Khariar	MDR-121 to Kikiribeda	1.50
26	Nuapada	Khariar	Lanji to Vemapadar	4.20
27	Nuapada	Khariar	Deobahal to Thongopada	1.60
28	Nuapada	Khariar	Bankapur to Khairbadi	2.50
29	Nuapada	Khariar	Ranimunda to Palma	1.30
30	Nuapada	Khariar	NH-217 to Sandibahali	1.60
31	Nuapada	Khariar	Chancharabhata to Hanspada	1.50
32	Nuapada	sinapali	Timpur to Rebedi	3.60
33	Nuapada	sinapali	Palsapada to Dongergaon	1.30
34	Nuapada	sinapali	PS Road to Sonversa	2.80
35	Nuapada	sinapali	PWD Road to Karlapani	2.70
36	Nuapada	sinapali	Telekote to Sindursil	2.60
37	Nuapada	Boden	PWD Road to Mahulpadar	4.00
38	Nuapada	Boden	Bhainsadani to Sirigidi	5.30
39	Nuapada	komna	NH-217 to Bilenjore	2.30
40	Nuapada	komna	Mendhatal to Dangargaon via Dedenga	3.00
	Sub Total			156.30
1	Phulbani	Raikia	Kilkia (T-5) to Didrabadi	13.50
2	Phulbani	Chakapad	RD Road to Pandrisima	3.30
3	Phulbani	G. Udayagiri	RD Road to Sakadi	5.80
4	Phulbani	Baliguda	Sudra to Tikarabaju	9.00
5	Phulbani	Daringibadi	Pangaraha (NH-217) to Iripisura	7.50
6	Phulbani	Khajuripada	PWD Road to Meru(Lambabadi)	8.00
7	Phulbani	K. Nuagaon	Sainipada to Daugaon	4.20
8	Phulbani	Daringibadi	Badipadar (NH-217) to Baimela	13.20
9	Phulbani	Khajuripada	Garakumpa to Balisugri	4.00
10	Phulbani	Khajuripada	Nediguda to Gundribadi	2.00
11	Phulbani	K. Nuagaon	PWD Road T-5 Dharampur to Letingia (Reach-I) RD0/0 to 1/110 Km & 2/100 to 9/00 Km	9.00
12	Phulbani	Kotagarh	Subarnagiri to Parigada Road (Reach - I) RD 0/0 to 4/260 & 4/560 to 5/790 & 6/050 to 9/0 Km	8.84
13	Phulbani	Kotagarh	Subarnagiri to Parigada Road (Reach-IV) RD 9/0 to 18/0 Km	9.00
	Sub Total			97.34
1	Puri	Kanas	N.J. Sadak to Balipada-A	2.40
2	Puri	K.Prasad	Badabhuin to Gangadharur	1.10
3	Puri	K.Prasad	PWD road to Anandpur	0.80
4	Puri	K.Prasad	PWD road to Kamalasingh	1.83
5	Puri	K.Prasad	Badajhada to Samantarapur	2.20
6	Puri	K.Prasad	PWD road to Noliasahi	2.30
7	Puri	K.Prasad	PWD road to Paikarapur	1.10
8	Puri	Puri	Siruli Project road to Jirakandi	1.10
9	Puri	K.Prasad	R.D. road to Kahneipur	1.30
10	Puri	Pipili	Kasarda to Rajtei	2.08
11	Puri	Pipili	T-5 to Nalihana	1.24
12	Puri	Pipili	N.H.203 to Potal	1.86
13	Puri	Pipili	N.H.203 to Baragarh	1.10

No	Division/ District	Block	Road Name	Length (Km)
14	Puri	Pipili	T-5 to Solana	3.94
15	Puri	Pipili	L-24 to Sarola	1.20
16	Puri	Pipili	N.H.203 to Malibarahi	1.33
17	Puri	Pipili	S.H.13 to Sunapada	2.52
18	Puri	Pipili	T-6 to Raigurupur	1.00
19	Puri	Pipili	T-6 to Subudhipada	1.20
20	Puri	Pipili	N.H.203 to Gobardhanpur S. Nagar	2.00
21	Puri	Delang	T-4 to Jayapur	2.00
22	Puri	Delang	T-1 to Golapada	1.20
23	Puri	Delang	T-7 to Tikarpada	7.00
24	Puri	Satyabadi	Algum PWD road to Baniasahi	2.00
25	Puri	Satyabadi	Algum WD road to Bagasahi	0.60
26	Puri	Satyabadi	N.Someswarapur to Bastapada	0.80
27	Puri	Satyabadi	Budhang Canal to Balisahi	2.02
28	Puri	Satyabadi	R.D. road to Otarakera	2.50
29	Puri	Puri	L-34 to Odasamal	2.00
30	Puri	Puri	R.D. road to Jagannathpur	2.50
31	Puri	Puri	N.H.203 to Nilachakranagar	2.70
32	Puri	Puri	Malatipatpur R.D. road to Rahangiria via- Kanchinala Irrig. Embkt. (golasahi)	7.00
33	Puri	Puri	N.H.203 to Apila	4.80
34	Puri	Puri	N.J. Sadak to Karadi	1.80
35	Puri	Brahmagiri	RD Road to Sahaspur	3.28
36	Puri	Brahmagiri	L-76 to Jagannathpur	0.60
37	Puri	Brahmagiri	N.H.203A to Gokhara	1.60
38	Puri	Brahmagiri	N.H.203 A to Bentapur	1.66
39	Puri	Brahmagiri	L-58 to Baghalanji	2.01
40	Puri	Brahmagiri	R.D. road to Haridas	2.57
41	Puri	Brahmagiri	PWD road to Mirzapur	0.75
42	Puri	Brahmagiri	L-69 to Danduasipada	2.09
43	Puri	Brahmagiri	Sikatnuapada to Sisupur	1.00
44	Puri	Kanas	R.D. Road to Maitratrilochanpur	1.80
45	Puri	Kanas	R.D. road to Delang Charipada	3.50
46	Puri	Kanas	L-28 to Rudhupur	8.00
47	Puri	Kanas	Gadakhara to Malisahi	2.50
48	Puri	K.Prasad	R.D. road to Jamuna	3.77
49	Puri	K.Prasad	R.D. road to Mahanisa	3.00
50	Puri	K.Prasad	PWD road to Anlakuda	1.90
51	Puri	K.Prasad	Bhawanipur to Parala	1.67
52	Puri	K.Prasad	Manikpatna to Sebakpur	2.70
53	Puri	K.Prasad	PWD road to kandeswar	2.80
54	Puri	K.Prasad	Naba to Samantarapur	1.71
55	Puri	K.Prasad	Badadanda to Khalamunha	1.00
56	Puri	K.Prasad	R.D. road to Adalabad	1.00
57	Puri	Pipili	Podaguna to K.S. Patna	1.30
Sub Total				124.73
1	Nimapara	Nimapara	P.K Road to Porakana	3.00
2	Nimapara	Gop	RD Road to Simili	1.50
3	Nimapara	Nimapara	Bamnal to Tihula	5.00

No	Division/ District	Block	Road Name	Length (Km)
4	Nimapara	Gop	M.B Road to Khadisa	6.00
5	Nimapara	Gop	Mohanty sahi (L-34) to Morada	1.50
6	Nimapara	Gop	R.D Road to Desunthi	3.00
7	Nimapara	Astaranga	Edbansa to Paikhala	1.90
8	Nimapara	Gop	RD Road to Balibasta	2.30
9	Nimapara	Satyabadi	Padmapur to Rudupur	0.70
10	Nimapara	Nimapara	T-5 to Chhatahar	3.20
11	Nimapara	Nimapara	P.K Road to Arilo	4.35
12	Nimapara	Nimapara	Tititngapada to Kantilo	2.00
13	Nimapara	Astaranga	L-28 to Osihan	2.10
14	Nimapara	Astaranga	Manduki to Olara	2.65
15	Nimapara	Astaranga	L-23 to Olihan	1.80
16	Nimapara	Satyabadi	Rudupur to Malasahi	1.60
17	Nimapara	Gop	RD Road to Soma	1.50
18	Nimapara	Gop	Baulanga to Panchena	3.06
19	Nimapara	Astaranga	L-47 to Badaola	2.47
20	Nimapara	Satyabadi	Gabakunda to Chakarapada	1.30
21	Nimapara	Kakatpur	PWD Road (T3) to Osalanga	1.55
22	Nimapara	Gop	RD Road to Ampada	3.00
23	Nimapara	Astaranga	R.D. Road Karanjapur	1.55
24	Nimapara	Astaranga	PWD Road (T-2) to Silari	4.20
25	Nimapara	Nimapara	Porakana to Juanlo	1.50
	Sub Total			62.73
1	Sambalpur	Redhakhol	Charmal to Keutibahali	3.00
2	Sambalpur	Naktideul	RD Road to Panduakhol(Upto Podakhol)	3.00
3	Sambalpur	Redhakhol	RD Road to Sarapal	2.50
4	Sambalpur	Redhakhol	SH-24 to Dimirimunda	2.00
5	Sambalpur	Redhakhol	Rengali to Sunamudi	6.50
6	Sambalpur	Jujumura	NH-42 to Budhiakata	2.40
7	Sambalpur	Kuchinda	MDR 26A to Ainlaposi	1.30
8	Sambalpur	Kuchinda	Telitleimal to Dhanudihi	3.50
9	Sambalpur	Kuchinda	Paruabhadi to Pandrikata	0.85
10	Sambalpur	Jamankira	RD Road to Banjari	5.30
11	Sambalpur	Dhankuda	NH-6 to Gengtipali	1.43
12	Sambalpur	Rengali	Babuchakuli to Meherpada	1.62
13	Sambalpur	Jujumura	Dhalpal to Laida	1.62
14	Sambalpur	Dhankuda	RD Road to Bakbira	2.85
15	Sambalpur	Jujumura	NH-6 to Maliamunda	2.70
16	Sambalpur	Maneswar	PWD Road to Saradhapali	1.08
17	Sambalpur	Maneswar	PWD Road to Jampali	0.71
18	Sambalpur	Maneswar	RD Road to Karlabahal	1.00
19	Sambalpur	Rengali	PWD Road to Bhagia	1.70
20	Sambalpur	Maneswar	RD Road to Jharmunda	2.93
21	Sambalpur	Jamankira	Lepeikani to Babejori Road	2.90
22	Sambalpur	Jamankira	RD Road to Langabahal (San)	3.20
23	Sambalpur	Jamankira	N.H.-6 to Biswalpali	1.45
24	Sambalpur	Jamankira	RD Road to Dehurunimal	2.80
25	Sambalpur	Jamankira	N.H.-6 to Patrapalli	0.82
26	Sambalpur	Bamra	Uttargaon to Dangakhunti	2.22

No	Division/ District	Block	Road Name	Length (Km)
27	Sambalpur	Bamra	Dumku to Kinabaga	5.28
28	Sambalpur	Redhakhol	Rengali to Harizanpada (Upto Chakamunda)	4.00
	Sub Total			70.65
1	Sonepur	Ullunda	Salepali Chhak to Badmal	3.60
2	Sonepur	Ullunda	PWD Road to Dakhinpalli	2.00
3	Sonepur	Ullunda	Nakdein to Pipalkata (Meghanad)	10.00
4	Sonepur	Sonepur	T-L RD Road to Jhankarpali	3.20
5	Sonepur	Sonepur	T-L RD Road to Luhurapali	2.35
6	Sonepur	Sonepur	Baslat to Dumerkhol	3.84
7	Sonepur	Sonepur	NH-224 to Majhimunda-1	1.65
8	Sonepur	Sonepur	NDPS road to Kudadera	2.61
9	Sonepur	B.M. Pur	Hanumanpalli Chhak to Deulamunda	3.45
10	Sonepur	B.M. Pur	PWD Road to Phulchara	1.90
11	Sonepur	B.M. Pur	Janakpur (RD Road) to Rajanpali	3.20
12	Sonepur	B.M. Pur	PWD Road to Dahanipali	8.00
13	Sonepur	B.M. Pur	Kardapal to Barjula	3.00
14	Sonepur	B.M. Pur	BM Pur-Amarpali RD Road to Bankia	2.52
15	Sonepur	B.M. Pur	BM Pur Amarpali RD Road (Badmal) to Keshalaga	4.80
16	Sonepur	Tarava	Tarava-Bramhani RD Road to Rugudipali	3.60
17	Sonepur	Tarava	Kamsara-Badtenda Road to Tithipali	4.45
18	Sonepur	Tarava	Kamasara-Balikhamar to Khairabhadi	3.33
19	Sonepur	Tarava	Sargaj-Arda Road to Budhakhaman	2.66
20	Sonepur	Tarava	Sibtala-Lukapada Road to Keketpali	2.25
21	Sonepur	Dunguripali	Sunapali Chhak to Charnapur	3.50
22	Sonepur	Dunguripali	Sanabhalupali to Chhanaabera	5.00
23	Sonepur	Binika	FM RD Road to P Sahajbahal	3.00
24	Sonepur	Binika	Gulunda (RD Road) to Piteipali	2.00
25	Sonepur	Binika	MDR-39 to Pandakital	1.35
26	Sonepur	Dunguripali	PWD Road to Katapali	3.00
27	Sonepur	Dunguripali	Gajabandha to Kainsakanda	2.00
28	Sonepur	Dunguripali	Cherupali-Agalpur RD Road to Telimal	3.00
29	Sonepur	Ullunda	MJ RD road to Jagannathpali -2	2.00
30	Sonepur	Ullunda	Kadodara-Khuntulipali RD Rd to Bairagipali	6.50
31	Sonepur	Dunguripali	Cherupali-Agalpur Road to Gajmal	2.60
32	Sonepur	Ullunda	PWD road to Dhalei	3.50
33	Sonepur	Ullunda	Irrigation road to Goyelguri	3.50
34	Sonepur	Ullunda	Irrigation road to Radum	4.20
35	Sonepur	Ullunda	PWD road to Hatipahul	3.00
36	Sonepur	B.M. Pur	Tangarsahi Chhak to Khambeswaripalli	2.00
37	Sonepur	B.M. Pur	BMPur Amarpalli road to Ranapalli	1.50
38	Sonepur	B.M. Pur	Jatasingha Chowk to Anandapur	1.50
39	Sonepur	B.M. Pur	BMPur Amarpalli RD road to Dadarpalli	1.50
40	Sonepur	B.M. Pur	Bolipali to Baghartula	2.10
41	Sonepur	Sonepur	PWD Road to Bankbija	2.60
42	Sonepur	Sonepur	PWD Road to Pratappur	1.20
43	Sonepur	Sonepur	NH-224 to Gatarkela	4.70
44	Sonepur	Sonepur	RD Road to Baldapali	1.98

No	Division/ District	Block	Road Name	Length (Km)
45	Sonepur	Sonepur	NH-224 to Singhari	2.00
46	Sonepur	Sonepur	BA RD Road to Karlakhaman	3.85
47	Sonepur	Sonepur	LK RD Road to Badipadia	4.15
48	Sonepur	Sonepur	Asurmunda to Majhimunda	2.00
49	Sonepur	Sonepur	NDPS Road (MDR-39) to Nagapali	5.20
50	Sonepur	Sonepur	MK RD Road to Singhbahali	2.50
51	Sonepur	Sonepur	RD Road to Sankadalipali	1.45
52	Sonepur	Tarava	Kamsara-Balikhmar to Sukhilasar	3.75
53	Sonepur	Tarava	Kamsara-Balikhmar to Polbandh	3.50
54	Sonepur	Tarava	Arda to Balipatha	4.10
55	Sonepur	Tarava	Brahmani (Khuntabandha) road to Pandrapitha	4.60
56	Sonepur	Tarava	Sargaj Arda Road to Jamkani	2.00
57	Sonepur	Tarava	Tarva-Brahmani road to Guhiraghat	2.00
58	Sonepur	Dunguripali	Lingamarini (NH-57) to Chitikilibandhali	5.40
59	Sonepur	Dunguripali	Badkarley to Amamunda	5.30
60	Sonepur	Dunguripali	Sahajbahal Canal Road to Kulthipali	2.60
61	Sonepur	B.M. Pur	Janakpur Chhak to Jubarajpur	4.81
62	Sonepur	Sonepur	PS Road to Salepali	1.50
63	Sonepur	Binika	Canal Road to Khaliapali	6.45
64	Sonepur	Dunguripali	Bandhapali Road to Barpadar	2.50
65	Sonepur	Tarava	Kamsara-Balikhmar to Charniapali	2.50
66	Sonepur	B.M. Pur	PWD Road to Kelgaon	1.70
67	Sonepur	Sonepur	Mahule to Uperphabsi	4.92
68	Sonepur	Ullunda	PWD road to Naikpara to PWD road Rathpur chowk (Bagchhera)	9.00
69	Sonepur	Binika	Baunsuni to Bhikabahali	3.85
70	Sonepur	Tarava	Kamsara-Badtenda Road to Surajmunda	2.98
71	Sonepur	Ullunda	PWD road to Limbapali-2	2.00
72	Sonepur	Tarava	Tarva-Brahmani road to Nadhara	2.50
73	Sonepur	Tarava	Tarva - Panimura road to Sanbhainro	1.90
74	Sonepur	Dunguripali	Lingamarin Road to Mahulpali	1.60
75	Sonepur	Dunguripali	NH201 to Sargul	1.90
76	Sonepur	Sonepur	Bahirkhaman to Mahulkhunta	1.20
	Sub Total			245.35
1	Sundargarh	Sundargarh	Bhedabahal to Bamandihi Via Bankubahal	5.15
2	Sundargarh	Balisankara	Talsara to Rengali	7.91
3	Sundargarh	Kutra	SH-10 to Dhipapada	3.57
4	Sundargarh	Kutra	Khatkurbahal to Dhipapada Road	8.13
5	Sundargarh	Lefripada	Mahikani to Dharuadihi	2.80
6	Sundargarh	Subdega	MDR Road to Badamalbasti	1.91
7	Sundargarh	Sundargarh	Karla to Sahupara	3.55
8	Sundargarh	Sundargarh	Kulta to Kuanrmal Via Goyalijhumpa	3.10
9	Sundargarh	Sundargarh	Jamtalia to Kabanga via Colonypara	4.76
10	Sundargarh	Tangarpali	Pudadihi to Jamunadhip Via Khamarbahal (Road-A)	2.20
11	Sundargarh	Kutra	PS Road to Automunda	2.65
12	Sundargarh	Baragaon	RD Road to Dudungpada	1.25
13	Sundargarh	Kutra	SH-10 to Panchupada	6.00

No	Division/ District	Block	Road Name	Length (Km)
14	Sundargarh	Tangarpali	Nialiapali to Kurludhipa	2.00
15	Sundargarh	Rajgangpur	Bahium to Kichinda	8.10
16	Sundargarh	Subdega	SH-31 to Bhagpalbasti	1.65
17	Sundargarh	Subdega	RD Road to Dehurimunda	2.60
18	Sundargarh	Sundargarh	Majhapada to Aunajore Via Chandilipada	2.50
19	Sundargarh	Tangarpali	RD road to Kripsira	1.10
	Sub Total			70.93
	TOTAL			2565.81

State: WEST BENGAL

No	Division/ District	Block	Road Name	Length (Km)
1	Siliguri M.P.	-	Howdavita(NH31) to Tetulguri ((ch. 0.00km - 3.904km)	3.904
2	Siliguri M.P.	-	Balaijhora (NH31C) to Bhogvita, Ch. 0.00km-2.521km	2.521
3	Siliguri M.P.	-	NH31C (near Bapujipath) to Dangarvita via Manjoyjote, ch. 0.00km-2.767km	2.767
4	Siliguri M.P.	-	NH31 (near Bagdogra Airport) to Church More via Tarbanda (ch. 2.355km at Digravita - 8.071km at Saldangi)	5.716
5	Siliguri M.P.	-	NH31(near Ayappa Temple) to Alokjhari via Putimari (ch. 0.00km-2.507km)	2.507
6	Siliguri M.P.	-	NH31C Chowpukuria to Bhariadangar Chhat (ch. 0.00km -6.534km)	6.534
7	Siliguri M.P.	-	NH 31C Rupsingh to Dhema (ch. 0.00km-6.534km)	7.2
8	Siliguri M.P.	-	Goyaltuli more to Bidhannagar via Tufandangi (ch. 3.98 at Tufandangi to ch. 10.114km at Jorepakuri)	6.134
9	Siliguri M.P.	-	NH31C(near Sathbhaiya) to Naxalbari Tea Estate (ch. 0.00km-3.795km)	3.795
10	Siliguri M.P.	-	Mangalsingh(NH31C) to Sebdella (ch. 0.00km-2.50km)	2.5
	Sub Total			43.578
11	Birbhum	-	Pahareswar More To Kharui More	18.5
12	Birbhum	-	Gerupahari To Babuijore	8.515
13	Birbhum	-	Layekbazar to Karpatikuri Busstand via Donaipur Padmabatipur bye pass	6.99
14	Birbhum	-	Maldiha to Chatrisapara	2.26
15	Birbhum	-	Ayas Dharmatala G.P. Office to Chamtibagan ADB Road via Nachhia Debogram Lambodarpur	7.078
16	Birbhum	-	Dakshingram to Saithia Rampurhat road at Battala via Ratma Sibgram	4.821
17	Birbhum	-	Barutia to Chottorigram Road via Radhanagar	2.381
	Sub Total			50.545
18	Burdwan	-	Mougram to Naihati	9.225
19	Burdwan	-	Radhakantapur More to Sahajadpur	5.250
20	Burdwan	-	Chatni (At STKK Rd.) to Kashipur	12.225

No	Division/ District	Block	Road Name	Length (Km)
21	Burdwan	-	Chelod to Chanda	7.445
22	Burdwan	-	Ura to Dadpur	8.650
23	Burdwan	-	Galsi to Dakshinvasapur	7.900
24	Burdwan	-	Bamungoria to Haripur	5.925
25	Burdwan	-	Chhora to Bishnupur	5.550
26	Burdwan	-	Dignagar to Shibda	6.900
27	Burdwan	-	Bhota to Karanji	13.650
28	Burdwan	-	Gopalmath to Sonai	6.150
29	Burdwan	-	Deslopa to Sankarpur	13.750
30	Burdwan	-	Harishpur J.K. Ropeways to Sidhuli	10.000
31	Burdwan	-	Debipur (NH2) at Panagarah to NH2 at Rajbandh to Manikara	12.200
32	Burdwan	-	Gutulia to Madhaiganj	7.750
33	Burdwan	-	Raniganj (O.D.R.) to Baktar Nagar Vill.(Upto N.H)	4.600
		Sub Total		137.17
34	Hooghly	-	Haripal station to Shipaigachi - part of mosai More to Illipur	14.720
35	Hooghly	-	Mukundapur busstop to Blacktop road part of singhtimore Ichanagar Rangupur RD	3.600
36	Hooghly	-	Baradigrui Bus stand to majpur jarapar part of Pursurah Baradigrui	3.160
37	Hooghly	-	Kumarganj To Balitakundu Part Of Pundahit Rathtala To Balitakundu Po Salikana To Shripur Jn	4.084
38	Hooghly	-	Mohanpur Betari More To Jagothpur Part Of Vikdas Saora Road	3.780
39	Hooghly	-	Singti To Binogram Damodhar Bhand Road	11.930
40	Hooghly	-	Chatrashal To Chabbisapur	11.220
41	Hooghly	-	Keshab Chak Bank To Tarakeswar Padmapukur More	5.880
42	Hooghly	-	Purushattambati To Jarura Part Of Korala Via Sugandha To Towards Bhargeswer Ps	10.530
43	Hooghly	-	Apurbapur To Bora Via Paltagarh And Ramnagore	6.900
44	Hooghly	-	Milki Part Of Majiman To 23 No Route Via Mouro	8.440
45	Hooghly	-	Chowanpara Bridge To Kindkarbetai Kadamtala	3.690
		Sub Total		87.934
46	Nadia	-	Hazrapur To Duttapulia More	13.58
47	Nadia	-	Nokari To Kulgachhi	5.145
48	Nadia	-	Betaibazar To Chhitkadaspara	10.471
49	Nadia	-	Hanskhali To Nidhirpota	5.302
50	Nadia	-	Kalinagar To Sahapur	19.925
51	Nadia	-	Ghurni To Patuli Ghat	16.937
52	Nadia	-	Goaldanga Dhal(Pwd Road) To Bangaljihi Dakshin	10.111
53	Nadia	-	Baor To Bdo Office Para	7.925
54	Nadia	-	Sadhipur To Lalnagar	16.945
55	Nadia	-	Kharer Math To Gobindapur	6.275
56	Nadia	-	Nimtala Bazar To Rustam Nagar	6.564
57	Nadia	-	Isrnali To Gopinath	6.637
58	Nadia	-	Hijuli Ghospara To Baglachra	6.380
59	Nadia	-	Shitalpur To Debgram Krishi Firm	18.034
60	Nadia	-	Janal To Nidaya Sluicgate (Mayapur) Via Post Office	6.29

No	Division/ District	Block	Road Name	Length (Km)
			More	
61	Nadia	-	Methiadanga Jamtala More To Baganchara Via Barodanga Para	9.604
62	Nadia	-	Ruipukur To Chak Chapra	20.543
63	Nadia	-	Nh 34 Bholdang To Birpur Ghat	10.507
64	Nadia	-	Ghatigachha To Ruppur	8.175
65	Nadia	-	Natna To Chak Madhubona	12.753
	Sub Total			218.103
66	Purba Medinipur	-	Jasar To Brindabanchak	11.000
67	Purba Medinipur	-	Diglabarh - Bankura Chak	10.400
68	Purba Medinipur	-	Chandipur - Bar Baharpota	8.100
69	Purba Medinipur	-	Katlauri - Fatepur	7.400
70	Purba Medinipur	-	Nimdasbar - Biramput	5.800
71	Purba Medinipur	-	Gorsafat - Asnan (Arang Kyarana)	9.750
72	Purba Medinipur	-	Khalsiberia To Paschim Sarpai	15.600
73	Purba Medinipur	-	Dakshin Kalamdan - Tikashi	9.100
74	Purba Medinipur	-	Durgapur - Jhaugeria	11.000
75	Purba Medinipur	-	Bararamkua - Gaurangabar	6.900
76	Purba Medinipur	-	Kaur Maishali (From Chakrasul) - Pania Via Chakrasul	5.200
	Sub Total			100.25
	TOTAL			637.58

B. Institutional Strengthening Component

Project 3 includes the construction of 25 RRNMU buildings in the 5 RCIP states of Assam (6 buildings); Chhattisgarh (4 buildings); Madhya Pradesh (5 buildings); Odisha (5 buildings); and West Bengal (4 buildings). The exact locations for these buildings are being identified by each state.

PROCUREMENT PLAN

Basic Data

Project Name: Rural Connectivity Investment Program	
Project Number: tbd	Approval Number: tbd
Country: INDIA	Executing Agency: Ministry of Rural Development, State Governments of Assam, Chhattisgarh, Odisha, Madhya Pradesh, West Bengal
Project Procurement Classification: B	Implementing Agency: Assam State Road Board, Chhattisgarh State Rural Road Development Agency, Odisha State Rural Road Agency, Madhya Pradesh State Rural Road Development Authority, West Bengal State Rural Development Agency
Procurement Risk: Low	
Project Financing Amount: \$273 million ADB Financing: \$273 million Cofinancing (ADB Administered): - Non-ADB Financing: -	Project Closing Date: 31 December 2017
Date of First Procurement Plan: 22 November 2011	Date of this Procurement Plan: 6 August 2015

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 (roads)	Between \$100,000 and \$39,999,999	Prior review of SBD; for each state under each project: prior review for 1 st NCBs, post-review for succeeding NCBs; prior review for the 1 st three Technical Bid Evaluation Reports and Financial Bid Evaluation Reports of the same contracts, post-review for succeeding reports.
National Competitive Bidding (NCB) (RRNMU buildings)		Prior review of SBD; for each state under each project: prior review for the 1 st Technical Bid Evaluation Reports and Financial Bid Evaluation Reports of the same contracts, post-review for succeeding reports.
Shopping for Works	Up to \$100,000	EA/IA will issue public request for quotations

Consulting Services	
Method	Comments

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/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments

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

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	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sample)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
various	Civil works for NCB Roads	\$475.69 million	1177	NCB	Post (Sample)	1S2E	tbd	
various	Civil works for RRNMUs	\$25 million	25	NCB	Post (Sample)	1S2E	tbd	

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments

B. Indicative List of Packages Required Under the Project

The list of roads is attached as appendix to this Procurement Plan.

(i)	State of Assam	- 486.984 km
(ii)	State of Chhattisgarh	- 1055.94 km
(iii)	State of Madhya Pradesh	- 1377.86 km
(iv)	State of Odisha	- 2565.81 km
(v)	State of West Bengal	- 637.574 km

OUTLINE TERMS OF REFERENCE

Project Implementation Consultant

I. SCOPE OF WORK

A. Road Maintenance

(i) Road maintenance inspections

- a) Conduct maintenance inspections on a sample of post-construction roads under Rural Roads Sector I Investment Program (RRSI-IP), Rural Roads Sector II Investment Program (RRSII-IP), Rural Connectivity Investment Program (RCIP), and other Pradhan Mantri Gram Sadak Yojana (PMGSY) roads (at least two from each district with at least one road under the initial 5-year maintenance contract and at least one road post 5 year maintenance and minimum 60 roads per year) and prepare (i) Maintenance Inspection Reports for each road inspected; and (ii) Annual Maintenance Audit Reports for the inspected roads in the state.

(ii) Road maintenance planning

- a) Assist pilot Rural Road Network Management project implementing units (PIUs)¹ to prepare comprehensive inventory of all PMGSY roads on yearly basis in the district.
- b) Assist pilot Rural Road Network Management PIUs in preparing Annual Road Maintenance Management Plans for PMGSY roads, which will include both roads under initial post-construction five year maintenance contracts and roads under post five-year maintenance.

(iii) Road maintenance training

- a) Providing training and support to PIU's for conducting inspections on road maintenance, and use of local labor for maintenance works.
- b) Conduct annual road maintenance workshop for State Government reporting the progress and result achieved, issues encountered and proposed countermeasures.

B. Road Safety

(i) At the DPR preparation stage

- a) Conduct road safety audits (RSAs) including mandatory field visits (jointly with PIUs) on 30 detailed project reports (DPRs) 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/eliminate road safety issues.

¹ One in each state in the second year of RRS-III and 10 – in the fourth year.

- b) Conduct follow up desk review of final DPRs to check how the issues identified by 30 RSAs in Task a) are addressed and report to PIUs.
- c) Based on the RSAs under the batch, prepare the summary of RSA issues and suggestions for the batch and submit to PIU/State Rural Roads Development Agency (SRRDA) for review and action on remaining, not audited DPR's as appropriate, as this will address issues identified on road safety audited roads but perceived to be common on other roads under the batch.

(ii) During construction

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

(iii) At the post-construction stage

- a) Conduct RSIs on randomly selected roads (at least 10 roads in each RRSIIIP batch) within three month after completion of civil works, and prepare concise RSI reports listing road safety issues and proposed measures to mitigate/eliminate road safety issues.
- b) Conduct RSIs on randomly selected roads completed under RRSI-IP, RRSII-IP and RCIP (at least 30 roads a year, in addition to immediate post-construction RSIs described under a) above and prepare concise RSI reports listing road safety issues and proposed measures to mitigate/eliminate road safety issues.
- c) Prepare Quarterly Road Safety Monitoring reports for the roads inspected in concise matrix format, including status of the roads where RSI is conducted, issues observed, and measures proposed for implementation.
- d) As per direction of the SRRDA, conduct independent analysis of severe road accidents occurred on the RRS-I, RRS-II, and RCIP roads over the period of RRSIIIP implementation, if any, and recommend specific road safety countermeasures for review and endorsement by PIU/SRRDA.

(iv) Road Safety Training

- a) Conduct on-the-job training of PIUs on conducting RSA and RSI during the joint road safety audits and inspections conducted together with PIU staff.
- b) Provide dedicated training to PIUs on conducting RSA and RSI and implementing engineering road safety counter measures.

C. Social, gender and Resettlement Safeguard Implementation

- (i) Assist PIU in organizing the transect walk for documenting the social features and profile along the alignment for each sub project proposal prepare the record of community participation through the field visits to the project affected communities to assess rather CPF requirements have generally met. Ensure the involvement of the affected people and community groups in assessing the same.
- (ii) Following the provision of community participation framework (CPF), identify the project affected persons based on participated techniques like participatory rapid appraisals (PRA) fully involving all the measures stakeholders through community meetings, random selected interviews of the affected persons with set off questionnaires, secondary and other available data.
- (iii) Prepare methodology and approach for affectively selecting sample sub projects for monitoring and evaluation on the basis of social economic profile of project-affected communities and the extent of the project impact on these communities.
- (iv) Identification of all the land and structures getting affected along the proposed alignment, prepare the detailed inventory of the same by means of resettlement, census survey, covering 100% affected household along the alignments.
- (v) Based on the survey prepare support/assistance provisions for the project affected persons with particular attention to the vulnerable groups.
- (vi) Assist PIU in implementing the Gender Action Plan and monitoring implementation progress of the Plan.
- (vii) Assist PIU and Panchayats and disseminating information on the land, transfer support/ assistance provisions and grievances procedure as prescribed in the CPF.
- (viii) Assist the PIU to prepare a written agreement with h the State Aids Control Society in aligning its HIV/AIDS prevention awareness along with the vulnerable areas along the Project roads.
- (ix) Assist PIU in preparing monthly reports in compliance with the CPF during the project implementation.
- (x) Prepare due diligence report of all the project trenches.

PIC will conduct the following activities as per the new safeguard policies (June 2009):

D. Environmental Safeguards

- i) Assist PIU in checking compliance of the sub project proposal with EAF provisions during preparation and adherence to identified relevant provisions of the ECOP during construction.

ii) Providing on-the-job training and support to PIU's in implementing environmental safeguards. Through a phase-approach in building capacity of PIUs, demonstrate at least 12 months before contract termination that all PIUs are capable of preparing ECOP and conduct ongoing and post-construction monitoring independently, and recommending corrective action on detected non-compliances.

iii) Prepare needed internal guide documents for PIUs in ECOP preparation and environmental monitoring. This include, but not limited to, national and state environmental regulatory briefs (e.g. applicable emissions and effluent guidelines/standards), designing effective requirements, and environmental best practices in road construction (occupational health and safety; storm water, waste, noise, air emission, wastewater management; and community health and safety), and types of environmental monitoring (inspection, self-monitoring, and citizen monitoring).

iv) Assist the PIU in organizing the transect walk for recording the environmental features/profile within the right of way (ROW) of each subproject proposal.

v) Determine the requirement of regulatory clearances (environment/forest/archeological) to be sought from Government of India or State Government, and provide advisory services to PIU on environmental aspect including implementation and monitoring of the identified provisions of the ECOP by the contractor.

vi) Conduct Environmental baseline survey, prepare environmental checklist for inclusion in the contract document and also ensure that contract document includes the environmental responsibilities to implement mitigation measures and during the construction stage of the sub project in accordance with PMGSY guidelines.

vii) PIC will monitor the impacts of the construction work on the environmental and local settlement ensuring that contractor implement the environmental mitigations measures recommended in the environmental checklist and environmental management plan. Prepare a monthly progress report as per the environmental assessment and review framework during the pre-construction and post-construction stage.

II. STAFFING

The Consulting Services will be implemented over the whole period of the Investment Program (2012-2017). The person-month inputs required are summarized below.

Name of Positions	Indicative person-months					
	Assam	CG	MP	Orissa	WB	Total
Road Safety Engineer (1 No)						
Road Maintenance Engineer (1 No)						
Social,gender and Resettlement Safeguard Expert (...Nos)						
Environmental Safeguards Expert (...Nos)						

OUTLINE TERMS OF REFERENCE

Technical Support Consultant

A. Introduction

1. The Technical Support Consultant (TSC) will be engaged at the center by the National Rural Roads Development Agency (NRRDA) to assist the state IAs in implementing road safety measures, conduct maintenance of PMGSY roads, check and monitor compliance of the subprojects under ADB financing with the agreed safeguard requirements throughout the project cycle, and conduct impact monitoring of the Program. The TSC will be a team of national consultants. The TSC will be engaged to cover the following scope of activities:

- a) Monitoring at the implementation stage of last batches of subprojects of Rural Road Sector II Investment Program in Assam, Chhattisgarh, Madhya Pradesh, Orissa and West Bengal
- b) Preparation stage of batch I, batch II, and batch III in Assam, Orissa, West Bengal, Madhya Pradesh, and Chhattisgarh under RRS-III
- c) Implementation stage of batch I, batch II and batch III in Assam, Orissa, West Bengal, Madhya Pradesh, and Chhattisgarh under RRSIII-III
- d) Impact monitoring study of the project under RRS-II and RRS-III
- e) Assistance to PPTA for preparation of RRS-III

2. The TSC team will consist of multiple units, each having 4 experts covering (a) road safety, (b) social safeguards and socioeconomic impact monitoring, (c) environmental safeguards, and (d) road maintenance, all based in the capital of each state.

B. Primary Objectives

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

(i) Road Safety

- Conduct systematic road safety auditing of 10% of DPRs including preparation of formal road safety audit and safety check reports
- Conduct systematic road safety inspections on a randomly selected sample of roads under maintenance, and document issues and countermeasures
- Prepare half-yearly Summary Road Safety Monitoring reports.
- Provide training and support to PIUs and PICs
- Assist SRRDAs and PIUs with road safety complaints and accident investigations
- Assess the effectiveness of RSA procedures and recommend improvements as needed

(ii) Social Safeguards

- Check compliance of subprojects with CPF provisions during subproject preparation and implementation
- Prepare due diligence reports on a randomly selected sample of roads for all Project tranches

Monitor and evaluate implementation of the community participation process prescribed in CPF and recommend improvements to the participatory process to ensure broader participation of rural population in subproject formulation.

(iii) Environmental Safeguards

- Assist in checking compliance of subproject proposals with EAF provisions during preparation and adherence to identified relevant provisions of the ECOP during construction
- Prepare due diligence reports on a randomly selected sample of roads for all Project tranches

(iv) Road Maintenance

- Conduct systematic checking of road maintenance management plans and conduct maintenance inspections
- Prepare half-yearly Road Condition and Maintenance Audit Reports
- Provide training and support to PICs, PIUs or Zilla Panchayats as the case may be
- Review the effectiveness of existing maintenance procedures and recommend improvements as needed
- Provide advise to NRRDA for the maintenance module of the Online Maintenance and Monitoring System (OMMS)

(v) Socioeconomic Impact Monitoring

- Conduct socioeconomic impact monitoring of selected subproject roads under the Program following the methodology developed for monitoring of socioeconomic impacts
- Monitor implementation of the Gender Action Plan.

C. THE CONSULTANT

4. The services will be provided by a national consulting firm, to be appointed by the NRRDA in accordance with agreed procedures acceptable to ADB. The consultant will provide the staffing as indicated in Para 11, though in preparing their proposals the consultants may propose alternative arrangements that, in their opinion, will provide services of an equivalent quality. The final staffing will be adjusted to suit the actual procurement and implementation schedules.

D. Scope of Work

Activity 1: Road Safety

5. The consultant will:

- (i) Conduct systematic road safety auditing of DPRs (at least one from each district and minimum of 10% of total DPRs in each state) including field visits to the proposed roads, make random checks of roads under construction and within 3 months after construction to ensure that road safety measures proposed by road safety audits (RSAs) 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 SRRDAs for action;

- (ii) Conduct systematic road safety inspections on randomly selected sample (at least one 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 SRRDAs for action. Sample for maintenance inspection would be selected from those districts where running batch of RRSIII-P is being implemented;
- (iii) Prepare half-yearly Summary Road Safety Monitoring reports summarizing in the concise matrix format status of conducted road safety audits, inspections and follow-up checks, issues found, measures proposed, implementation status and other important findings;
- (iv) Provide training and support to PIU's and PICs in road safety auditing and implementing engineering road safety countermeasures;
- (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 of 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 Program; and
- (vii) Conduct annual road safety workshops for the state governments reporting on the progress and results achieved, issues encountered, lessons learned and work plan for the next year.

Activity 2: Social Safeguards

6. The consultant will:

- (i) Assist the state IAs in reviewing and scrutinizing the records of community participation generated by PICs and verifying the records through field visit to the project affected communities (at least one from each District and minimum 10% of total DPRs in each state) to assess whether CPF requirements have been generally met. Ensure involvement of the affected people and community groups in assessing the same;
- (ii) Prepare methodology and approach for effectively selecting sample subprojects for monitoring and evaluation on the basis of 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 visit 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 visit 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 report based on items (i)-(v) for all Project tranches;
- (vii) Provide training and support to PIUs in implementing social safeguards;

- (viii) Provide training and support to PICs in performance of their tasks on social safeguards as needed; and
- (ix) Provide support to PPTA Team preparing RRS-III on implementation of social safeguards on the 500 km sample roads.

Activity 3: Environmental Safeguards

7. The consultant will:

- (i) Assist in checking compliance of subproject proposals with EAF provisions during preparation and adherence to identified relevant provisions of the ECOP during construction;
- (ii) Providing advisory services to PIUs in environmental aspects including seeking the regulatory clearances, application of the ECOP, implementation and monitoring of the identified provisions of the ECOP by the Contractor including by means of workshops;
- (iii) Scrutinizing, on a sample (at least one from each District and minimum 10% of total DPRs in each state) basis the environmental checklists generated by PICs, review of applications seeking the regulatory clearances prepared by PICs;
- (iv) Prepare due diligence report based on items (i)-(iii) for all Project tranches;
- (v) Conducting periodic site inspection for determining the efficacy and application level of the ECOP and suggest any modifications required thereof;
- (vi) Provide training and support to PIUs in implementing environmental safeguards;
- (vii) Provide training and support to PICs in performance of their tasks on environmental safeguards as needed; and
- (viii) Provide support to PPTA Team preparing RRS-III on implementation of environmental safeguards on the 500 km sample roads.

Activity 4: Road Maintenance

8. The consultant will:

- (i) Conduct systematic checking of road maintenance management plans and conduct maintenance inspections on a sample (at least one from each district and minimum of 30 roads per state per year) of post-construction roads under RRS-I, RRS-II, and RRS-III annually to ensure that road maintenance measures are properly and systematically implemented Sample for maintenance inspection would be selected from those districts where running batch of RRSIII-P is being implemented;
- (ii) Prepare half-yearly Road Condition and Maintenance Audit Reports for the inspected sample of roads in each state with reference to maintenance activities mentioned in Standard Bidding Document of PMGSY;
- (iii) Provide training and support to PIUs in administration of maintenance contracts, including maintenance inspections;
- (iv) Provide training and support to PIC, PIU or Zila Panchayats as the case may be;
- (v) Review the effectiveness of existing maintenance procedures and practices and provide advisory support to SRRDAs and NRRDAs including amending of existing bidding documents, manuals, and other maintenance guidelines and procedures;

- (vi) Provide advise to NRRDA regarding the addition, improvement and use of the maintenance module of the Online Maintenance and Monitoring System (OMMS); and
- (vii) Conduct annual road maintenance workshops for the state governments reporting on the progress and results achieved, issues encountered, lessons learned and work plan for the next year.

Activity 5: Impact Monitoring

9. The consultant will undertake monitoring in accordance with the Annex to TOR: Monitoring of Socioeconomic Impacts attached to this TOR and will:

- (i) Prepare study methodology, approach and implementation plan, including preparation of survey instruments and approach to project and control sample selection for purposes of statistical validity of results and availability of data on indicators selected; select project and control sample roads and principal villages; and conduct workshops in the three states on approach and methodology for purposes of consultation and capacity building of state socioeconomic research capacity. The study methodology will generally follow the one being followed under RRS1P, details of which is in the appendix to this TOR;
- (ii) Prepare initial inventory of road lengths, population served, inventory of existing facilities and services (education, health, shops, other services) and village general 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 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 on institutions in villages to administer self-monitoring, and selection of households and arrangements for tracer studies. It is expected this will be conducted in mid 2011;
- (iv) Conduct half-yearly selected project roads and principal villages after improvement and of control roads and their principal villages. It is expected these will be conducted in 2011, 2012, & 2013; and
- (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 socio economic conditions of women in the project influence area.

E. Schedule and Resources

10. All the activities will be executed from April 2011 to March 2013 with services being intermittent. Total length of the road covered under RRS-II and RRS-III will be 15,000 km approximately, for which the consultancy services will be provided. Agreement will be operative for the different loans sanctioned under RRS-II and RRS-III. 1,800 km length of the road will be

covered in batch II in Assam and West Bengal under Loan no. 2445-IND. 3,110 km will be covered in Assam, Orissa, and West Bengal in batch III under Loan no. 2535. Another 3,000 km of road length is being covered under new loan in Madhya Pradesh, Orissa, Assam, Chhattisgarh, and West Bengal under RRS-II. The project RCIP will cover 9,000 km of road in two batches in Madhya Pradesh, Chhattisgarh, Assam, Orissa, and West Bengal. The award of civil works in each batch will be after the pre-construction sample review and scrutiny in respect of road safety, social safeguards, environmental safeguards are completed by TSC.

F. Estimated Person month and desirable Qualifications

11. An estimated total of 200 person-months of consulting services are envisaged. In addition, about 200 person-months of survey enumerators will be required.

Experts ^a	Person-months	Tasks assigned
Road Safety Specialists (5 nos.)	45 (9 months each)	Activity 1
Team Leader cum Social Development/Monitoring Specialists (1 nos.)	12 (12 months each)	Activity 2,5
Social Development /Monitoring Specialist (4 nos.)	48 (12 months each)	Activity 2, 5
Environment Specialists (5 nos.)	50 (10 months each)	Activity 3
Road Maintenance Specialist (5 nos)	45 (9 months each)	Activity 4
Total	200	

^a National Consultants to be based with IAs in each respective State capital.

12. The team leader will be one of the five social development specialists who will have the longest assignment period under the staffing schedule. The prescribed desirable qualifications of each of the above experts are listed below.

(i) The **Road Safety Specialist** should be a senior level road engineer with a minimum of bachelor degree in civil engineering or equivalent, having experience of at least 15 years in the design of roads including rural roads, out of which he 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 blackspots, development and implementation of road safety programs, road safety monitoring and evaluation. Must 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. Must have knowledge of proper placement and use of signs, pavement markings, and roadside hardware. Must 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.

(ii) The **Social and gender Development/Monitoring Specialist** should have a master's degree in social science or equivalent, and have at least 7 years of experience in preparing, implementing and monitoring social development schemes associated with infrastructure projects. He or she should have knowledge of statistical sampling. He or 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.

(iii) The **Environment Specialist** should have a master's degree in environmental science or equivalent, and have at least 7 years of post-graduate experience in preparing, implementing and monitoring environment management schemes associated with infrastructure projects. He or she should be fully familiar with legal provisions for environmental management. Experience in externally funded infrastructure projects would be desirable.

(iv) The **Road Maintenance Specialist** should be a senior level road maintenance engineer with a minimum of bachelor degree in civil engineering or equivalent, preferably with a specialized training in road maintenance, having experience of at least 15 years, out of which he should have managed road maintenance projects for at least 5 years. Must have knowledge of best practices, challenges and lessons learned in maintenance of rural roads in India. Must 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.

13. The Consultant's nominated staff may be required to attend interview by the Client as part of the technical evaluation of proposals.

G. Reports

14. The consultant will submit within 15 days from end of month/quarter/half year, the following reports (both in hard and soft copies and with the executive summaries as needed).

Report	Due Date	MORD/ NRRDA	SRRDAs	ADB
Inception Report	Month 1	2# Hard copy, 1 Softcopy	1 Hard copy & 1 soft copy for concern state	2 (Hard Copy)
Progress Reports including Appendices of individual DPR scrutinizing results	Quarterly	1 softcopy	1 Hard copy & 1 soft copy for concern state	2 (Hard Copy)
Due Diligence Reports on social and environmental safeguards	2 months prior to submission of PFR	2 Hard copy, 1 Softcopy	1 Hard copy & 1 soft copy for concern state	2 (Hard Copy)
Road Safety Monitoring Report including Appendices of individual DPR audits and road inspections	Half-yearly and Yearly	1 Hard copy and 1 soft copy	1 Hard copy & 1 soft copy for concern state	-
Road Condition and Maintenance Audit Report including Appendices of individual road inspection reports	Yearly	1 Softcopy	1 Hard copy & 1 soft copy for concern state	2 (Hard Copy)
Socio-economic Impact Monitoring Report	Yearly	1 Hard copy, 1 Softcopy	1 Hard copy & 1 soft copy for concern state	2 (Hard Copy)
Project Completion Report *	Month 36	2# Hard copy, 1 Softcopy	1 Hard copy & 1 soft copy for concern state	2 (Hard Copy)

one each for MORD and NRRDA

** 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 of 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 and annual surveys.*

H. Facilities and Services to be provided by the Employer

15. Accommodation for an office in each of the capital cities of Assam, Orissa, West Bengal, Madhya Pradesh, and Chhattisgarh will be provided by the respective state SRRDAs. The consultant will have to make its own arrangements for transportation and residential accommodation in capital cities as well as in the field, costs for which should be included in the financial proposals of the consultant. The consultant also has to make its own arrangements for office purposes in the field, if required, for which no extra payment would be made.

16. The consultant will be given access to all data available with the NRRDA and the state SRRDAs that is required to perform the tasks including district road plans, CNCPL and CUPL, project proposals, DPRs, progress reports produced by PICs.

17. SRRDAs of Assam, Orissa, West Bengal, Madhya Pradesh, and Chhattisgarh will ensure participation of the respective staff in joint field visits with the TSC as required for the enhancement of the TSC input and on-the-job training. This will include joint road safety audits, maintenance inspections, etc.

TERMS OF REFERENCE FOR FIRM OF CONSULTANTS
SUPPORT TO THE RURAL CONNECTIVITY TRAINING AND RESEARCH CENTRES
FOR RURAL ROADS ASSET MANAGEMENT
(SECOND STAGE TRAINING CONSULTANT)

I. BACKGROUND OF THE PROJECT

1. The Government of India has signed a Framework Financing Agreement (FFA) with the Asian Development Bank (ADB) for a Multi-tranche Financing Facility (MFF) for USD 800 million on 17th May 2012 for the Rural Connectivity Investment Program (the investment program, RCIP). This investment program will construct 9,000 km all-weather rural roads under *Pradhan Mantri Gram Sadak Yojana* Program (PMGSY) connecting 4,200 habitations in States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal. This investment program intends to finance the component and the sub project which will include road infrastructure development component and institutional development component. ADB has provided a capacity development technical assistance (CDTA) of TA 8110-IND “Institutional Development of the Rural Roads Asset Management, that is focused on providing support to the establishment of Rural Road Network Management Units and Rural Connectivity Training and Research Centres” in each of the above states. These would manage the road asset and develop human resources needed in future to manage the rural road network. In particular, the RCTRC would be for the purpose of training all people in RCIP States dealing with the management of rural road network and to undertake research for the effective management of the State rural road network.

2. Government of India intends to engage institutional strengthening consultant to continue the development of procedures to cover business process within the organization and associated capacity building of human resources especially in relation to design, operation, social and environment safeguards, financial management, road safety and road asset management.

3. In order to improve and keep up a high standard skills of engineers, technicians, site supervisors, concerned staff of PRI, design consultants and construction contractors involved in the development and maintenance of the rural road network, there is a need for a systematic, sustainable, and high quality training reflecting specifics of the rural roads and building up on the extensive experiences and lessons learned accumulated over 14 years of implementation of PMGSY roads across India. Rural road network in India (around 425,500 km) makes up 76% of the total road network in the country, however, qualifications and training of civil engineers remain oriented at high category roads. National Rural Roads Development Agency (NRRDA) has already developed certain capabilities in conducting specialized practice-oriented research on PMGSY roads, these activities are not systematic and need support in staffing, business procedures, and facilities to become sustainable.

4. The Investment Program will construct and equip 5 RCTRCs in the States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal as state-of-the-art facilities, and finance consulting services to assist RCTRCs in rolling out systematic and large scale training in RCIP states and targeted rural roads research programs. These units have currently been established in temporary accommodation; construction of the permanent buildings in the States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal are at different stages and likely to be completed by end of Year 2017. The support to the RCTRC staff will be provided in the apprenticeship mode over a period of 24 months by the Second Stage Training Consultant (SSTC), contracted under RCIP Project 1 (Loan 2881-IND) of the investment program. This Consulting Services will also support RCTRCs in

research and compiling best specific practices and experiences in rural roads and will use that material in the training and development of MORD/NRRDA guidelines, manuals, etc. The CDTA Consultant has developed the generic operational manual covering policies, procedures, tools and guidelines for running these units. It is anticipated that RCTRCs will train by the end of 2017 around 4,000 PIU engineers, technicians, site supervisors; 300 concerned representatives of Panchayati Raj Institutions (PRIs); 100 design consultants and 300 contractors in the five RCIP States.

II. OBJECTIVES FOR THE SECOND STAGE CONSULTING SERVICES

5. The broad objective of the SSTC is to help the States achieve a good degree of self-sufficiency in managing a large training organization, the RCTRC, so that by the time the SSTC completes its assignment, after two years, the RCTRCs are able to manage their affairs sustainably and to continually improve their performance into the future.

6. The SSTC, in conjunction with the States, will monitor the States progress and provide feedback and continuous improvement to the governance policies, management systems and guidelines necessary to manage the RCTRC organizations.

7. In conjunction with the RCTRCs, the SSTC will help develop long term (5 year) costed training plans based on thorough training-needs-analysis that will be required to meet the States' future manpower needs for managing the whole State rural road network. This is to be formally presented to the Directors i/c of RCTRC so that they can prepare long term financial support for training in the sector.

8. In conjunction with the RCTRCs, the SSTC 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 for the annual training program, overhead expenses and running costs of RCTRC. .

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

10. Organize specialist external training providers from India and abroad to provide technical and management training in a variety of topics 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, distance education or by videoconferencing or similar. Technical and management training may be to internal RCTRC staff as well as to external officials from the RRNMUs, State Government, PWD, Rural Engineering Services, Irrigation Dept., the PIUs, the PRIs and the private sector.

11. It is **not** the role of the SSTC or the RCTRC staff to provide all technical training in road engineering type subjects to external participants. It is however expected that if there is the staff in the above organisation that can provide some technical training, they will do so.

12. It is the role of the SSTC to help manage technical and management training to internal (i.e. RCTRC staff) and external stakeholders such as staff from the SRRDAs, the RRNMUs, the PIU, PRIs and private sector participants. The external training providers for technical training should be engaged for one year or more depending upon the requirement and will be engaged by the State using funds from the State or the RCIP Loan.

13. Organize joint workshops where training management and technical training can be discussed openly by all States.

14. The SSTC is to assist the RCTRCs establish further partnerships as required with leading rural road training and research institutions in India and overseas.

15. The SSTC should support the RCTRCs with developing long term rural roads 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 SSTC will provide Material Engineer who will train the RCTRC and RRNMU laboratory staff in up to 10 organisations. (i.e. all pilot RRNMUs and all RCTRCs in how to:-

- set up a laboratory with equipment and storage areas in the optimum locations
- training in how to use all the equipment provided.
- establish laboratory management systems including procedures, computer based record keeping
- how to operate and maintain laboratory equipment safely.
- obtain the standards and procedures for all required tests.
- training in sampling, testing and recording procedures

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

17. These are considered realistic minimum targets, will vary from State to State and will be focused on the specific needs of each State. This will require the SSTC helping the RCTRCs to undertake detailed assessments of the task requirements for each type of organisation; evaluate the capabilities and competencies of the staff in each organisation 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 SSTC will help the RCTRC to update the RCTRC Operations Manual on an annual basis, based on the learnings for the year.

III. SCOPE OF THE SECOND STAGE CONSULTING SERVICES

19. The SSTC 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 (TM) annually. It will also require additional training manuals to be developed. In short, the SSTC 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. The SSTC will help the RCTRCs to plan and organise specific training programs based on the specific training needs of each of the States. These will cover the internal management of the RCTRCs, herein called RCTRC management training and external training to staff in the SRRDAs, the RRNMUs and the PIUs, PRIs and 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 general technical training of junior engineers,
- specialised technical and engineering management training, such as in contract management, asset management and HRD, for middle level engineers and
- 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 State to make them state-specific. The SSTC 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.

Staffing of RCTRC

- a) Director
- b) Manager (Training, Faculty, HR & Training Database, Research, ICT, Administration & Finance)
- c) Assistant Manager (Training, Testing and Research
- d) Lab Technicians – 3 Nos.
- e) Administrative Staff (Data Entry Operator, clerks, Accountant etc.)
- f) Finance Officer
- g) Pool of External Faculty (Resource Person)

23. Initially the RCTRC staff will be mainly used for managing the training, not doing the training, even though if some of the SSTC or RCTRC permanent staff can also deliver some required technical or management training that will be a plus and a good example to the staff in other RCTRCs.

24. The SSTC 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 bench-marked against each other for various parameters and indicators, preferably in graphical format.

25. The SSTC, in conjunction with the RCTRCs will develop, within twelve months of its appointment, a long-term five-year Training Plan with corresponding five-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

organisation as well as the external technical and management training for those in such external organisations, such as staff in SRRDA, RRNMUs, PIUs, PRIs and the private sector for managing the rural road network asset as well as staff responsible for finance and human resource management.

26. The SSTC will help each RCTRC conduct “Training Needs Assessments” for the whole State for all PMGSY and Panchayati Raj rural roads,. Depending on the States’ 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.

27. The SSTC will, in conjunction with the RCTRC Director, develop the overall Management Information System (MIS) required by the RCTRC. The MIS will include but not limited to the following:

A. Management and Administration

- (i) Information on the Management Board including their responsibilities, Key Performance Indicators (KPI), 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.

B. Human Resource Management

- (i) Human Resource Development Plans and Policies
- (ii) A Student Management System which captures all necessary personal and academic information on the students, including their performance over time.
- (iii) RCTRC staff HRD records
- (iv) Staff administrative records
- (v) Registers on the Panchayati Raj rural roads organisation including their staffing numbers, education and experience levels, locations, training received to date, and an assessment of training needs, etc.

C. Finances

- (i) Financial Management of the organisation
- (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 levels of all personnel in the State involved with managing rural roads

D. Training

- (i) Assessment of training and recruiting 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) Register 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, evaluating, selection, contract values, payment conditions, performance evaluation, reporting.
- (ix) Data base or register on all courses.
- (x) Electronic copies of all training materials.
- (xi) Records of all training given

E. 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) Register 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.

F. 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, skill levels, education, and an assessment of training needs, etc.
- (ii) Promotional material for securing private clients.
- (iii) Registers from the RRNMUs on relevant aspects such as contractors' and individuals' performance.

G. Information Technology

- (i) Register of all 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 in how to use the ICT equipment and software

H. Miscellaneous

- (i) All other requirement that can be stored digitally.

28. The SSTC will, in conjunction with the RCTRC Management, develop or procure the necessary technical training programs. The technical programs may be delivered by internal RCTRC staff but more generally will be delivered by the external training organizations. The training programs will include but not limited to the following:

A. Internal management training of RCTRC Staff

- (i) Principals of Human Resource Development and Human Resource Management
- (ii) Train the trainer

- (iii) Asset management (also for RRNMU staff)
- (iv) Financial management
- (v) Administrative management
- (vi) How to use the RCTRC MIS
- (vii) Obtaining high level support for annual programs and budgets.

B. Technical training of external trainees from the public and private sectors.

Road and bridge inventory

- (i) 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

Road, Bridge & Culvert condition surveys

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

Asset Management

- (i) Developing Asset Management Plans through systems based planning, programming and budgeting,
- (ii) Prioritising 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.

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

Procurement of the maintenance contract

- (i) Preparing Standard Bidding document for the maintenance contract for 5 year post construction period and various maintenance contract beyond 5 year post construction period with the development and incorporation of necessary state specific modification.

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

C. Climate Change implications.

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 equipments required for laboratories

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.

29. The SSTC will manage a one 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 time lines, staffing requirements, budget requirements and responsibilities.

30. The SSTC will arrange a one day workshop in each State at the end of each year to review the progress during the year to date and to plan activities and budget for the financial year to come.

31. The SSTC will prepare an Interim Project Report at the end of 12 Month. A Draft Final Project Report will be submitted at 20 month, thereby allowing the NRRDA and the ADB to make comment. The Final Project Report with NRRDA and ADB comments will be submitted in the final month of the assignment.

IV. ORGANISATIONAL REQUIREMENTS

32. The SSTC can be any competent organisation experienced in developing training and research organisations, specially associated with asset management, including human resource development.

V. DELIVERABLES

33. The SSTC will be responsible for peer reviewing, compiling and cataloguing training course material, whether it is designed by the SSTC, the RCTRC staff or by external training providers. All reports and training material, 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 state, NRRDA and ADB. One hard copy of the final report on RCTRCs including the training of staff in the new RRNMUs will also be provided to DEA. The summary of reporting requirements is below:

Reports	Time line
General Requirement	
Inception Report	End of week 6
Two 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, organisational structure and roles and responsibilities of core staff and of external training providers for both RCTRC and RRNMU	End of Month 12 and 22
Develop an operational plan for relocating each of the ten new pilot organisations to their new building when they are ready to be occupied	3 month prior to each new building being ready for occupancy
Strategic Plan for future post SSTC support, i.e. post two 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
Workshops	
Timeline	
Information Dissemination Seminar/Workshop. Three senior representatives from each State.	Before end of month 1
Complete a one day workshop in each State, for staff from both the RRNMU and RCTRC, on annual programming and budgeting (APB) by end of November each year with the APB prepared by end of November each year (2 in total).	March each year for Workshop and APB
Joint workshop in New Delhi of representatives of each RCTRC	By end of month 15

VI. GOVERNMENT INPUT

34. Space will be provided within the RCTRC temporary office to accommodate the office requirements of the SSTC.

VII. IMPLEMENTATION ARRANGEMENTS, STAFFING AND SCHEDULE

35. MORD, with technical and management support from NRRDA, will be Executing Agency (EA) for the SSTC at the central level and will be responsible for execution of the contract of SSTC. The Governments of the five RCIP States through the SRRDAs will be Implementing Agencies (IA) for the supervision of assignment at the State level. SSTC will interact with the head of RCTRC in the States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal.

VIII. INDICATIVE STAFFING REQUIREMENTS

36. Dedicated Experts except the Team Leader will be provided in the States of Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal to execute role and responsibility.

Table 1: Indicative Staffing Requirements

No.	Position	Role and responsibility	Indicative Person Months *
1	Organisational & HRD Expert – Team Leader (National)	Manage the contract and relationships between the NRRDA and the Consultant. Manage relationships in the States. Oversight and direct and lead the Consultant's Team; work with NRRDA and States to identify and prioritise organisational needs. Includes developing long term (5-year) plans, annual programs and budgets, guide rest of team and the RCTRC Directors. Responsible for all monitoring and reporting,	22
2	Human Resource Development Expert – Training Manager (National)	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. Ensure the Student Management Systems and MIS in general are kept up to date and all RCTRC know how to use them. Organise appropriate train the trainer course. Develop the management training to be provided by internal or external training providers.	15 (3 x 5 States)
3	Rural Roads Asset Management Expert including PPB. (National).	Train appropriate RRNMU and RCTRC staff in all matters related to rural roads asset management. Develop an Asset Management Plan for all States' RRNMUs.	15 (3 x 5 States)
4	Expert in Planning, Programming and Budgeting	Continue the detailed training provided by CDTA consultant in gathering road condition data using handheld data loggers connected telephonically to the head office	15 (3 x 5 States)

No.	Position	Role and responsibility	Indicative Person Months *
	(National)	GIS data base, conduct prioritisation using the road condition rating system, prepare long term plans, annual programs and budgets.	
5	Expert for Training in GIS and data base management (National)	Good inventory data is essential and this needs to be stored on a GIS. Role is to set up systems for the RNMUs in each state and train in 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 SSTC will set up and train local staff in how to operate	15 (3 x 5 States)
7	Expert for Training in research and laboratory management (National)	Establishing management systems for research including programming and budgeting, monitoring and evaluation, Provide training in Laboratory Management	15 (3 x 5 States)
8	Manager Technical Management (National)	Managing training of external and internal candidates using internal and external training providers. Assist the RCTRC staff in managing the delivery of training programs and managing contracts with external training providers. Developing technical engineering curricula for both internal and external training providers.	15 (3 x 5 States)
9	Resident Training & Research Consultant	Manage total coordination of the common team rotating in the States with RCTRC Staff on regular basis. Manage a relationship in the State specially with the RCTRC and SRRDAs to ensure compliance of the aims and objective of the SSTC Contract.	22 x 5 =110
		Total	237

IX. REQUIREMENTS FOR KEY PERSONNEL

37. The qualification requirements in this TOR are preferred qualifications.

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

1. Team Leader Organisational and HRD Expert (National) Should be a senior level Educational Manager from the public or private sector with a minimum of 20-years' experience, out 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 organisations would be highly regarded especially in the development of new organisations 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, securing funding for an overhead based organisation are desirable requirements. Experience with conducting training needs assessments, developing training curricula and courses and associated training material/modules, hands-on experience with delivering and implementing competency based training programs, and monitoring and evaluating the a and the RCTRCs. 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.

39. 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 multi-disciplinary teams and experience in the delivery of consultancy assignments financed by one or more external financiers (ADB, JBIC, World Bank or other bilateral/multilateral funding agencies).

40. This position will be responsible for the provision of training for leaders and senior managers within the States rural infrastructure sectors, through either internal (SSTC) staff or by external training providers such as from various Business Schools in India or abroad.

41. Position based in New Delhi but rotating to the five RCIP States regularly

2. Human Resource Development Expert – Training Manager (International)

42. Should be a senior level Human Resource Management Expert with a minimum of 20-years' experience in preparing HRD plans based on organisational requirements and implementing them. Experience in managing HRD in an infrastructure or technical organisation 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.

43. 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.

44. The HRD expert will be proficient in HRM, particularly 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 to international training providers. The HRD expert will be proficient in organising external training providers to come to the RCTRC to deliver training to sending State based trainees to other areas if India and overseas, to conducting training through internet based providers, such as webinars and MOOCs (Massive Open On-line Courses).

45. Monitoring and evaluating the impacts of the HRD will be an important responsibility. Experience in a developed country and an emerging country is required.

3. Rural Roads Asset Management Expert (International)

46. Should be a senior level Civil Engineer with formal qualifications and experience in the total Asset Management of Infrastructure. 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 in developing countries is desirable.

47. 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.

48. Experience in Asia and especially India would be an advantage.

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

49. Should be a senior level Civil Engineer with at least 10-years' experience in systematic prioritising and ranking required road maintenance works to deliver the optimum outcomes for road users and the government road owners and managers.

50. Should be capable of building from first-principals the 15-year long-term plans and indicative budgets and to 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 can develop appropriate revenue raising policies to pay for the large amount of additional maintenance. Need to be proficient in valuing rural roads based on deterioration models and allowing for requisite maintenance to restore value.

5. Training in GIS and data base management (National)

51. Should be a senior level GIS professional with a minimum of at least 10-years' experience in GIS technology and training staff in its potential, use and limitations. May be called upon to provide assistance with procuring the GIS technology including hardware, software and training and managing contracts with any external providers of equipment, software or training.

6. Expert for Training in IT Management (National)

52. The IT training expert shall have at least ten years recent experience in training in all aspects of managing IT hardware, software and systems. Experience with training in data bases 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)

53. Should be a mid-level Civil Engineer with a minimum of 10 years' experience in managing research of all types related to road asset management including traffic surveys, axle load surveys, bridge/culvert hydraulics and structures, construction materials including managing material laboratories for soils and rock, concrete and bitumen. This position will be responsible for training the RCTRC staff prioritise research and its distribution into 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.

54. Position based in New Delhi but rotating to the five RCIP States regularly.

8. Manager Technical Management (National)

55. Candidates 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. Assist RCTRC staff in preparing training delivery programs and helping in their implementation. This position will also assist in the evaluation of the training providers and provide feedback to SRRDA managers and incorporate learnings into the RCTRC operations.

TERMS OF REFERENCE FOR FIRM OF CONSULTANTS

TA 8110 – IND: INSTITUTIONAL DEVELOPMENT FOR RURAL ROADS ASSET MANAGEMENT

A. BACKGROUND

1. The consulting services are to support the establishment and operations of 5 Rural Road Network Management Units (RRNMUs) and 5 Rural Connectivity Training and Research Centers (RCTRCs) in Assam, Chhattisgarh, Madhya Pradesh, Orissa, and West Bengal. The consulting services will be financed under a capacity development technical assistance (CDTA) which will support the institutional development component of the ADB-financed Rural Connectivity Investment Program (RCIP or Investment Program) in the total amount in ADB financing of around \$800 m. The present terms of reference (TOR) is for the firm of consultants (hereinafter referred to as Consultant).

2. The Investment Program will construct or upgrade to the all-weather standard about 9,000 km of rural roads connecting around 4,200 habitations in the states of Assam, Chhattisgarh, Madhya Pradesh, Orissa, and West Bengal (RCIP States). RCIP is the continuation of RRS-I (2003-2008) and RRS-II (2005, ongoing) provided to support a nationwide rural road investment program, Pradhan Mantri Gram Sadak Yojana¹ (PMGSY). PMGSY is aiming to provide all-weather road connectivity to currently unconnected eligible habitations in India's rural areas. For the investments in physical infrastructure to be effective and sustainable, the Investment Program will also focus on the improvement of institutional arrangements, business processes and associated capacity building, especially in relation to design, operation, safeguard, financial, road safety, and road asset management matters.

3. **Need for improvement of rural road network management.** Institutional arrangements and staff qualifications for PMGSY in RCIP states are currently strongly oriented towards project preparation and implementation. However, with the shift in emphasis from construction to the operation and maintenance of the created network of rural roads,² there is an urgent need for strengthening of institutional arrangements and PIU capacities in the states for operation and maintenance of the created road network. In the course of implementation of the Investment Program, it is planned to establish around 30 rural roads network management units (RRNMUs) on a pilot basis. It is anticipated that one pilot RRNMU in each participating state will be established during the first year of RCIP implementation. After sufficient experience with the work of RRNMUs is accumulated and analyzed (by the third-fourth year of implementation), around 5 more RRNMUs will be established in each RCIP state. The tasks of RRNMUs will encompass the complete road network management cycle and will include: (i) mapping and road data inventory (information, data presentation, decision making); (ii) road inspection, data collection, and community work (traffic volume and type, traffic generators, road conditions, roadside and adjacent land use activities, seasonal impacts, community meetings and participation); (iii) planning, programming and budgeting for road construction, road periodic maintenance and road routine maintenance (preparing road programs—short term, single year, multi-year, preparing estimates and budgets); (iv) road safety (road safety audit of designs, and

¹ Prime Minister's Rural Roads Program.

² Specifically, more than 65,000 km are currently on 5-year post-construction maintenance, and the length of roads beyond 5-year post-construction maintenance will increase from around 17,000 km to more than 80,000 km within the next 5 years.

road safety audits of roads under construction and maintenance); (v) road design (procurement of design contracts, participation in field reconnaissance and transect walks, quality control of designs); (vi) road construction and supervision (contract packaging, contract administration, construction supervision); (vii) road maintenance (performance standards, prioritizing defects for attention, contract packaging, tendering, contract administration, maintenance supervision, linkage of payments to the achievement of standards and incentives for consistency of performance); (viii) data management and record keeping including development, operating and maintaining of the asset management module of the online management and monitoring system and related collection, verification, entry, retrieval and analysis of road condition, traffic and other road data and expenditure data; and (ix) protection of roads from excessive loads.

4. Pilot RRNMUs will be created based on the existing project implementation units for rural roads and will have staffing, equipment, and training adequate for effective management of the rural road network. RCIP will finance civil works and equipment to establish RRNMU facilities. Created RRNMUs will have a high demonstration potential and will establish a model for replication in the remaining PMGSY districts. First component under CDTA (this assignment) will be provided to support the establishment and operations of 5 RRNMUs in the initial period of their operations.

5. **Need for improvement of skills, qualifications and knowledge base.** In order to improve and keep up a high standard skills of engineers, technicians, site supervisors, concerned staff of PRI, design consultants and contractors involved in the development and maintenance of the rural road network, there is a need for a systematic, sustainable, and high quality training reflecting specifics of the rural roads and building up on the extensive experiences and lessons learned accumulated over 11 years of implementation of PMGSY across India. Rural road network in India (around 2,700,000 km) makes up 80% of the total road network in the country, however, qualifications and training of civil engineers remain oriented at high category roads. Previous experience with the massive training of PMGSY engineers supported under World Bank-financed rural road project³ was successful, however, it was a one-off exercise and due to the turnover of staff, the acquired skills are already being diluted. Also, while NRRDA has already developed certain capabilities in conducting specialized practice-oriented research on PMGSY, these activities are not systematic and need support in staffing, business procedures, and facilities to become sustainable.

6. The Investment Program will construct and equip 5 rural connectivity training and research centers (RCTRCs) in each RCIP state as state-of-the-art facilities,⁴ and finance consulting services to assist RCTRCs in rolling out systematic and large scale training in RCIP states and targeted rural roads research programs. The support to the RCTRC staff under RCIP financing will be provided in the apprenticeship mode where over the period of three years training courses will be delivered by the RCTRC consultant together with the concerned RCTRC staff, with increasing responsibility given to RCTRC staff. The consultant engaged under RCIP financing will also establish partnerships with leading institutions on the rural road training and research in India and overseas and work together to prioritize, develop and deliver specific rural road training courses with the utilization of external resources. Consulting services financed by the Investment Program will also support RCTRCs in research and compiling best specific practices and experiences in rural roads and will use that material in the training and

³ The World Bank's loan for \$400 million to finance part of PMGSY in Himachal Pradesh, Jharkhand, Rajasthan, and Uttar Pradesh.

⁴ This will include both construction of new buildings (classrooms, laboratories, housing blocks, etc.) and providing state-of-the-art equipment.

development of MORD/NRRDA guidelines, manuals, etc. It is anticipated that RCTRCs will train by the end of RCIP in 2017 RCIP states around 4,000 PIU engineers, technicians, site supervisors; 300 concerned representatives of Panchayati Raj Institutions (PRIs); 100 design consultants and 300 contractors.

7. Thorough preparatory work will be needed both in terms of establishing required RCTRC facilities and, more importantly, in the establishment of the RCTRCs as an institution.⁵ Second component under CDTA (this assignment) will be provided to support the preparatory work for the establishment of RCTRCs, while subsequent loan-financed consultancy engaged under a separate contract under RCIP will be provided to actually roll out RCTRCs and provide large scale, longer term training.

B. COMPONENTS OF THE TA

COMPONENT 1: PILOTING RURAL ROAD NETWORK MANAGEMENT UNITS

1-A. OUTCOME AND OBJECTIVES (COMPONENT 1)

8. The outcome of the Component 1 will be strengthened institutional capacity and improved business processes ensuring effective, sustainable, safety conscious and cost efficient design, construction, operation and maintenance of rural roads in RCIP states. Specific objectives of the Component 1 are to: (i) develop rural road network management policies, business procedures and associated tools; (ii) provide advisory support in design and procurement process for RRNMU facilities; (iii) provide dedicated rural road network management training; (iv) support RRNMUs with the implementation of rural road network management tasks; and (v) conduct monitoring and analysis of RRNMUs performance and lessons learned.

1-B. SCOPE OF SERVICES (COMPONENT 1)

9. The scope of services under Component 1 will include, but not necessarily be limited to, the following tasks:

Task 1.1: Develop rural road network management policies, business procedures and associated tools.

10. To increase the realism and result orientation of this task, the development of the rural road network management policies and operations manual defining business procedures for the complete cycle of rural road network management will be conducted by the Consultants together with its involvement in the operations of the first 5 PIUs selected for the conversion to RRNMUs. The Consultant will also make contact with the consultants working on the road maintenance strategy, policies and standards under the World Bank financed rural road project and obtain all applicable information and insights. The Consultants inputs will be state-specific. The Consultant services under this task may include, but not be limited to the following aspects:

- (i) Planning and programming of rural road network development and maintenance: e.g., priorities; data collection, entry, storage, retrieval, presentation and analysis; PMGSY vs. non-PMGSY roads; construction vs. upgradation, key design criteria,

⁵ It can be a separate faculty of an existing training/research institute/laboratory, or expansion of existing research centre, etc. The arrangement will be different from state to state.

- institutional development and capacity building; connectivity standards (e.g., single vs. double connectivity; eligibility of habitations); ownership (i.e., Rural Road Departments vs. Panchayati Raj Institutions, PRIs), data-driven mechanisms and tools vs. other approaches, impact monitoring, etc.
- (ii) Financing and budgeting of rural road network development and maintenance: e.g., central vs. state financing; funding arrangements (e.g., state rural road maintenance funds), associated governance mechanisms, sources of funding, including non-traditional sources (e.g., levy of cess on agricultural produce brought to local markets⁶, cess levied on mining companies using/planning to use rural roads⁷, tolls on through traffic/large trucks collected by panchaytai Raj institutions⁸ etc); budgeting mechanisms, use of data-driven procedures.
 - (iii) Regulatory mechanisms to protect rural roads from unforeseen use by farm machinery, overloaded vehicles, and traffic volume increases generated through traffic using PMGSY roads as shortcuts to higher category roads, etc.
 - (iv) Development of operations manual defining business procedures for the complete cycle of rural road network management, including separate modules and associated tools/templates for each stage, such as longer term and annual planning and budgeting, data management, design, procurement, project implementation and contract management for construction/upgradation and maintenance and impact monitoring mechanisms. This will also include development of asset management module of online management, monitoring, and accounting system (OMMAS) which is operational in all states, utilizing work already conducted by RCIP states to the extent possible); and specifying associated procedures, tools and equipment required for data collection, verification, storage, retrieval, analysis and reporting; network mapping; introduction of e-billing, etc).
 - (v) Development and support in operationalization of a set of bidding documents and maintenance contracts. This will include contracts for the maintenance over the 5-year post-construction period, and various types of maintenance contracts beyond the 5 years post-construction period, with the development and incorporation of necessary state-specific modifications.
 - (vi) Staff instructions tailored to the RRNMUs along with the performance monitoring and incentive mechanisms to lower a turnover of RRNMU staff.
 - (vii) Operationalization schedule.

Task 1.2: Provide advisory support in design and procurement process for RRNMU facilities

11. Design. The Consultant will prepare site-specific architectural drawings of all subsequent RRNMU facilities (25 in total, around 5 in each participating state⁹) at a model concept level, and provide advisory support to local architects and designers in preparing the detailed

⁶ Experience and arrangements used in Madhya Pradesh to be reviewed

⁷ Experience and arrangements used in Madhya Pradesh to be reviewed

⁸ Experience and arrangements used in West Bengal to be reviewed

⁹ Architectural concept drawings for the first 5 RRNMU facilities have already been developed, and detailed design will have to be developed by local architects. Consultant will provide reviews further advice as needed.

architectural drawings and designs based on the model concept drawings provided. The drawings will include each floor plan, all side views, in 3D views with the landscaping (3D views can be prepared at the artistic rendering level, for the demonstration to the high level decision makers in each state), and all other necessary details. The Consultant will prepare a short brief for each architectural design explaining architectural solutions used, functionalities of the facility, and benefits. Architectural design will utilize a “green” concept suitable to tropical conditions, and sustainability measures such as insulation, solar water heating, low energy light fixtures, double glazed units, solar powered air conditioning and natural ventilation and ample day lighting reducing the energy consumption in the buildings, etc. Concept of laboratories/workshops should utilize special requirements such as vibration free floors, dust exhaust and suppression, etc.

12. The Consultant will also provide advice/ideas on the innovative equipment which can be installed in the facilities, including videoconferencing; interactive satellite TV facilities connecting RCTRCs, RRNMUs and mobile stations for distant learning, demonstration, and feedback, etc; and, upon the consent of the states will ensure that the architectural design properly accommodates such equipment.

13. The Consultant will review drawings and designs to be prepared by local architects regularly in the preparatory process and provide comments/suggestions for improvements. The Consultant will start review designs prepared locally as early as possible in their development, and provide comments and advisory support in the development of designs. The major thrust of this effort will be to arrive at the design creating working environment most conducive to the RRNMU functions, comparable with best international standards, having high demonstration and replication potential, suitable to local climatic and other conditions, and based on the “green” concept, including utilizing sustainable energy sources.

14. **Equipment.** The Consultant will develop the list of equipment for RRNMUs and related functional specifications.

15. **Procurement.** The Consultant will prepare bidding documents for the procurement of civil works for the construction of RRNMUs and procurement of the equipment. The bidding documents will be developed to the standard acceptable to the RCIP states and in compliance with ADB requirements. Further, the Consultant will provide all necessary support in the procurement process.

Task 1.3: Provide dedicated rural road network management training

16. At the outset of the assignment the Consultant will prepare and deliver an overseas training tour (OST) on rural road network management to the key staff of RRNMUs and officials of the rural road network management cells established at headquarters of the IAs. The compendium of training materials with related audio-visual footage illustrating key aspects learned during OST will be compiled.

17. The Consultant will organize an international forum in India, where experts from India and other ADB DMCs will be invited to share experiences and best practices regarding the development and management of rural road networks. A knowledge product documenting lessons learned from the forum will be produced.

18. Over the period of first year of RRNMU operations, the Consultant will conduct three dedicated training sessions explaining the broader picture and concepts of RRNMU operations

and business procedures and tools. The Consultant will compile all training materials and prepare a dedicated training course which will be later utilized for the training of trainers mode for the staff of other RRNMUs and in the training programs of newly established RCTRCs

19. In the training tasks the Consultant will explore the ways of how RRNMUs could be used for demonstration and field training of RCTRC trainees, placing of longer term interns at RRNMUs, etc while RCTRC facilities and training expertise could be used for dedicated training of RRNMU staff. The Consultant will also make contact with the National Skills Development Corporation (NSDC) to obtain additional information, their insights on establishing the institutions, and potential ways of future collaboration.

Task 1.4. Support RRNMUs with the implementation of rural road network management tasks.

20. The operationalization will be conducted in a gradual manner, first on the existing PIU facilities, and continue together with putting in operations new RRNMU facilities and equipment. The Consultant will be placed in the respective RRNMUs and will conduct all RRNMU tasks together with the assigned RRNMU staff in the apprenticeship mode, giving more and more responsibilities to local staff so that by the end of the second year of RRNMU operations local staff could conduct all RRNMU tasks fully independently.

21. The operationalization will also involve a thorough analytical work aiming at assessment whether the procedures are really working, are right, and what should be done to make them work. E.g., cross-learning achieved through the rotation of Consultant experts between different RRNMUs should be part of the process.

22. Specific tasks and responsibilities of the RRNMUs will be defined by the Consultant as a part of Task 1 and will encompass the complete road network management cycle. E.g., the tasks may include, but not be limited to the following:

- (i) planning, programming and budgeting for road construction, road periodic maintenance and road routine maintenance (preparing road programs–short term, single year, multi-year, preparing estimates and budgets);
- (ii) mapping and road data inventory (information, data presentation, decision making);
- (iii) road inspection and data collection (traffic volume and type, traffic generators, road condition, roadside and adjacent land use activities, seasonal impacts, community meetings and participation);
- (iv) road safety (in-house or outsourced road safety audit of designs, road safety audits of roads under construction (temporary traffic control) and under maintenance both in day and night time operation, road safety awareness sessions with the communities, incorporation of road safety audits recommendations, investigating causes of road accidents and taking actions, handling community complains on road safety, interaction with police/schools on safe way to school programs, accident data analyses, etc);
- (v) road design (procurement of design contracts, participation in field reconnaissance and transect walks, quality control of designs);
- (vi) road construction and supervision (bidding documents, contract packaging, tendering, managing site preparation,¹⁰ contract administration, construction supervision);

¹⁰ Including shifting of utilities, etc.

- (vii) road maintenance (performance standards, bidding documents, contract packaging, tendering, contract administration, maintenance supervision);
- (viii) protection of roads from excessive loads (weigh stations and surveys, regulatory mechanisms, coordination and interaction with enforcing authorities etc);
- (ix) right of way management;
- (x) data management and record keeping (database on contractors and consultants; operating and maintaining of the asset management module of the OMMAS, including collection, verification, entry, retrieval and analysis of road condition, traffic and other road data and expenditure data);
- (xi) Impact monitoring (baseline, and post implementation surveys and analyses;
- (xii) Environmental management (environmental management frameworks, initial environmental examination reports, liaison with other government agencies, etc.);
- (xiii) Social development and community work (community participation frameworks, social assessments, donations/acquisition/compensations, land transfer issues, liaison with other government agencies, etc); and
- (xiv) RRNMU performance monitoring.

23. It would be highly beneficial if the staff of the first 5 pilot RRNMUs could deliver the training of the subsequent RRNMUs to be established later on. The Consultant will come up with specific mechanisms enabling such training without negatively affecting the operations of the first 5 pilot RRNMUs.

Task 1.5. Conduct monitoring and analysis of RRNMUs performance and lessons learned.

24. This will be conducted on the day-to-day basis and will be documented in the CDTA reports as defined in Section E.

COMPONENT 2: SUPPORT TO THE ESTABLISHMENT OF THE RURAL CONNECTIVITY TRAINING AND RESEARCH CENTERS

2-A. OUTCOME AND OBJECTIVES (COMPONENT 2)

25. The outcome of the Component 2 will be RCTRCs in RCIP states as an institution ready for the rollout and managing large scale training programs and dedicated research. CDTA scope will include tasks to (i) formulate the concept, organizational structure, business procedures, and staffing requirements of RCTRCs; (ii) formulate funding mechanisms for the RCTRCs operations; (iii) provide advisory support in design and procurement process for RCTRC facilities; (iv) provide training to RCTRC staff; (v) develop operational plan for the rollout of RCTRCs; and (vi) assist in the recruitment process for the loan-financed RCTRC consultant.

2-B. SCOPE OF SERVICES (COMPONENT 2)

26. The scope of services under the TA will include, but not necessarily be limited to, the following tasks:

Task 2.1: Formulate the concept, organizational structure, business procedures, and staffing requirements of RCTRCs.

27. The Consultant will use the draft concept, organizational structure, and staffing requirements of RCTRCs developed by the PPTA consultant preparing RCIP as a starting point

and further improve and finalize these aspects in consultations with RCIP states, NRRDA, State Technical Agencies, and leading road training and research institutions in India. Experiences with the establishing of similar institutions need to be studied and proven models applied as suitable.¹¹ The Consultant will also make contact with the National Skills Development Corporation (NSDC) to obtain additional information, their insights on establishing the institutions, and potential ways of future collaboration.

28. Following the finalization and acceptance of the improved RCTRC concept by NRRDA and RCIP states, the Consultant will develop state-specific detailed operations manuals defining business procedures in RCTRCs. This may include but not be limited to such aspects as planning and budgeting for training and research; establishment of annual and longer term training and research programs; interaction with external training and research institutions; delivery of training and research programs; establishment of feedback, monitoring and evaluation of training and research programs; mechanisms to contribute to the PMGSY or similar rural road program (e.g., testing, quality control, participation in state technical agencies etc); human resources development providing mechanisms to lower a turnover of RCTRC staff, etc.

Task 2.2: Formulate funding mechanisms for the RCTRCs operations

29. The Consultant will propose sustainable funding mechanisms for the RCTRCs operations, which will achieve an optimum balance between the government financing and other sources, such pay per training/laboratory test mechanisms (including those for trainees coming from other states), partnerships with private companies, etc. In this effort, the Consultant will explore different schemes and potential partnerships, e.g., discussions with the National Skills Development Corporation should be conducted, and proposed/ongoing national/state skills development schemes should be reviewed.

Task 2.3: Provide advisory support in design and procurement process for RCTRCs facilities

30. **Design.** The Consultant will propose concept design of each RCTRC including learning blocks, housing and laboratories, and assist RCIP states in the recruitment process of the local consultants to design RCTRCs.

31. The Consultant will prepare site-specific architectural drawings of all RCTRCs at a model concept level, and provide advisory support to local architects and designer in preparing the detailed architectural drawings and designs based on the model concept drawings provided. The Consultant will prepare site-specific architectural drawings of RCTRC facilities. The drawings will include each floor plan, all side views, in 3D views with the landscaping (3D views can be prepared at the artistic rendering level, for the demonstration to the high level decision makers in each state). The Consultant will prepare a short brief for each architectural design explaining architectural solutions used, functionalities of the facility, and benefits. Architectural design will utilize a “green” concept suitable to tropical conditions and sustainability measures such as insulation, solar water heating, low energy light fixtures, double glazed units, solar powered air conditioning and natural ventilation and ample day lighting reducing the energy

¹¹ Indian Academy of Highway Engineers (IAHE) can be an example. Aside from the fact that its focus is higher level roads, there are a lot of similarities. It was established in the same way through a bank funded (WB in this case) project. Like NRRDA, it is established as a society and has a memorandum of understanding to guide it.

consumption in the buildings, etc. Concept of laboratories/workshops should utilize special requirements such as vibration free floors, dust exhaust and suppression, etc.

32. The Consultant will also provide advice/ideas on the innovative equipment which can be installed in the facilities, including videoconferencing; interactive satellite TV facilities connecting RCTRCs, RRNMUs and mobile stations for distant learning, demonstration, and feedback, etc; and, upon the consent of the states will ensure that the architectural design can properly accommodate such equipment.

33. The Consultant will review drawings and designs prepared by local design consultants regularly in the preparatory process and provide comments/suggestions for improvements. The Consultant will start review designs prepared locally as early as possible in their development, and provide comments and advisory support in the development of designs. The major thrust of this effort will be to arrive at the design creating working environment most conducive to the RCTRC functions, comparable with best international standards, having high demonstration and replication potential, suitable to local climatic and other conditions, and based on the “green” concept, including utilizing sustainable energy sources. Following the review and approval by the RCIP states, designs will be amended based on the Consultant’s recommendations.

34. **Equipment.** The Consultant will finalize the list of equipment for RCTRCs and related functional specifications.¹²

35. **Procurement.** The Consultant will assist in the preparation of bidding documents for the procurement of civil works for the construction of RCTRCs and procurement of the equipment, acceptable to the RCIP states and in compliance with ADB requirements, and will provide all necessary support in the procurement process.

Task 2.4: Provide dedicated training to RCTRC staff

36. The Consultant will prepare outline training program for RCTRC staff, and provide dedicated training to the RCTRC staff in rural road training and research, which will include both in-house (by the Consultant) and external training. Internal training will be done at each RCTRC campus (as they will have different environments), with the involvement of SRRDA management in an advisory role. External training will include both domestic and overseas training courses in the selected rural road training and research institutions. International program will also include interactions with local practitioners, such as within forums involving local government engineers to share experiences and learn, and to show off the achievements.¹³

37. Following the completion of the external training the Consultant will compile all training materials for the subsequent utilization in RCTRC courses delivered by RCTRC staff together with consultants financed by the Investment Program. The Consultant will also prepare video footages illustrating major aspects of the overseas training.

¹² Drafts will be developed by the PPTA consultant preparing RCIP.

¹³ Example can include forums for local government engineers conducted by the Institute of Public Works Engineering Australia (IPWEA).

Task 2.5. Develop operational plan for the rollout of RCTRCs

38. The state-specific operational plans for the rollout of RCTRCs will include preparing outline training and research programs for each of the next three years to be managed and delivered by RCTRC. This will include identification of courses and research topics, their scope and outline, targeted audiences, and providers (RCTRC staff together with the loan-financed consultants; invited representatives from other leading institutions in India or overseas (those should be part of the loan-financed consultancy, etc). The Consultant will also propose innovative methods of learning and related equipment (audio-visual capabilities, interactive satellite TV equipment for distant learning and feedback connecting all RCTRCs and RRNMUs, etc). In addition to core training modules required for the rural connectivity management, the Consultant will propose outline of additional module(s) on climate proofing¹⁴, greening, planting trees, community participation, approaches to afforestation, effective soil conservation techniques, etc. Task 4 will also include estimation of budgeting for training and research.¹⁵ The plan should be prepared for each RCTRC, but will also attempt to foster coordination and partnership between 5 RCTRCs and provide some delineation of efforts, especially in the research.

Task 2.6. Assist in the recruitment process for the loan-financed RCTRC consultant

39. The Consultant will develop a detailed TOR for the loan-financed consultant which will assist RCTRCs in rolling out systematic and large scale training in RCIP states. It is anticipated that loan-financed support to the RCTRC staff will be provided in the apprenticeship mode where over the period of three years the training courses will be delivered by the RCTRC consultant together with the concerned RCTRC staff, with increasing responsibility given to RCTRC staff. TOR should also define tasks related to establishing partnerships with leading rural road training and research institutions in India and overseas. It is anticipated that TOR should include support RCTRCs in research and compiling best specific practices and experiences in rural roads. It is anticipated that RCTRCs will train annually around 2,000 PIU engineers, technicians, site supervisors; 50 concerned representatives of Panchayati Raj Institutions (PRIs); 10 design consultants and 30 contractors.

40. The Consultant will then assist RCTRCs in the development of draft request for EOI and RFP acceptable to the RCIP states and in compliance with ADB requirements.

C. DELIVERABLES

41. **Reports.** All reports will be in English and Hindi. One hard copy and one electronic copy of each report will be submitted to each RCIP state, NRRDA and ADB. One hard copy of the final report on pilot RRNMUs and the operational plan for the roll out of RCTRCs will also be provided to DEA. The summary of reporting requirements is below:

Report	Timeline
General Requirement	
Progress reports	quarterly
Inception report	1 st month
Component 1	

¹⁴ ADB has developed guidelines on climate proofing (adaptation options) in training and capacity development. These will need to be reviewed and incorporated as appropriate

¹⁵ Some portion of financing (e.g., fees for invited resource persons) could be potentially provided by ADB under the RCTRC rollout consultancy included in the Investment Program.

Report	Timeline
Draft state-specific reports on RRNMU policies, business procedures and tools (5 in total, one per state)	4 th month
Final state-specific reports on RRNMU policies, business procedures and tools (5 in total, one per state)	8 th month
Compendium of RRNMU training materials (including OST audio-visual materials)	8 th month
Interim Report on pilot RRNMU operations and knowledge product on lessons learned from the international forum	12 th month
Draft Final Report on pilot RRNMU operations	24 th month
Final Report on pilot RRNMU operations	30 th month
Component 2	
State-specific reports on RCTRC concept, organizational structure, business procedures, and staffing requirements (5 in total, one per state)	4th month
Compendium of RCTRC training materials	8th month
State-specific report on operational plan for the rollout of RCTRCs (5 in total, one per state)	10th month

42. **OST and Workshops.** The Consultant will deliver OST and the following workshops:

Workshop	Timeline
Component 1	
International forum on rural road network development and management	3 rd month
RRNMU policies, business procedures and tools (5 in total, one in each state; and one cross-learning workshop for representatives of all states)	5 th month
Overseas study tour	7 th month
RRNMU operations: achievements and lessons learned (5 in total, one in each state; and one cross-learning workshop for representatives of all states)	11 th month
RRNMU operations: achievements and lessons learned (5 in total, one in each state; and one cross-learning workshop for representatives of all states)	23 rd month
Component 2	
RCTRC concept, organizational structure, business procedures, and staffing requirements (5 in total, one in each state; and one cross-learning workshop for representatives of all states)	4th month
Operational plan for the rollout of RCTRCs (5 in total, one in each state)	10th month

D. GOVERNMENT INPUT

43. The IAs of RCIP will provide counterpart staff, provide all relevant information and data, and ensure proper level of review of the recommendations provided by TA Consultant. The IAs will ensure active participation and learning of the concerned RRNMU and RCTRC staff. The IAs will also provide office space for the CDTA Consultant in PIUs/RRNMUs for Component 1, and in the existing state educational institutions for Component 2 to ensure effective cooperation between the TA Consultant and RRNMU/RCTRC staff. The offices will be provided on the campuses of the future RCTRCs (or nearby).

E. IMPLEMENTATION ARRANGEMENTS, STAFFING AND SCHEDULE

44. MORD, with technical and management support from NRRDA, will be Executing Agency (EA) for the CDTA at the central level and will be responsible for overall supervision and execution of the CDTA. The government of Assam through its Public Works Department; the governments of Chhattisgarh, Madhya Pradesh and West Bengal through their Departments of Panchayat and Rural Development; and the government of Orissa through its Department of Rural Development will be Executing Agencies for the TA at the state level. The Implementing Agencies (IAs) will be State Road Board in Assam, State Rural Roads Agency in Orissa, State Rural Development Agency in West Bengal, and Rural Roads Development Authorities in Madhya Pradesh and Chhattisgarh. Heads of the IAs in each state will be the major point of contact for the TA consultant and will appoint their representatives and counterpart support staff to interact with the TA consultant at the working level.

45. Both components will be carried out by a firm of international consultants in association with national consultants. Indicative breakdown of person-months is shown in Table 1.

Table 1. Indicative Breakdown of Consultant's Input

CDTA (Both Components)		
Position	Tasks	Input
International Staff		
Rural Roads Network Management Expert (Team Leader)	Tasks 1.1-1.5 and 2.1-2.6 - all states, with the RRNMU implementation emphasis on Madhya Pradesh, Chhattisgarh, and Orissa	20
Architect	Tasks 1.2 and 2.3 (support to design)	6
Road Safety Expert	Tasks 1.3, 1.4, 2.4, 2.5 (road safety aspect)	5
National Staff		
Rural Roads Network Management Expert (Deputy Team Leader)	Tasks 1.1-1.5 and 2.1-2.6 (review and oversight)	30
Architect	Tasks 1.2 and 2.3 (support to design by local architects and designers)	6
Procurement Expert	Tasks 1.1, 1.2 , 2.3 and 2.6 (goods and civil works)	6
Social Development Specialist	Tasks 1.4 and 2.4(social development aspect)	4
Environmental Specialist	Tasks 1.4 and 2.4 (environmental aspect)	4
COMPONENT 1		
Position	Tasks	Input
International staff		
Rural Roads Network Management Expert	Tasks 1.1-1.5 (RRNMUs, focus on Assam and West Bengal)	10
COMPONENT 2		
Position	Tasks	Input
International Staff		
Position	Tasks	Input
Continuing Education Expert (Roads)	2.1-2.5; 2.3, 2.6 (review, oversight and input)	8
National Staff		
Continuing Education Expert (Rural Road Network Management)	2.1-2.5; 2.3, 2.6 (review, oversight and input)	8

46. The Continuing Education Expert (Roads) and Continuing Education Expert (Rural Road Network Management) will have different experience and skills, which will be complementary to each other in the context in the assignment. One needs to be capable of establishing a training

institute and should have an educational background in road sector. The other needs to be a rural road management expert with extensive experience in delivering training. Detailed qualification requirements for key personnel are provided in Appendix 1.

47. Component 1 will be conducted over a period of 30 months. Component 2 will be conducted over the period of 10 months, starting at the outset of the assignment in parallel with the Component 1. International team members will be required to provide at least 90% of their input working in RCIP states, while the rest of the input (such as finalizing the reports and attending to the requests for advice coming from the PIUs/RRNMUs etc. during the period of the on-call support) can be done in their home offices. Deputy team leader (national) will be required to provide at least 70% in the PIU/RRNMUs offices of the total input working in RRNMUs and 30% in the firm's headquarters (overall oversight and coordination). The input of the Consultant under Component 1 will be gradually decreasing from full involvement in the operations to the oversight and advisory support on as needed basis, as more and more responsibilities are given to the local RRNMU staff.

PREFERRED QUALIFICATION REQUIREMENTS FOR KEY PERSONNEL

The qualification requirements in this appendix are preferred qualifications, and not pass/fail. However, qualifications specifically mentioned with language such as “minimum” or “at least” are pass/fail. Not meeting the pass/fail requirements will be considered as “non-complying” for those specific requirements.

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

1. Team Leader Cum Rural Roads Network Management Expert

Should be a senior level Road Asset Management Expert with a minimum of Masters Degree in Civil Engineering, having total experience of at least 20 years, out of which he should have been involved in the all aspects of road network management either as a public servant or consultant for at least 15 years. Experience in rural road network management will be an advantage. The experience should include developing road network management policies and operational manuals; institutional strengthening; management of various types of road construction and maintenance contracts; planning, programming and budgeting for road network development and maintenance; development and application of network management tools, and conducting training in road asset management. 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 in project management at senior levels, including leading large multi-disciplinary teams and experience in the delivery of TAs financed by one or more external financiers (ADB, JBIC, World Bank or other bilateral/multilateral funding agencies).

2. Rural Roads Network Management Expert

Should be a senior level Road Asset Management Expert with a minimum of Bachelors Degree in Civil Engineering, having total experience of at least 15 years, out of which he should have been involved in the all aspects of road network management either as a public servant or consultant for at least 8 years. Experience in rural road network management will be an advantage. The experience should include developing road network management policies and operational manuals; institutional strengthening; management of various types of road construction and maintenance contracts; planning, programming and budgeting for road network development and maintenance; and development and application of network management tools. 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 in the delivering of services under TAs financed by one or more external financiers (ADB, JBIC, World Bank or other bilateral/multilateral funding agencies).

3. Continuing Education Expert (Roads). Should be a senior level Transport Education Specialist (e.g., Civil Engineer, Transport Economist, Road Asset Management Expert, or equivalent) preferably with a Masters Degree in Transportation Studies or equivalent, having total experience of at least 20 years, out of which he should have been involved all aspects of continuing education in the transport sector for at least 10 years. Such experience should include as a minimum, participation in the establishment of training courses, programs and educational institutions; working in such institutions as a manager responsible for all aspects of planning, budgeting and operations; and delivering of training programs. Should have an experience of cooperation with leading transport educational and research institutions around

the world. Experience in rural road network management will be an advantage. Experience in Asia and especially India would be an advantage.

4. Road Safety Expert

Should be a senior level Civil/Traffic Management Engineer with a minimum of bachelor's degree and preferably with a master's degree in Traffic/Road Safety Engineering, with at least 10 years experience in various aspects of road safety engineering. This should include experiences in leading RSA teams and conducting RSAs at various stages in project implementation; identification and treatment of black spots; road safety monitoring and evaluation, including accident data analyses. Experience in road safety audits/engineering for rural roads will be an advantage. Must have experience in delivering training on road safety training. Must have a combination of experiences in both developed and developing countries.

5. Architect

Should be a senior level Architect with a minimum of Bachelors Degree in Civil Engineering, having experience of at least 15 years, out of which he should have prepared architectural drawings and design of buildings for at least 10 years. Experience in the design of field offices and industrial buildings (e.g., field laboratories) suitable to tropical conditions, educational institutions and utilizing best international standards and utilizing a "green" concept, including utilizing sustainable energy sources would be an advantage.

National Experts

1. Deputy Team Leader Cum Rural Roads Network Management Expert

Should be a senior level Road Asset Management Expert with a minimum of Masters Degree in Civil Engineering, having total experience of at least 25 years, out of which he should have been involved in the all aspects of road network management either as a public servant or consultant for at least 15 years. Experience in rural road network management will be an advantage. The experience should include developing road network management policies and operational manuals; institutional strengthening; management of various types of road construction and maintenance contracts; planning, programming and budgeting for road network development and maintenance; and development and application of network management tools. Must have a combination of experiences in both developed and developing countries. He/she must have a successful experience in project management at senior levels, including leading large multi-disciplinary teams and experience in the delivery of TAs financed by one or more external financiers (ADB, JBIC, World Bank or other bilateral/multilateral funding agencies).

2. Continuing Education Expert (Rural Roads Network Management)

Should be a senior level Civil Engineer with a minimum of Masters Degree in Civil Engineering, having total experience in road planning, design, construction and maintenance for at least 25 years, including at least 10 years experience at senior level managing planning, design, construction and maintenance for a road network. Experience in rural roads and, in particularly, following experience would be an advantage: experience in developing road network management policies and operational manuals; institutional strengthening; management of various types of road construction and maintenance contracts; planning, programming and budgeting for road network development and maintenance; and development and application of network management tools. Must have experience in developing and delivering of the roads asset management training courses. Experience of cooperation with leading transport educational and research institutions in India will be an advantage. Must have a combination of experiences in both developed and developing countries. He/she must have a successful experience in project management at senior levels, including leading large multi-disciplinary

teams and experience in the delivery of TAs financed by one or more external financiers (ADB, JBIC, World Bank or other bilateral/multilateral funding agencies).

3. Procurement Expert

Should have a minimum 15 years of experience in procurement of civil works and goods including all stages of the procurement process, from the preparation of the bidding documents/requests for proposals to the assessment of the bids/proposals. Should have thorough knowledge of the procurement documentation and be experienced in all aspects of procurement of civil works, goods and consulting services including preparation of bidding documents, shortlists, technical and financial bid evaluation reports. Should have a thorough knowledge of ADB procurement process and requirements. Experience in the procurement and administration of road maintenance contracts will be an advantage

4. Social Development Specialist

Should have a Master's Degree in Social Science or equivalent, and have at least 8 years of experience in preparing, implementing and monitoring social development safeguards in infrastructure projects. He or she should have experience with the monitoring of socioeconomic impacts of road infrastructure projects and related knowledge of impact monitoring methodology, techniques and statistical sampling. Must have experience in the preparation, implementation and monitoring of social safeguards in infrastructure projects financed by one or more external financiers (ADB, JBIC, World Bank or other bilateral/multilateral funding agencies). Experience in social development aspects of the rural road projects will be an advantage.

5. Environmental Specialist

Should have a Master's Degree in Environmental Science or equivalent, and have at least 8 years of post-graduate experience in preparing, implementing and monitoring the implementation of the environmental safeguard in infrastructure projects. He or she should be fully familiar with the legal provisions for environmental management in India. Must have experience in the preparation, implementation and monitoring of environmental safeguards in infrastructure projects financed by one or more external financiers (ADB, JBIC, World Bank or other bilateral/multilateral funding agencies). Experience in environmental aspects of the rural road projects will be an advantage.

6. Architect

Should be a senior level architect with a minimum of Bachelors Degree in Civil Engineering, having experience of at least 15 years, out of which he should have prepared architectural drawings and design of buildings in India for at least 10 years. Experience in the design of field office and industrial buildings (e.g., field laboratories) and educational institutions suitable to tropical conditions and based on the "green" concept, including utilizing sustainable energy sources would be an advantage.

Social Safeguards Checklist for RCTRC and RRNMU

1. Where is the RCTRC located?
2. What are the land requirements of the building (area size requirements)?
3. What is the current land use of this area?
4. Does some/all the land belong to the SRRDA? If all the land does, please provide documentation in annex and skip to question # 7
5. If the land does not belong to the SRRDA, is it government land? If yes, please describe share of land and size area belonging to government as well as procedures for SRRDA to acquire the government land.
6. Is some of the land private land? If yes describe the share and size of private land required and provide short brief census¹ of affected households and survey of affected assets
7. If the land is SRRDA's or belong to another public entity, are there any structures, agricultural activities belonging/conducted by squatters on the plot? If yes, please conduct brief census of affected households and survey of affected assets
8. If answers to questions 6 and 7 are yes, please indicate mitigation measures as per the Mitigation Measure Matrix (Table 5.1 p. 2) of each state's Community Participation Framework (CPF).
9. Additional comment (if any):

¹Census should follow similar format as the one conducted for the Community Participation Framework

SUMMARY OF DESIGN STANDARDS AND TECHNICAL APPROACH

1. The roads to be constructed or upgraded under the Rural Roads Sector III Investment Program (RCIP, or Investment Program) are rural roads comprising village roads and other district roads to provide all-weather connectivity to habitations. RCIP roads will be built along the alignments of the existing earth/gravel roads/tracks, which are in poor condition. The majority of these roads/tracks are impassable for to 3-4 months during the wet season. As they presently carry a low volume of traffic—on average, less than 50 motorized vehicles per day—and projected traffic for them after 20 years will still be below 1,000, the project roads are classified as low-traffic.

A. Design Standards for Investment Program Roads

2. The design criteria adopted are in accordance with the Indian Roads Congress (IRC) publication *Rural Roads Manual* (IRC:SP:20-2002) and other IRC design codes that have been followed by the Prime Minister's Rural Roads Program (PMGSY). The standards are consistent with standard international practices adopted by the American Association of State Highway and Transportation Officials design standards and Transport Research Laboratory Overseas Road Note 31: Guide to the Structural Design of Bitumen-Surfaced Roads in Tropical and Subtropical Countries, and are found appropriate.

3. The following codes have been developed by IRC to provide guidelines on the Geometric Design Standards of Rural Roads.

- (i) IRC: 73-1980 : Geometric Design Standard for Rural (Non-urban) Highways
- (ii) IRC: 64-1970 : "Guidelines for Capacity of Roads in Rural Areas" for Carriageway Widths
- (iii) IRC: 72-2007 : "Guidelines for Design of Flexible Pavement for Low Volume Rural Roads" for Pavement Design
- (iv) IRC: SP: 62-2004 : "Guidelines for the Design and construction of Cement Concrete Pavement for Rural Roads" for C.C. Pavement
- (v) IRC: SP: 13-2004 : "Guidelines for Design of Small Bridge & Culverts" for Cross Drainage Works
- (vi) IRC: 52-2001 : "Recommendation about the Alignment Surveys & Geometric Design" of Hill Roads
- (vii) IRC: SP: 23-1983 : "Vertical Curves for Highways"
- (viii) IRC: 38-1988 : "Guidelines for Design of Horizontal Curves for Highways"
- (ix) IRC: SP: 48-1998 : "Hill Road Manual" for Rural Roads in Hilly Terrain

4. Pavement will be designed in accordance with IRC: 72: Flexible Pavement Design of Rural Roads (generally adapted from AASHTO Guide for Design of Pavement Structures). PMGSY requires that roads be negotiable in all kinds of weather. The choice of surfacing takes into account factors such as traffic, soil type, and rainfall. In most cases, bitumen surfacing will be the most economic option for the roads under the Investment Program, particularly because (i) under monsoon conditions, gravel-surfaced roads could be washed away by rains; and (ii) gravel roads require frequent maintenance if they are to realize their potential life, and include uncertainties about establishing a permanent capacity sufficient for carrying out required activities. Cement concrete pavement will be used instead of bituminous pavement in all village portions of rural roads since its drainage design is more compact and also due to the environmental and hygienic considerations. Rigid pavement option will also be explored as an alternative to bituminous pavement in the road portions susceptible for flooding, due to its higher endurance and lower maintenance costs.

B. General Design Consideration

5. The major improvements on the project roads are as follows:

- (i) Widen the existing roadway to 7.5 meters (m)—efforts will be made to confine widening within the existing right-of-way to minimize adverse environmental and social impacts.
- (ii) Provide a 3.75 m wide carriageway with granular subbase, waterbound macadam as base, and bitumen overlay.
- (iii) Provide a 3.75 m shoulder (1.875 m on each side). In case soft soils are used for embankment, hard shoulders of 1.0 m width will be provided on either side. Where availability of land is not a constraint, extra width of shoulders can be provided near bus stops and to provide platforms for storing of materials during maintenance.
- (iv) For link roads in plains: provide formation width of 6.0 m, carriageway width of 3.75 m (if motorized traffic volume is above 100 a day) and carriageway width of 3.00 m (if motorized traffic volume is below 100 a day)
- (v) For all roads in hilly areas: provide formation width of 6.0 m, carriageway width of 3.75 m (if motorized traffic volume is above 100 a day) and carriageway width of 3.00 m (if motorized traffic volume is below 100 a day)
- (vi) Raise the embankment to provide a minimum subgrade level of 0.5 m above the natural ground level or 0.6 m above the highest flood level to meet hydraulic requirements. As a general rule top of the road crust (at crown) shall not be more than 1.5 m above the general ground level except at locations of cross drainage structures and their approaches, subject to meeting the all weather road criteria.¹
- (vii) Improve horizontal and vertical alignment to allow a design speed of 50 kilometers/hour on level terrain. The existing alignment will be followed in most cases to minimize resettlement. However, viable alternative alignments should be considered and evaluated, especially in cases where such alternatives could provide savings, and minimize social and environmental impacts. The input from the communities² and Panchayati Raj Institutions will be incorporated in the selection of alignment alternatives.
- (viii) Provide adequate road safety features. Road safety audits will be conducted on sample roads in each RCIP tranche to identify specific road safety issues on each road and provide recommendations to address the issues. Road safety audits will also identify common/recurrent roads safety issues which will be addressed on all roads in each RCIP tranche.

¹. With consideration to possible climate change related risks that will reduce the life span and resilience of the roads and related infrastructure.

². Through the participation in the transect walks.

- (ix) Provide and integrate cross-drainage and longitudinal drainage. Provide proper cross-drainage structures, where necessary, to ensure all-weather connectivity. Explore possibilities of adopting causeways where minor/major bridges are proposed, for cost effectiveness. Provide conduits for future irrigation pipes.
- (x) Where height of embankment is more than 2.5m (approaches to cross drainage structures, side slopes should be protected by stone/cement concrete block pitching. Alternatively, use of erosion control blankets like biodegradable concrete fibers may be explored from cost considerations. In other cases, where embankment height to less than 2.5 m, local grass cover or vetiver grass cover may be adequate.
- (xi) Provide road furniture, including signs, delineators and kilometer posts. Provide speed breakers at critical locations where traffic speed should be lowered (such as schools, intersections with higher category roads, etc.).
- (xii) As rural roads are considered low volume, low cost roads, local materials which are cheaper to extract and readily available will be used to the maximum extent feasible.³
- (xiii) Pilot interlocking concrete block pavement in accordance to the IRC SP:63-2204 designs on village portion of rural roads where feasible.⁴
- (xiv) Pilot cold mix technology for bituminous pavements as per IRC 14:2004 specifications for use in construction of rural roads.⁵
- (xv) Stabilize high embankment slopes and bridge abutments, including the use of vetiver grass.⁶
- (xvi) Establish tree plantations along the roads or in designated locations where appropriate.
- (xvii) Use fly ash where feasible fly ash possesses several desirable characteristics such as lightweight, ease of compaction, faster rate of consolidation, better drainage, etc. In comparison to soil, spreading and compaction of fly ash can be started much earlier after a rainfall. For construction of embankments over weak subsoil fly ash could be a preferred material.

³ Past experience in India shows that for the same pavement thickness, the use of local materials in lieu of the conventional hard stone aggregates can bring about savings to the tune of 25% of conventional construction costs (up to 40% where hard stone aggregates have to be carted from long distances of the order of 200 km).

⁴ The advantage of the ICBP is that the blocks are constructed under the controlled conditions and actual laying of blocks is relatively simple. The ICBP is also much more aesthetically pleasing than the cc pavement. Application of the technology reduces energy consumption, and results in lower greenhouse gas emissions than hot mix.

⁵ This technology is especially beneficial compared to the hot mix technology in the regions which have continuous intermittent rains (such as Assam). Application of the technology reduces energy consumption, and results in lesser greenhouse gas emissions than hot mix.

⁶ The use of vetiver grass is especially beneficial to stabilize slopes adjacent to the pond/river and a viable alternative to concrete retaining walls and bamboo nets. Use of vetiver grass proved to be a very cheap and effective bio-engineering measure. It promotes climate resilience of the roads as it has better capacity to resist erosion due to heavier rains, storm surges, and similar climate induced events.

Attachment G to FAM

- (xviii) Pilot using of Jute Geo Textile (JGT). JGT, though biodegradable, helps in strengthening the soil and facilitating the drainage. JGT efficiently performs different tasks like separation, filtration, drainage, and reinforcing. The advantages for using JGT include natural consolidation of soil, strength graining of base soil through reduction in moisture content, and cost reduction compared to conventional methods in adverse soil conditions, like black cotton soils.
- (xix) Use pre-fabricated bridges (steel bridges) as an alternative to conventional bridges on PMGSY roads for faster construction.
- (xx) Pilot using of new materials accredited by IRC, e.g., new stabilizers for improving the engineering properties of soil, and additives improving the properties of asphalt.

Technical Bid Evaluation

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 (one 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

DESIGN AND MONITORING FRAMEWORK FOR THE INVESTMENT PROGRAM

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
Impact Reduction in poverty and deprivation, and inclusive socioeconomic growth of the communities served by the investment program roads	Three years after completion of the investment program (2020) as compared to 2011: Improvement in social indicators in rural areas served by the investment program roads by 10%, including poverty rates, maternal and infant deaths, safe delivery, immunization, employment opportunities, and agricultural revenue	Census (2011, next due around 2018), state and district statistics Impact monitoring by TSC in a sample of villages Post-project monitoring by NRRDA	Assumption PMGSY is prioritized in the Government of India's Twelfth Five-Year Plan and being implemented in accordance with the PMGSY targets Risks Extreme weather condition and severe economic downturn derail implementation
Outcome Connectivity of selected rural communities in five investment program states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal to markets, district headquarters, and other centers of economic activity is improved and sustainable.	By the end of the investment program (2017): About 4,200 rural habitations (with at least 10% of households headed by women and 40% of inhabitants from vulnerable groups) are newly connected by all-weather investment program roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumption Continuous allocation of central and state government funds for post-construction road maintenance
Outputs 1. Selected priority rural roads in five investment program states are constructed to all-weather standard	By the end of the investment program (2017), about 9,000 km of priority rural roads (2,000 km under PPP-based PBMCs) in the participating states are constructed to all-weather standard.	OMMAS	Risk Initial delays in start of civil works due to delays with government clearances (e.g., environmental)
2. Quality of design of the investment program roads is improved.	By the end of the investment program (2017) as compared to 2010: 100% of road designs follow standardized DPR template, undergo quality control with the use of quality control toolkit, and account for the climate change related impacts. 100% of affected communities (at least 30%	Quality control checklists attached to DPRs Community design briefs as included in the DPRs	Assumption SRRDAs allocate enough budget for the preparation of designs and adequate staff time for the quality control of designs

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	women) are consulted in the design process		
3. Maintenance of the investment program roads is improved and sustained.	By the end of the investment program (2017): At least 30 RRNMUs (with at least 25% of new staff as female staff) are established, fully operational, and mainstream a PPP approach to road maintenance (at least 33% of which is conducted by women).	Government circulars and budget allocations Annual reports by RRNMUs PIC and TSC monitoring reports	
4. Road safety measures are incorporated into the life cycle of the investment program roads.	By the end of the investment program (2017) in all RRNMU districts (30 in total): At least 50% of designs and 30% of existing rural road network undergo RSAs annually and are improved accordingly, with emphasis on vulnerable road users	Summary RSA reports by PICs, TSC, and RRNMUs Annual reports on road safety works completed and response reports by SRRDAs	Assumption States fully adopt RSA procedures and provide adequate budget for road safety improvements
5. Qualification and skills of PMGSY engineers, technicians, site supervisors, PRI staff concerned, design consultants, and contractors in the investment program states are improved and maintained.	By the end of the investment program (2017): five RCTRCs are established, fully operational, and completed training and certification of at least 4,000 PIU staff, 300 PRI staff (at least 30% women), 100 design consultants, and 300 contractors	Government circulars and budget allocations RCTRCs' training certification records	
6. Facility is managed effectively.	Each tranche is approved as scheduled, and completed on time and within budget All investment program performance targets and indicators are systematically monitored and achieved.	OMMAS OMMAS PIC reports TSC reports	
Activities with Milestones 1. Construction of rural roads 1.1 State-wise PMGSY road lists for 2012 (project 1), 2013 (project 2), 2014 (project 3), and 2015 (project 4) selected and approved by start of the project year 1.2 Detailed designs cleared and sanctioned by NRRDA 2 months before PFR submission 1.3 Contractors implement contracts according to schedule and design 2. Improvement of quality control of design 2.1 New procedure for quality control of DPRs is piloted		Inputs ADB: \$800.00 million	
		Amount (\$ million)	
		Item	
		Road infrastructure development	776.60
		Institutional development	23.40

Activities with Milestones	Inputs
on project 1 DPRs (throughout 2011) and subsequently used by all five investment program states throughout the investment program	India and the States: \$425.30 million
3. Improvement of asset management	Item Amount (\$ million)
3.1 RRNMU (fully staffed) in place in five pilot districts: December 2012; in 25 more districts: December 2014	Road infrastructure development 198.15
3.2 Construction and equipping of five RRNMUs completed: September 2014; 25 more RRNMUs: March 2017	Institutional development 18.60 Project management 19.00 Contingencies 148.36 Finance charges 41.19
4. Improvement of road safety	Japan Fund for Poverty Reduction: \$1.30 million
4.1 Systematic RSAs on existing roads, on sample DPRs under each tranche during construction, and on sample of newly constructed roads conducted (by PICs and PIUs: in 2011–2012; by RRNMUs: in 2013 in 5 districts, and in 2015 in 30 districts)	Item Amount (\$'000)
5. Capacity building	Consultants
5.1 RCTRC (fully staffed) in place in five investment program states: December 2013	Remuneration and per diem 1,075.00
5.2 Large-scale training started: June 2014	International and local travel 62.00
5.3 Construction and equipping of five RCTRCs completed : December 2014	Reports and communications 5.00 Equipment 10.00 Workshops, seminars, conferences 15.00 Miscellaneous administration and support costs 20.00 Representative for contract negotiations 6.00 Contingencies 107.00
6. Effective project management	Technical Assistance Special Fund (TASF-other sources): \$1.00 million
6.1 SRRDAs, PIUs, TSC, and PICs in place with full staffing and equipment: throughout the investment program	Item Amount (\$'000)
6.2 Technical assistance-financed consultants in place: December 2012	Consultants
6.3 Loan-financed RCTRC consultant in place: March 2014	Remuneration and per diem 603.00
6.4 Advance procurement of civil works starts: at least 2 months before PFR approval	International and local travel 43.00
6.5 Construction supervision by PIUs	Reports and communications 5.00
6.6 Baseline surveys by TSC and DPR consultants prior to or during the first year of each tranche	Equipment 7.00
6.7 Subsequent tranches prepared (annually)	Workshops, seminars, conferences 155.00
6.8 Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout the investment program implementation)	Miscellaneous administration and support costs 22.00 Representative for contract negotiations 6.00 Contingencies 159.00
6.9 Impact monitoring by TSC (on completion of tranche 1–3 roads) and by NRRDA (on completion of the investment program)	

ADB = Asian Development Bank; DPR = detailed project report; km = kilometer; NRRDA = National Rural Roads Development Agency; OMMAS = online management, monitoring, and accounting system; PBMC = performance-based maintenance contract; PFR = periodic financing request; PIC = project implementation consultant, PIU = project management unit; PMGSY = Pradhan Mantri Gram Sadak Yojana (Prime Minister's Rural Roads Program); PPP = public-private partnership; PRI = *panchayati raj* institution; RCTRC = rural connectivity training and research center; RRNMU = Rural Road Network Management Unit; RSA = road safety audit; SRRDA = state rural road development agency; TSC = technical support consultant.

Source: Asian Development Bank.

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 1

Design Summary	Performance Targets and Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
Impact Connectivity of selected rural communities in five RCIP states to markets, district headquarters, and other centers of economic activity is improved and sustainable	By the end of the RCIP (2017): About 4,200 rural habitations (with at least 10% female headed households and 40% beneficiaries from vulnerable groups) are newly connected by all-weather RCIP roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumptions Continuous allocation of central and state government funds for post construction road maintenance
Outcome Connectivity of selected communities in five RCIP states prioritized by PMGSY for 2012 sanction is improved and sustainable	By the end of the Project 1 (2015): 1,600 rural habitations (with at least 15% female headed households and 40% habitants from vulnerable groups) are newly connected by all-weather RCIP roads under long-term PBMCs (254 in Assam, 447 in Chhattisgarh, 431 in Madhya Pradesh, 427 in Odisha, and 41 in West Bengal).	OMMAS Impact monitoring and surveys by TSC	Assumptions Timely availability of counterpart funds
Outputs 1. Selected priority rural roads prioritized by PMGSY for 2012 sanction are constructed to all-weather standard	By the end of the Project 1 (2015): About 3,461 km of priority rural roads (300 km under PPP-based PBMCs) including in Assam (342 km), Chhattisgarh (1,008 km), Madhya Pradesh (1,187 km), Odisha (757 km), and West Bengal (167 km) are constructed to all-weather standards.	OMMAS	Risks Initial delays in start of civil works due to delays with government clearances for Project 1 (e.g. environmental)
2. Quality of design of RCIP roads is improved	100% of road designs for Project 1 roads follow standardized DPR template and undergo quality control with the use of quality control toolkit, and account for the climate change related impacts 100% of all affected communities along Project 1 roads (at least 30% women) are consulted in the design	Quality control checklists attached to DPRs Community design briefs as included in the DPRs	Assumptions SRRDAs allocate enough budget for the preparation of designs and adequate staff time for the quality control of designs

	process		
3. Maintenance of RCIP roads is improved and sustainable	By the end of Project 1 (2015): At least 5 RRNMUs (with at least 25% new staff as female staff) are established (1 in each state), fully operational and mainstream a public private partnership approach to the road maintenance, and mainstream a public private partnership approach to the road maintenance (at least 33% of which is conducted by women)	Government circulars and budget allocations Annual reports by RRNMUs	
4. Road safety measures are incorporated into the lifecycle of RCIP roads	In the course of preparation of Project 1 (2011): At least 10% of Project 1 designs in Assam, Madhya Pradesh and Chhattisgarh undergo RSAs and improved accordingly, with emphasis on vulnerable road users By the end of the Project 1 (2015) in 5 RRNMU districts: As least 20% of designs and 10% of existing rural road network undergo RSAs annually and improved accordingly, with emphasis on vulnerable road users	Summary RSA reports by PICs, TSC, and RRNMUs Response reports by SRRDAs Summary RSA reports by PICs, TSC, and RRNMUs Annual reports on road safety works completed and response reports by SRRDAs	Assumptions State Governments fully adopt RSA procedures and provide adequate budget for road safety improvements
5. Qualification and skills of PMGSY engineers, technicians, site supervisors, concerned staff of PRI, design consultants and contractors in RCIP states is improved and maintained	By the end of the Project 1 (2015): 5 RCTRCs are established, fully operational and completed training and certification of at least 300 PIU staff, 30 PRI staff (at least 30% women), 30 design consultants and 50 contractors.	Government circulars and budget allocations RCTRC's training certification records	
6. Effective project management provided	Each tranche is approved as scheduled, and completed on time and within budget. All RCIP performance targets and indicators are systematically monitored and achieved.	OMMAS OMMAS PIC reports TSC reports	

Activities with Milestones	Inputs		
1. Construction of Rural Roads			
1.1 State-wise PMGSY road lists for 2012 (Project 1), selected and approved by start of the project year			
1.2 Detailed designs cleared and sanctioned by NRRDA two months before PFR1 submission			
1.3 Contractors implement contracts according to schedule and design	ADB: \$252.00 million (ordinary capital resources loan)		
2. Improvement of quality control of design	<table> <tr> <th>Item</th><th>Amount (\$ million)</th></tr> </table>	Item	Amount (\$ million)
Item	Amount (\$ million)		
2.1 New procedure for quality control of DPRs is piloted on tranche 1 DPRs (throughout 2011)			
3. Improvement of asset management			
3.1 RRNMU (full staff) in place in 5 pilot districts: December 2012	<table> <tr> <td>Road infrastructure development</td><td>244.96</td></tr> </table>	Road infrastructure development	244.96
Road infrastructure development	244.96		
3.2 Construction and equipping of 5 RRNMUs completed : September 2014	<table> <tr> <td>Institutional development</td><td>7.04</td></tr> </table>	Institutional development	7.04
Institutional development	7.04		
4. Improvement of road safety			
4.1 Systematic RSAs on sample DPRs under Project1 conducted (by PICs in 2011); during construction, and on sample of newly constructed roads conducted (by PICs and PIUs: in 2012; by RRNMUs: in 2013 in 5 districts)			
5. Capacity Strengthening/Training			
5.1 RCTRC (full staff, m/f) in place in 5 RCIP states: December 2013			
5.2 Large scale training started: June 2014	Government: \$89.00 million		
5.3 Construction and equipping of 5 RCTRCs completed : December 2014	<table> <tr> <td>Road infrastructure development</td><td>62.14</td></tr> </table>	Road infrastructure development	62.14
Road infrastructure development	62.14		
	<table> <tr> <td>Institutional development</td><td>5.58</td></tr> </table>	Institutional development	5.58
Institutional development	5.58		
	<table> <tr> <td>Project management</td><td>4.20</td></tr> </table>	Project management	4.20
Project management	4.20		
	<table> <tr> <td>Interest during construction</td><td>16.47</td></tr> </table>	Interest during construction	16.47
Interest during construction	16.47		
	<table> <tr> <td>Commitment charges</td><td>0.61</td></tr> </table>	Commitment charges	0.61
Commitment charges	0.61		
6. Effective project management			
6.1 SRRDAs, PIUs, TSC and PIUs in place with full staffing and equipment: throughout Project 1			
6.2 TA-financed consultants in place: December 2012			
6.3 Loan-financed RCTRC consultant is in place: March 2014			
6.4 Procurement of civil works starts: before Project 1 approval			
6.5 Construction supervision by PIUs (throughout Project 1)			
6.6 Baseline surveys by TSC in 2012			
6.7 Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 1 implementation)			
6.8 Impact monitoring by TSC (on completion of Project 1 roads) and by NRRDA (on completion of RCIP)			

ADB = Asian Development Bank, CDTA = Capacity Development Technical Assistance, CPF=community participation framework, DPR = detailed project report, E-OPS= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=Project Management Unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = Pradhan Mantri Gram Sadak Yojana, PRI=Panchayati Raj Institution, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU = Rural Road Network Management Unit, RCTRC=Rural Connectivity Training and Research Center, RSA=Road Safety Audit, SRRDA = State Rural Road Development Agency, TSC = Technical Support Consultant.

Source: Asian Development Bank.

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 2

Design Summary	Performance Targets and Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
Impact Improved connectivity of selected rural communities in five RCIP states to markets, district headquarters, and other centers of socio-economic activity	By the end of the RCIP (2017): About 4,200 rural habitations (with at least 10% female headed households and 40% beneficiaries from vulnerable groups) are newly connected by all-weather RCIP roads under long-term PBMCs.	OMMAS Impact monitoring and surveys by TSC	Assumption Continuous allocation of central and state government funds for post construction road maintenance
Outcome Improved accessibility of selected communities in five RCIP states	<p>Estimated 493,235 average daily vehicle km in the first full year of operation.</p> <p>Average number of months per year that the project roads are accessible increases from 9 months in 2013 to 12 months in 2016.</p>	<p>Impact monitoring and surveys by TSC</p> <p>Impact monitoring and surveys by TSC</p>	Assumption Timely availability of counterpart funds
Outputs 1. Selected rural roads are constructed to all-weather standard	By the end of the Project 2 (2016): About 3,693 km of PMGSY sanctioned rural roads for 2013 in Assam (496 km), Chhattisgarh (429km), Madhya Pradesh (654km), Odisha (1,184 km), and West Bengal (930 km), are constructed/upgraded to all-weather standards.	OMMAS	Risk Initial delays in start of civil works due to delays with government clearances for Project 2
2. Quality of design of RCIP roads is improved	<p>By the end of Project 2 (2016): 100% of road designs for Project 2 roads follow standardized DPR template.</p> <p>100% of all affected communities along Project 2 roads (at least 20% women) are consulted in the design process.</p>	<p>Quality control checklists attached to DPRs</p> <p>Community design briefs as included in the DPRs</p>	

Design Summary	Performance Targets and Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
3. Maintenance of RCIP roads is improved and sustainable	By the end of Project 2 (2016): At least 5 RRNMUs and 5 RCTRCs fully operational. At least 33% of road maintenance workers are women.	Annual reports by RRNMUs and RCTRCs	
4. Road safety measures are incorporated into the lifecycle of RCIP roads	In the course of preparation of Project 2 (2013): At least 10% of Project 2 designs in all RCIP states undergo RSAs, with emphasis on vulnerable road users. By the end of Project 2 (2016) in 5 RRNMU districts: As least 20% of designs and 10% of existing rural road network undergo RSAs annually, with emphasis on vulnerable road users. At least 30% female participation in road safety orientation and awareness training programs.	Summary RSA reports by PICs, TSC, and RRNMUs Response reports by SRRDAs Summary RSA reports by PICs, TSC, and RRNMUs Annual reports on road safety works completed and response reports by SRRDAs	Assumption State governments provide adequate budget for road safety improvements
5. Effective project management provided	Tranche 2 is approved as scheduled, and completed on time and within budget. All RCIP performance targets and indicators are systematically monitored and achieved.	OMMAS OMMAS PIC reports TSC reports	
Activities with Milestones 1. Selected rural roads are constructed to all-weather standard 1.1 Approve state-wise road lists and detailed designs by NRRDA before PFR2 submission (August 2013) 2. Quality of design of RCIP roads is improved 2.1 Undertake quality control check during detailed designs (by TSC) based on standardized DPR template 3. Maintenance of RCIP roads is improved and sustainable 3.1 Installation of equipment for 5 RRNMUs and 5 RCTRCs by December 2015 4. Road safety measures are incorporated into the lifecycle of RCIP roads 4.1 Conduct systematic RSAs on sample DPRs under Project 2 (by PICs in 2013) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2013; by RRNMUs: in 2016 in 5 districts)			Inputs ADB: \$275.00 million (ordinary capital resources loan) Government: \$81.56 million

Design Summary	Performance Targets and Indicators	Data Sources/ Reporting Mechanisms	Assumptions and Risks
5. Effective project management provided 5.1 SRRDAs, PIUs, TSC and PICs in place with full staffing and equipment: throughout Project 2 5.2 Start procurement of civil works before Project 2 approval (July 2013) 5.3 Construction supervision by PIUs (throughout Project 2) 5.4 Conduct baseline surveys by TSC in October 2013 5.5 Internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 2 implementation) 5.6 Impact monitoring by TSC (on completion of Project 2 roads in December 2016) and by NRRDA (by 2018)			

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project management unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = Pradhan Mantri Gram Sadak Yojana, PRI=Panchayati Raj Institution, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.

Source: Asian Development Bank

DESIGN AND MONITORING FRAMEWORK FOR PROJECT 3

Impacts the Project is aligned with:

Improved access to markets, district headquarters, and other centers of socio-economic activities (India's 12th Five Year Plan, 2012-2017)¹

Project Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting	Risks
Outcome Improved and sustained connectivity of selected rural communities in the investment program states	By 2017 a. Estimated 1,320,000 average daily vehicle-km in the first full year of operation. b. All project roads are covered with 5-year performance-based maintenance contracts.	a-b. Impact monitoring and surveys by TSC b. OMMAS	Inadequate maintenance after the completion of the 5-year maintenance contract.
Outputs 1. Selected rural roads are constructed to all-weather standard	By 2017 1a. About 6,124 km of PMGSY sanctioned rural roads in Assam (486.98 km), Chhattisgarh (1,055.94 km), Madhya Pradesh (1,377.86 km), Odisha (2,565.81 km), and West Bengal (637.57 km), are constructed/upgraded to all-weather standards. 1b. At least 33% of construction workers are women 1c. The project roads are accessible for full 12 months per year.	1a. OMMAS 1b. GAP monitoring report 1c. Impact monitoring and surveys by TSC	Delay in initial procurement of civil work packages due to non-responsive bids.
2. Quality of design of RCIP roads is improved	By 2017 2a. All DPRs for Project 3 follow the standardized DPR template, and the quality control checklist is attached to DPRs. 2b. Communities along Project 3 roads (at least 20% women) are consulted in the design process.	2a. PIC and TSC reports; National/State Quality Reports 2b. Community design briefs as included in the DPRs	
3. Maintenance of RCIP roads is improved and sustained	By 2017 3a. At least 25 RRNMUs are fully operational (6 in Assam, 4 in Chhattisgarh, 6 in Madhya Pradesh, 5 in Odisha, and 4 in	3a. Annual reports by RRNMUs and RCTRCs and certified by NRRDA.	

¹ Government of India, Planning Commission. 2013. *Twelfth Five Year Plan, 2012-2017*. Delhi.

	West Bengal). 3b. Budget for maintenance for each project road is at least 5% of construction cost.	3b. Budget report.	
4. Road safety measures are incorporated into the design	By 2017 4a. At least 10% of Project 3 designs in all RCIP states undergo RSAs, with emphasis on vulnerable road users. 4b. In 30 districts of RRNMU at least 50% of designs and 30% of existing rural road network undergo RSAs, with emphasis on vulnerable road users. 4c. At least 50% of schools in the target habitations receive road safety awareness sessions. 4d. At least 40% of students participating in the road safety awareness sessions are women. 4e. Average 'Safety Risk Rating' of the RSA reports should not be more than 2 on the sample roads.	4a-e. Summary RSA reports by PICs, TSC, and RRNMUs 4a-e. Annual reports on road safety works completed and response reports by SRRDAs.	
5. Institutional capacity strengthened	By 2017 5a. Five RCTRCs are established and fully operational. 5b. Training and its certification of at least 4,000 PIU staff and 700 PRI, design consultant and contractor staff completed.	5a-b. Government circulars, budget allocations, and RCTRC's training certification records.	
6. Effective project management provided	By 2017 6a. Project 3 is approved as scheduled, and completed on time and within budget. 6b. All RCIP performance targets and indicators are systematically monitored and achieved.	6a-b. OMMAS and PIC/TSC reports.	

Key Activities with Milestones
<p>1. Output 1: Selected rural roads are constructed to all-weather standard</p> <p>1.1 Approve state-wise road lists and detailed designs by NRRDA before the PFR for Project 3 submission (March 2015)</p> <p>1.2 Contractors implement contracts according to schedule and design (throughout implementation period)</p> <p>2. Output 2: Quality of design of RCIP roads is improved</p> <p>2.1 Undertake quality control check during detailed designs (by TSC) based on standardized DPR template (March 2015)</p> <p>3. Output 3: Maintenance of RCIP roads is improved and sustainable</p> <p>3.1 All RRNMU staff are appointed (June 2017)</p> <p>4. Output 4: Road safety measures are incorporated into the design</p> <p>4.1 Conduct systematic RSAs on sample DPRs under Project 3 (by PICs in 2014) during construction, and on sample of newly constructed roads by PICs and PIUs: in 2015 and 2016; by RRNMUs: in 2017 in 5 districts)</p> <p>5. Output 5: Institutional capacity strengthened</p> <p>5.1 Hire and engage RCTRC (fully staffed and equipped) in the investment program states (December 2015)</p> <p>5.2 Large scale training started (April 2016)</p> <p>6. Output 6: Effective project management provided</p> <p>6.1 Hire and engage SRRDAs, PIUs, TSC and PICs and procure equipment (throughout Project 3)</p> <p>6.2 SSTC in place (December 2015)</p> <p>6.3 Start procurement of civil works before Project 3 approval</p> <p>6.4 Construction supervision by PIUs (throughout Project 3)</p> <p>6.5 Conduct baseline surveys by TSC (April 2015)</p> <p>6.6 Conduct internal monthly monitoring by PIUs; quarterly reporting by SRRDAs; quarterly external monitoring by TSC and PICs (throughout Project 3 implementation)</p> <p>6.7 Undertake impact monitoring by TSC (on completion of Project 3 roads in December 2017) and by NRRDA (on completion of RCIP, by 2018)</p>
Inputs
<p>ADB: \$ 273 million</p> <p>Government: \$ 233.89 million</p>
Assumptions for Partner Financing
Not applicable

ADB = Asian Development Bank, CDTA = capacity development technical assistance, CPF=community participation framework, DPR = detailed project report, e-Ops= ADB e-Operations system, NRRDA = National Rural Roads Development Agency, OMMAS = online management, monitoring, and accounting system, PIC = project implementation consultant, PIU=project implementation unit, PPP=public-private partnership; PBMC=performance-based maintenance contract; PMGSY = *Pradhan Mantri Gram Sadak Yojana*, PRI=*Panchayati Raj Institution*, RCIP=Rural Connectivity Investment Program, RCIP States=Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal; RRNMU =rural road network management unit, RCTRC=rural connectivity training and research center, RSA=road safety audit, SRRDA = State Rural Road Development Agency, TSC = technical support consultant.

Source: Asian Development Bank.

Gender Action Plan (GAP) Progress Update Format

Activities, Indicators, Baseline, Targets, Time Frame and Responsibility	Progress to Date		Issues and Challenges (Please include reasons why an activity was not fully implemented, or if targets fall short, or reasons for delay, etc.)
	Progress for the Reporting Period (MM/YYYY to MM/YYYY) (This should include information on progress for the current quarter-- qualitative and quantitative updates (sex-disaggregated data))	Cumulative Progress (MM/YYYY to MM/YYYY) (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.)	
Output 1. Selected priority rural roads prioritized by PMGSY for 2012 sanction are constructed/ upgraded into all-weather standard			
1.1 Hire women workers in road construction. Ensure equal wages for equal work (Target/Indicator: 33% Women)			
1.2 Ensure that contract documents prohibit the hiring of child labor (Target/Indicator: All Contract Documents)			
1.3 Ensure that affected vulnerable female-headed households ¹ (FHH) are linked to national and state-sponsored government poverty alleviation programs (Target/Indicator: All affected vulnerable FHH in the project area)			
Output 2. Quality of design of RCIP roads is improved			
2.1 Consider the specific needs of vulnerable users (elderly, women, children, and disabled) in the design and modification of roads, wherever applicable. (Target/Indicator: 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.)			
2.2 Involve women from the local communities in project areas in the identification of road alignment and decision making during the transect walk (Target/Indicator: 20% Women)			
2.3. Women are represented in Grievance Redress Committees (GRCs) (Target/Indicator: 30% Women)			
Output 4. Road safety measures are incorporated into the lifecycle of roads in RCIP states			
4.1 Ensure the communities' participation in road safety awareness campaigns (Target/Indicator: (1) 50% of all			

¹ Vulnerable Households: affected households who are in the vulnerable category as defined by the Community Participation Framework

schools along subproject roads and targeted settlements benefit from safety awareness sessions; (2) 40% of participant students of safety awareness sessions are girls			
Output 5. Effective project management provided			
5.1. Collect sex-disaggregated data during the preparation of the baseline census survey, subproject monitoring and impact assessment reports. (Target/Indicator: Baseline surveys of affected households, social monitoring reports and impact assessment reports have sex disaggregated data)			
5.2. GAP Monitoring and Reporting: (1) Gender Focal Point in each PIU are designated/identified; (2) Gender Specialist in each PIC is appointed/recruited; and (3) GAP progress report is submitted annually)			

FHH = female-headed households, GP = Gram Panchayat, 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 Centre, RRNMU = Rural Road Network Management Unit, TSC = Technical Support Consultants, ZP = Zilla Parishad.

Comments/ Remarks:

Prepared by: _____

Approved by: _____

Date: _____

APPENDIX M - OUTLINE COMMUNITY PARTICIPATION FRAMEWORK FOR RCIP

1. The proposed multitranche financing facility (MFF) will finance the construction and upgrading of rural roads eligible for *Pradhan Mantri Gram Sadak Yojana* (PMGSY), the Prime Minister's Rural Roads Program, in the selected states (Assam, Orissa, West Bengal, Chhattisgarh and Madhya Pradesh) and any other states meeting the requirements in the Framework Financing Agreement). The criteria for subproject selection, social assessment, and review procedures are provided here.

A. Social Criteria for Subproject Selection

2. Criteria include the following:

- (i) adequate land width availability as specified in the Rural Roads Manual, Specification for Rural Roads 2004, PMGSY Operations Manual 2012;
- (ii) the proposed alignment involves limited land loss, and the remaining land and or/structures remain viable for continued use;
- (iii) if impacts are unavoidable, the impacts will be minimized through one or more of the following mechanisms: (a) design modifications by reducing land width, shifting the alignment, modifying cross-sections, etc., to the extent required by safety considerations; (b) voluntary donation of land/assets by the land/asset owner by means of memorandum of understanding (MOU) or other documentation acceptable to ADB; and (c) provision of support and assistance to vulnerable affected people¹ through gram panchayat² and rural development schemes and agreed mitigation matrix; and
- (iv) roads with no scope for addressing social impacts through any of the mechanisms above will not be taken up under the MFF for that particular year. Such roads will be taken up after the social issues are resolved by the community.

B. Social Assessment Requirement

3. After subproject selection (para. 2), the following processes will be undertaken and documented in specified formats:

4. **Planning.** This involves the following activities:

- (i) Disseminate project information to (a) sensitize the communities on project related issues, and (b) articulate community expectations of the proposed project and the mechanism for beneficiaries' land contribution.
- (ii) Finalize alignment through community planning: (a) transect walk conducted by the PIU, panchayat, and local community; (b) joint on-site inventory, crosschecking, verification of alignment, and transfer of information on revenue maps; (c) Identification and redress of grievances; (d) initiation of the process of land transfer; (e) Identification of vulnerable³ people affected by the project

¹ Affected people are defined as people (households) who stand to lose, as a consequence of the project, all or part of their physical and nonphysical assets irrespective of legal or ownership titles.

² A panchayat is a body of directly elected people responsible for development of activities in an area. The three levels of panchayat comprise gram panchayat at village level, intermediate panchayat at block level, and zilla panchayat at district level.

³ Vulnerable people affected by the project are defined as (i) households living below the poverty line as per the state poverty line for rural areas; (ii) households who will lose income and move below the poverty line as a result of loss to

- identified; (f) Community acceptance of the project and road alignment; (g) voluntary land donations made through MOU or other documentation acceptable to ADB; and (h) Adjustment of community/panchayat land to mitigate severe livelihood disturbances arising from land donations.
- (iii) The PIU/gram panchayat consults with people affected by the project after the transect walk to (a) disseminate information and data on how the concerns of affected people (AP) are incorporated in design modifications; (b) describe procedures to be adopted for land transfer; (c) outline entitlement provisions for vulnerable affected people for targeted support/assistance through linkages with rural development schemes, civil support mechanisms, or cash assistance; (d) describe disbursement procedures to vulnerable AP; and (e) outline inputs required from the community: construction labor, temporary use of land for diversion.
 - (iv) Develop a profile of AP: the PIU and gram panchayat will (a) survey AP to estimate asset ownership, sources of livelihood, and lost assets and livelihood; and (b) identify vulnerable AP to provide targeted support/assistance based on their vulnerability (living below the poverty line; households moving below the poverty line; scheduled tribes; scheduled castes; households headed by women; handicapped people suffering losses of their land, shelter, or source of livelihood).
 - (v) Disseminate the process of land transfer and finalize entitlement provisions.
 - (vi) Form village and district land management committees⁴ and grievance redress committees to resolve grievances, if any.
 - (vii) Submit MOU or other documentation acceptable to ADB/ to panchayati raj institution (PRI) and documentation of structure losses that are to be replaced by the PIU, state, and/or panchayat.

5. **Mitigation Measures Matrix.** A voluntary land donation system is adopted for the project in recognition of the effectiveness of the system for rural roads development in India. The project will also ensure that (i) there is full consultation with landowners and any non-titled people on site selection (ii) voluntary donations do not severely affect the living standards of affected people⁵ and are directly linked to benefits for the affected people, with community sanctioned measures to replace any losses that are agreed through verbal and written record by affected people; (iii) any voluntary donation will be confirmed through verbal and written record, and verified by an independent third party; and (iv) adequate grievance redress mechanisms are in place.

6. To mitigate the possible adverse impacts of the subprojects, the community participation framework (CPF) lists various types of impact categories and mitigation measures which would apply to sample as well as additional subprojects, based on the specific project impacts.

assets and/or livelihoods; (iii) households losing structure, households headed by women, scheduled caste, scheduled tribe, or the disabled.

⁴A land management committee will be formed by the gram panchayats consisting of gram panchayat members.

⁵ Including that the extent of land loss is does not go beyond 5% of the productive land of any affected individual.

Mitigation Measures Matrix

Impact Category	Mitigation Measures	Responsibility
Loss of Agricultural Land	<ul style="list-style-type: none"> Willing transfer of land by means of memorandum of understanding (MOU) or other documentation acceptable to ADB • Advance notice to harvest standing crops • For vulnerable affected people (AP), assistance/support by means of (i) alternate land sites provided by gram panchayat, or (ii) cash assistance as per replacement cost⁶ by gram panchayat to meet loss of land; and inclusion as beneficiaries in the existing poverty reduction/livelihood restoration programs • For land involving traditional and tenurial rights, the legal provisions applicable of the central and state governments pertaining to transfer of land will be followed; existing customary rights of tribal communities on various categories of land will be taken into account during the process of land transfer 	Gram panchayat (GP), Project implementation unit (PIU) and land revenue department
Loss of Structure	<ul style="list-style-type: none"> • Provision of an alternate plot of land and structure of equivalent quality and value to be provided as per AP's choice, or cash assistance by gram panchayat to meet the loss of land and structure allowing AP to purchase land and rebuild structure of an equivalent standard • For loss of boundary walls, fences, and other structures, willing transfer by means of MOU or other documentation acceptable to ADB. If voluntary donation of such structures is not possible, cash assistance as per replacement cost by gram panchayat to meet the loss of such structures, or provision of materials and/or labor by gram panchayat to allow AP to replace/rebuild the same • For vulnerable AP, inclusion as beneficiaries in the rural development programs/housing schemes • For tenants, assistance to find alternative rental arrangements by gram panchayat, or cash assistance equivalent to advance payments made to the owner • For squatters, provision of alternative relocation site, or cash assistance as per replacement cost, or provision of building material and/or labor by gram panchayat, or inclusion as beneficiaries in the rural development programs/housing schemes • For land and structure involving traditional and tenurial rights, the legal provisions applicable of the central and state governments pertaining to transfer of land will be followed; existing customary rights of the tribal communities on various categories of land shall be taken into account during the process of land transfer 	Gram panchayat (GP), Project implementation unit (PIU) and land revenue department
Loss of Livelihood	<ul style="list-style-type: none"> • For vulnerable AP, inclusion as beneficiaries in the existing poverty reduction/livelihood restoration programs; in case of non-inclusion in such programs, cash assistance to meet the loss of income during transitional phase and for income restoration • Assistance for asset creation⁷ by community and gram panchayat 	Gram panchayat and PIU
Loss of Assets Such as Trees, Well, and Ponds	<ul style="list-style-type: none"> • Willing transfer of the asset by means of MOU or other documentation acceptable to ADB • For vulnerable affected people, assistance for the loss of these assets through inclusion as beneficiaries in the existing poverty reduction/livelihood restoration programs; in case of non-inclusion in such programs, cash assistance by gram panchayat to meet the loss of assets and income 	Gram panchayat, PIU, and land revenue department
Loss of Community-Owned Assets (such as temple, wells, ponds, grazing land, etc.)	<ul style="list-style-type: none"> • Relocation or construction of assets by gram panchayat with technical inputs from the PIU • Consultations with the concerned section of the community in the case of grazing land, etc. 	Gram panchayat, and PIU
Temporary Impacts during Construction	<ul style="list-style-type: none"> • Civil works contract conditions to include provisions to obligate the contractor to implement appropriate mitigation measures for the temporary impacts including disruption of normal traffic, increased noise levels, dust generation, and damage to adjacent parcel of land due to movement of heavy machinery. 	PIU
Other Impacts not Identified	<ul style="list-style-type: none"> • Unforeseen impacts will be documented and mitigated based on the principles in this framework. 	

⁶ Replacement cost means the "cost" to replace the lost asset at current market value or its nearest equivalent, plus any transaction costs such as administrative charges, taxes, and registration and titling costs allowing the individual/ community to replace what is lost and their economic and social circumstances to be at least restored to the pre-project level.

⁷ Assistance for asset creation shall comprise of assistance for creation of cattle shed, shop, production unit or any other form of income generating asset that will enable the affected household in restoring their livelihood.

7. Implementation. The following activities will be undertaken:

- (i) (i) For the implementation of civil works, the states will acquire or make available on a timely basis the land and rights in land, free from any encumbrances.
- (ii) (ii) The PIU will facilitate enrollment of vulnerable AP in rural development schemes with prior disclosure of information of the process and schedule.
- (iii) Entitlements will be disbursed through civil support mechanism by gram panchayat or any other agency that holds jurisdiction over such disbursement.
- (iv) For lands involving traditional tenurial rights, the PIU and gram panchayat, through consultations, will assess the impacts of such land donations and the extent of dependence of the local community on such land.
- (v) Loss of other assets (well, trees, etc.) will be accounted for either through willing transfer (MOU or other documentation acceptable to ADB) or relocation/construction by gram panchayat/community with technical inputs from the PIU.
- (vi) Grievances will be resolved through the land management committee and grievance redress committees.
- (vii) The PIU takes physical possession of land.
- (viii) Temporary use of land during construction will be through written approval of the landowner or the panchayati raj institution. Contractor will bear the costs of any impact on structure or land due to movement of machinery and other construction-related reasons. Construction camp will be sited in consultation with local community and panchayati raj institution.
- (ix) In order to ensure effective implementation of social safeguard process and accountability of Social Safeguarding interests, procedures and documents post the demobilization of the PIC, it may be necessary to formulate state level Social Safeguard Cells. The cell will (i) Coordinate all agencies involved in dealing with Social safeguards process (ii) Assist the PIU and PIC in organizing social safeguard processes as mentioned in CPF (iii) Ensuring documentation of all documents on time (iv) Facilitate PIU/PIC for better linkage of APs and (iv)b Monitoring of the PIUs and PIC.

CONTRIBUTION TO THE ADB RESULTS FRAMEWORK

No.	Level 2 Results Framework Indicators (Outputs and Outcomes)	Targets	Methods / Comments
1	Use of roads built or upgraded (average daily vehicle-kilometers in the first full year of operation)	1,320,000 vehicle-km	
2	Provincial, district, and rural roads built or upgraded (kilometers)	6,124 km Rural roads	

km = kilometers

Source: Asian Development Bank.

ECONOMIC AND FINANCIAL ASSESSMENT

1. The Rural Connectivity Investment Program will construct to all-weather standard around 9,000 kilometers (km) of priority rural roads in the states of Assam, Chhattisgarh, Madhya Pradesh, Odisha, and West Bengal (the investment program states). This figure has increased to 13,278 km to fully utilize the funding under the facility. All-weather roads constructed under the investment program will provide all-year access to social services and markets and significantly reduce vehicle-operating costs. The first and second sets of road sections under RCIP (project 1 and project 2) have been approved and are under implementation. The third set of road sections (selected based on the established PMGSY guidelines which has identified the core road network to be developed) proposed under RCIP (project 3) is now ready to be taken up for implementation. An economic analysis of the sample set of road subprojects under project 3 in each state was carried out to assess the economic viability of the project road sections.

2. Economic evaluation of the proposed project was undertaken using the Highway Development Model 4 (HDM-4). The costs to the road agency and road users in the “without” and “with” project cases were estimated and used for deriving the net costs and benefits with the project and to calculate the economic viability of the project road sections. The analysis has used the domestic price numeraire. A shadow exchange rate factor of 1.037 is applied to traded goods to convert into domestic prices.¹ A shadow wage rate factor of 0.74 is applied to unskilled labor cost.² An analysis period of 20 years of operation after construction completion is used. In the terminal year of the project, residual values of assets were considered as per their economic life by applying the straight-line depreciation method.

3. **Project road details.** The details of road sections included in the analysis are given in Table 1. All road sections under consideration are earth/gravel roads in poor to very poor condition and difficult to travel in the rainy season with many cross drainage structures missing, and are used by two-directional traffic. Base-year traffic volumes were obtained from classified traffic counts carried out on selected road sections or adjoining links of similar characteristics.

Table 1: Details of Project Road Sections

State	No. of Road Sections	Total Length (km)	Daily Traffic Range (motorized vehicles)	Average Traffic Composition (%)				Daily Traffic Range (nonmotorized vehicles)
				Two Wheeler	Passenger Veh.	Tractor/Trailer	Truck	
Assam	196	486.98 (0.52–11.95) ^a	87–246	33.9	26.5	20.7	18.9	98–124
Chhattisgarh	320	1055.94 (0.60–23.23) ^a	92–142	38.3	16.8	39.3	5.6	47–142
Madhya Pradesh	482	1381.36 (0.50–13.0) ^a	63–215	37.2	18.1	36.2	8.5	27–143
Odisha	748	2566.86 (0.50–21.3) ^a	73–185	36.6	30.0	17.4	16.0	65–218
West Bengal	76	637.57 (2.26–20.54) ^a	138–345	57.1	13.6	22.4	6.9	231–950

km = kilometer, Veh = vehicle.

^a Range of section lengths in kilometers

Source: Detailed Project Reports.

¹ Estimated using trade data from Government of India Websites www.commerce.nic.in and www.indiabudget.nic.in

² Estimated using data from website of Ministry of Labour and Employment, Government of India.

4. Passenger vehicles including two wheelers constitute 55 to 70% and tractors have a much larger share among goods vehicles. Agricultural vehicles, such as tractors and trailers, are a big component of the traffic in Chhattisgarh and Madhya Pradesh. Non-motorized traffic for all these states is primarily made up of bicycles.

5. **Economic growth trends and traffic growth forecast.** Table 2 shows the average real economic growth rate experienced from FY2005-06 to FY2013-14. India's economic growth has been affected in recent years by global economic downturn with GDP growth rates falling to approximately 5.0 to 6.0 percent from the over 8.0 percent growth rate achieved prior to that. The economic growth rate for 2014-15 is estimated at 7.5 percent and is expected to be close to 8 percent in the immediate future. Investment program states are expected to continue to experience the growth trend in recent years.

6. The growth of registered vehicles in the investment program states (Table 2) gives an indication of the potential for traffic growth on the project roads. Table 2 also provides data on elasticity of vehicle registration growth in the investment program states. Some states indicate a high elasticity of vehicle growth which may be due to the low base.

Table 2: Economic Growth Rates and Growth of Registered Vehicles

States	Economic Growth Rate (FY2005-FY2014), % ^a	Growth of Registered Vehicles (FY2007-FY2012), % ^b	Elasticity, Calculated against GDP Growth Rate
Assam	6.0	12.3	2.05
Chhattisgarh	7.4	12.4	1.66
Madhya Pradesh	9.0	10.0	1.11
Odisha	5.9	11.8	2.00
West Bengal	6.5	- ^c	
All of India	7.9	10.5	1.33

GDP = gross domestic product.

^a Economic Survey of India, 2014-15, Government of India.

^b Ministry of Road Transport and Highways. 2012. *Road Transport Year Book*. New Delhi.

^c Inconsistent vehicle registration data.

7. Table 3 shows the percentage growth of registered vehicle numbers by category and in total in each investment program state, as well as for all of India during 2007–2012.

Table 3: Growth Rate of Registered Vehicles, 2007–2012 (%)

States	Two Wheeler	Car/Jeep/ Van	Bus	Goods Vehicle	Tractor	Total
Assam	12.5	13.5	5.4	9.7	10.1	12.3
Chhattisgarh	12.4	17.7	6.7	10.8	10.4	12.4
Madhya Pradesh	10.5	13.1	6.8	9.9	5.3	10.0
Odisha	11.6	13.1	2.1	11.4	12.4	11.7
All of India	10.8	11.3	4.4	8.4	7.7	10.5

Source: Ministry of Road Transport and Highways. 2012. *Road Transport Year Book*. New Delhi.

8. In the absence of any data on historical traffic growth on similar road sections, a direct correlation between vehicle growth rates and traffic growth rates is assumed to arrive at future traffic growth rates. The elasticity of vehicle growth for each vehicle category was derived³ by relating the vehicle growth to socio-economic growth factors such as net state domestic product (NSDP) growth rates in case of private modes and goods vehicle, agriculture sector growth rate in case of tractors and population and per

³ Using the relation, $\text{Loge RV} = A_0 + A_1 \text{Loge EV}$, where RV is registered vehicle volume, A_0 and A_1 are regression coefficients and EV is the economic variable used.

capita income in case of buses for the period FY2007–FY2012. Vehicle growth data for this period is available and is given in Table 4. Table 4 also gives the range of elasticities adopted for estimating the future traffic growth rate based on the estimated values and the range adopted in recent studies eliminating the high and low values. With the adopted elasticity values and the growth outlook for economic variables, the growth rates for different vehicle categories are estimated by multiplying the economic variable with the adopted elasticity values. The growth rate of economic variables and the traffic growth rates thus estimated are given in Table 5.

Table 4: Transport Demand Elasticities

States	Two Wheeler	Car/Jeep/ Van	Bus	Goods Vehicle	Tractor
Assam	1.74	1.87	1.97	1.38	2.19
Chhattisgarh	1.80	2.46	2.32	1.59	1.76
Madhya Pradesh	1.18	1.45	1.88	1.12	0.71
Odisha	2.06	2.28	1.54	2.08	3.25
All of India	1.27	1.34	1.44	1.02	1.79
Adopted range of elasticity	1.3-1.8	1.4-1.8	1.7-1.9	1.4-1.6	1.7-2.1

Source: Consultant estimates.

Table 5: Estimated Statewide Traffic Growth Rates (2015-20)

States	NSDP Growth rate (%)	Agriculture Growth rate (%)	Population and per capita income growth rate(%)	Two Wheeler	Car/Jeep/ Van	Bus	Goods Vehicle	Tractor
Assam	6.0 (6.3)	4.0 (4.1)	2.5 (2.5)	10.2	10.8	5.0	8.4	8.4
Chhattisgarh	7.0 (6.7)	5.0 (5.7)	2.8 (2.8)	12.6	12.6	5.6	11.2	9.0
Madhya Pradesh	8.0 (8.3)	5.0 (6.5)	3.3 (3.3)	10.4	12.0	6.3	11.2	8.5
Odisha	6.0 (5.5)	3.0 (1.9)	2.1 (2.1)	10.8	10.8	3.8	9.6	6.3

Note: Figures in bracket are economic variable growth rates observed in FY 2007-12.

Source: Consultant estimates.

9. Some of the vehicle additions will be for replacing older vehicles, and growth in rural areas is likely to be lower than the average growth rates. Future traffic growth rates for the present analysis given in Table 6 was derived by reducing the statewide growth rates given in Table 5 by 30 percent (10 percent in case of buses) to account for replacement of older vehicles and lower growth rates in rural areas. For West Bengal, average of growth rate estimated for Assam and Odisha was used. Traffic growth reduces over time and, therefore, for traffic projections beyond 2020, growth rates are reduced by 1% every 5 years in the analysis but not less than 2% for any vehicle category in the analysis period.

Table 6: Adopted Growth Rates for Motorized Traffic, 2015–2020 (%)

States	Two Wheeler	Car/Jeep/ Van	Bus	Goods Vehicle	Tractor
Assam	7.1	7.6	4.3	5.9	5.9
Chhattisgarh	8.8	8.8	4.8	7.8	6.3
Madhya Pradesh	7.3	8.4	5.3	7.8	6.0
Odisha	7.6	7.6	3.2	6.7	4.4
West Bengal	7.3	7.6	3.8	6.3	5.0

Source: Consultant estimates.

10. The project roads under RCIP connect villages with bituminous surfaced roads and have potential for traffic diversion and, hence, no diverted traffic was considered. However, there is potential for significant generated traffic with improved roads and reduced vehicle operating costs. The proposed improvements are estimated to reduce the

vehicle operating costs by 35%–55% and reduce the travel time and, therefore, will result in traffic generation. Based on these considerations, generated traffic is assumed at 20 to 30%. Additionally in case of roads where major stream crossings are bridged, additional traffic generation is anticipated and was assessed assuming a 50% increase in project influence area.

11. **Design standards and construction costs.** All project road sections are in poor condition and will be constructed or upgraded to a standard all-weather single lane road. All existing surfaces are earthen or gravel and will be reconstructed from subgrade with base and sub-base and a premix carpet bituminous surfacing. The proposed upgrading will form the with-project case with regular routine and periodic maintenance required to maintain the level of service with first 5 years maintenance included under the contract. The without-project case will involve minimum maintenance, including spot graveling to keep the existing roads in operation. Construction cost estimates from detailed project reports have been adopted and cost ranges are shown in Table 7. Where construction of bridges and/or many cross-drainage structures are involved, costs per km are higher.

Table 7: Improvement Option and Construction Costs

State	Range of Financial Cost (Rs million per km)
Assam	4.46–16.75
Chhattisgarh	2.78–5.36
Madhya Pradesh	3.07–5.78
Odisha	3.51–6.72
West Bengal	4.16–6.65

km = kilometer

Source: Detailed Project Reports.

12. **Vehicle operating cost savings:** The improvement of road corridors will result in savings to road users and the society as a whole in the form of reduced vehicle operating and time costs for passengers and freight traffic. Economic analysis has been carried out using the HDM 4 model which takes as inputs the vehicle technical and operational characteristics, vehicle prices, tire prices, fuel price, maintenance and vehicle operation staff costs. The vehicle price, tire price and maintenance and operating staff costs were collected recently in the region were adopted. Economic fuel prices have been derived excluding all taxes and duties and considering the medium term fuel price of US\$ 75.0 per barrel. The HDM 4 model calculates the vehicle operating savings as the difference between vehicle operating costs without and with the project.

13. **Value of time.** For passenger-carrying vehicles, values of passenger working and nonworking time were calculated based on wage rates, income distribution and/or per capita income in each state. The bus passenger value of time was calculated taking agricultural labor wage and skilled labor wage as shown in Table 8. The income share distribution in India as given in the World Bank database indicates that the top 20% of the population has a 42.8% share of income, the next 20.8% share of the income and the lowest 60% of the population has an income share of 36.4%. Assuming that these groups represent the car, two wheeler and bus users, the per capita income index of car, two wheeler and bus users is 2.14 (42.8/20), 1.04 (20.8/20) and 0.61 (36.4/60) or two wheeler and car passenger time may be valued at 1.7 and 3.5 times the bus passenger value of time. The value of time of two wheeler and car passengers thus estimated is given in Table 9. The per capita income per employed person is calculated and average hourly income is derived assuming 2,080 hours of work per year. The working time for bus passengers is valued at 0.33 times the average hourly income, two-wheeler passengers at

average hourly income and car passengers at twice average hourly income. The value of nonworking time is taken as 25% of the working time.

Table 8: Values of Bus Passenger Working and Nonworking Time

	Wage Rates with Overhead ^a			Weighted daily wage rate ^b	Value of Work Time (Rs per hour)	Value of Non-Work Time (Rs per hour)
	Agricultural labor	Skilled labor	Others ^c			
Assam	234	418	626	407	50.9	12.7
Chhattisgarh/ Madhya Pradesh	170	287	431	284	35.4	8.9
Odisha	216	394	591	381	47.7	11.9
West Bengal	278	387	581	401	50.2	12.5

^a Overhead rate of 33% is taken as per Transport Note No. TRN 15, "Valuation of Time Savings", The World Bank, 2005

^b Assuming the passenger population consisting of workers with equivalent wage rate of 40% agricultural labor, 30% skilled labor and 30% others

^c Taken as 1.5 times skilled worker rate

Source: Consultant's estimate based on wage rate data from Ministry of Labour and Employment, Government of India.

Table 9: Values of Two Wheeler and Car Passenger Working and Nonworking Time

	Value of Work Time (Rs per hour)		Value of Non-Work Time (Rs per hour)	
	Two wheeler passengers	Car passengers	Two wheeler passengers	Car passengers
Assam	86.5	178.0	21.6	44.5
Chhattisgarh/ Madhya Pradesh	60.3	124.1	15.1	31.0
Odisha	81.1	166.9	20.3	41.7
West Bengal	85.3	175.6	21.3	43.9

Source: Consultant's estimates

14. **Salvage value.** A straight-line depreciation method is used to calculate the salvage value of project elements at the end of the analysis period. Pavement components are assumed to have a design life of 20 years and will have no salvage value. Bridges and cross-drainage structures can have a life of more than 40 years. Assuming a 40-year life for all structures and formation for road widening, salvage values are estimated in a range of 5% to 45%.

15. **Other parameters.** An analysis period of 20 years and a discount rate of 10% (adopted for RCIP Loan⁴ considering the additional benefits provided by the Prime Minister's Rural Roads Program [PMGSY] all-weather roads, including health, education, poverty reduction, employment and income, housing facilities, moveable assets and communication which are not included in the analysis) are used. The analysis also includes benefit to slow moving vehicles⁵ as there will be energy savings for riders of cycles with a paved road compared to an earth/gravel road in poor condition.

⁴ ADB. 2012. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranchise Financing Facility, Technical Assistance, and Administration of Technical Assistance to India for Rural Connectivity Investment Program (MFF 0069-IND)*.

⁵ The HDM model includes estimation of non-motorized traffic (NMT) costs in terms of energy cost and vehicle related costs. The cost of energy per MJ is taken as INR 15 estimated based on the cost of food items and calorific value obtained from internet sources for a 2400 calorie (2.4 MJ) (consisting of 400 grams of cereals, 45 grams of pulses, 130 ml of milk, 60 gram of vegetables, 20 grams of oil and other ingredients).

16. **Economic analysis.** An economic analysis has been carried out for representative sample of roads in all investment program states.⁶ The benefits considered include vehicle operating cost savings for motorized vehicles, travel time savings for passengers of motorized vehicles, value of equivalent energy savings for slow moving vehicle users. In addition, during rainy season, driving on the existing earthen roads/tracks is much slower and difficult, and such roads/tracks are often passable only by tractors. A conservative 25% increase in transport cost in the without project case is considered for about 60 days in a year. The economic analysis results given in Table 10, indicate that the project is economically viable and have an economic internal rate of return (EIRR) above the desirable rate of 10%. The cash flow streams for the road sections included in the analysis in all the states are given in Table 12.

Table 10: Results of Economic Analysis

	EIRR (%)	NPV (Rs million)
Assam	15.0 (11.5-18.8)	190.1
Chhattisgarh	14.6 (10.9-18.1)	128.9
Madhya Pradesh	14.4 (11.0-17.6)	150.2
Odisha	14.3 (10.4-17.9)	343.0
West Bengal	17.0 (13.0-24.6)	668.6

EIRR = economic internal rate of return, NPV = net present value.

Note: EIRR values given in bracket are the range of EIRR for road sections.

Source: Consultant estimates.

17. **Sensitivity analysis.** Sensitivity analyses were carried out for the investment program in each state. The following cases were analyzed:

- Case I Base Cost and Base Benefits
- Case II Increase Capital Costs by 10 % and Base Benefits
- Case III Base Cost and Decrease Benefits by 10 %
- Case IV Increase Capital Costs by 10 % & Decrease Benefits by 10 %

18. The results of the sensitivity analyses are given in Table 11. As shown, with an increase in capital costs of 10% or a decrease in benefits of 10%, the investment program remains economically viable in all states, with EIRRs above 10%. With both an increase in capital costs and decrease in benefits of 10%, road investment program for all states continue to have an EIRR above 10%. The proposed road links provide basic access to the villages and will have positive impacts on the agricultural productivity and quality of life with better access to health and education in the project area. The cross drainage works which form a substantial part of project cost in many of the road sections also will ensure accessibility to the villages all year.

Table 11: Sensitivity Analysis Results

State	Economic Internal Rate of Return (%)			
	Case I	Case II	Case III	Case IV
Assam	15.0	13.7 (49%)	13.4 (29%)	12.2 (18%)
Chhattisgarh	14.6	13.3 (45%)	12.9 (26%)	11.8 (16%)
Madhya Pradesh	14.4	13.1 (42%)	12.7 (25%)	11.5 (15%)
Odisha	14.3	13.0 (41%)	12.7 (25%)	11.5 (15.5%)
West Bengal	17.0	15.5 (66%)	15.0 (33%)	13.7 (22%)

Note: Values given in bracket are switching values.

⁶ Assam (34), Chhattisgarh (35), Madhya Pradesh (51), Odisha (78) and West Bengal (28)

Table 12: Cash Flow Stream – All States (Rs million)

Year	Increase in Road Agency Costs		Decrease in Road User Costs			Net Benefits
	Capital Costs	Maintenance Costs	Vehicle Operating Costs	Time Costs	NMT Costs	
2015	1,710.7	0.0	0.0	0.0	0.0	-1,710.7
2016	1,582.3	0.0	0.0	0.0	0.0	-1,582.3
2017	0.0	34.0	279.9	127.7	77.6	451.2
2018	0.0	34.0	311.7	136.8	85.8	500.3
2019	0.0	34.0	345.7	146.6	93.7	551.9
2020	0.0	23.5	373.7	155.8	98.4	604.4
2021	0.0	39.7	373.7	164.8	83.0	581.7
2022	0.0	700.9	405.1	175.1	91.0	-29.7
2023	0.0	34.0	413.8	185.5	94.9	660.2
2024	0.0	23.5	450.0	197.0	98.6	722.0
2025	0.0	34.0	453.1	206.6	84.1	709.9
2026	0.0	34.0	494.3	217.8	93.5	771.6
2027	0.0	39.7	528.3	229.5	99.4	817.4
2028	0.0	690.2	554.6	241.6	101.3	207.4
2029	0.0	34.0	518.7	252.4	84.1	821.3
2030	0.0	34.0	576.9	266.3	94.9	904.1
2031	0.0	34.0	626.9	281.0	101.2	975.1
2032	0.0	23.5	664.2	296.0	103.3	1,040.0
2033	0.0	39.8	659.5	310.4	88.7	1,018.9
2034	0.0	701.9	711.3	327.3	98.4	435.1
2035	0.0	29.2	717.9	344.0	100.8	1,133.5
2036	-369.8	32.2	767.0	359.2	103.2	1,567.1
EIRR (%)						15.4
NPV @ 12%						1481.0

EIRR = economic internal rate of return, NPV = net present value.

Source: Asian Development Bank assessment.

19. The maintenance of roads under PMGSY is funded by excise tax on high speed diesel oil. Sustainability of roads constructed under the project is ensured through (i) the provision of 5 years post construction road maintenance included in the civil works contracts financed by the investment program states, and (ii) adequate funding provided by the Government after this initial 5 years, to be managed by RRNMU to ensure that programmed maintenance activities and adequate maintenance financing are in place. ADB monitors the adequacy of the maintenance activities and funding during project implementation.

SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY

Country:	India	Project Title:	Rural Connectivity Investment Program
Lending/Financing Modality:	Multitranche Financing Facility	Department/Division:	South Asia Department/ Transport and Communications Division

I. POVERTY AND SOCIAL ANALYSIS AND STRATEGY
Targeting classification: General Intervention
<p>A. Links to the National Poverty Reduction and Inclusive Growth Strategy and Country Partnership Strategy</p> <p>As one of the key features of the poverty reduction agenda for the rural sector, the Government of India is implementing a nation-wide rural road investment program, <i>Pradhan Mantri Gram Sadak Yojana</i> (PMGSY). The program aims to provide all-weather road connectivity to currently unserved habitations in India's rural areas, where 70% of the population live. The Program is being implemented through the National Rural Road Development Authority (NRRDA) under the Ministry of Rural Development (MORD) at central level and through State Rural Road Development Agencies (SRRDA) at state level.</p> <p>The Asian Development Bank (ADB) is extending assistance to PMGSY through the Rural Connectivity Investment Program. The investment program has been designed as a multi-tranche financing facility (MFF) divided into three projects. Overall, the investment program aims at upgrading to all-weather standard 3,826 rural roads equivalent to 13,278 km, and connecting 5,598 habitations in the states of Assam, Chhattisgarh, Orissa, Madhya Pradesh and West Bengal (the investment program states). These states are among the poorest in the country and priority areas for economic development. Through its support, the ADB also provides capacity building in the implementation of the PMGSY, especially in the areas of design, environmental and social safeguards and road safety. Project 1 and Project 2 of \$252 million, and \$275 million respectively, were approved in 2012 and 2013 respectively, and are ongoing.</p> <p>Project 3, of \$273 million, aims at upgrading 6,124 km of rural roads (for a total of 1820 roads). The project will improve connectivity to 1,945 habitations, access to markets, jobs, and social services, including health and education. The investment program is in line with the strategic objective set out in <i>Strategy 2020</i>, India's <i>Twelfth Five Year Plan</i>, as well as with ADB's <i>India Country Partnership Strategy</i> (2013–2017) and <i>Country Operations Business Plan</i> for 2015–2017.</p>
<p>B. Results from the Poverty and Social Analysis during PPTA or Due Diligence</p> <p>1. Key poverty and social issues. Four of the investment program states are among the poorest in India.¹ According to the 2011/2012 National Sample Survey, rural poverty rates range from 45% in Chhattisgarh to 23% in West Bengal.² In Madhya Pradesh, Odisha and Assam, around 33 to 36% of households in rural areas live below the poverty line.³ In the investment program states, close to 50% of rural households live from self-employed agriculture. The importance of the agricultural sector is reinforced by the findings from the baseline survey conducted at the onset of the program, where most journey patterns were trips to the workplace and markets, and the key goods being transported were agriculture produce, construction material, and livestock.</p> <p>2. Beneficiaries. Key beneficiaries are the estimated 8,800 community residents of over 1,950 habitations expected to be connected by the project.⁴ Other beneficiaries include commercial service providers, transport providers, government workers such as health workers, teachers, and agriculture extension workers.</p> <p>3. Impact channels. A socioeconomic impact assessment of Project 1 has been conducted in each of the five states. The assessment was based on focus groups discussions and surveys on a sample of 149 roads (totaling 620 km), representing 18% of the total number of roads financed under Project 1. Key findings indicate that the program improved accessibility and contributed to economic development for the population along the project roads. Immediate benefits included significant travel time savings to the workplace (a reduction in time that varied from 30 to 40%), change towards an increased use of motorized vehicles, an improvement in the availability, frequency and quality of public transportation, as well as a marginal increase in household monthly income (5%). Moreover, most of the people surveyed (60-70%) indicated an improvement in road safety knowledge and signage as a result of the program. It is expected that Project 3 will lead to similar positive impacts, which in the long term</p>

¹ Assam, Chhattisgarh, Madhya Pradesh, Odisha

² http://planningcommission.nic.in/news/pre_pov2307.pdf

³ http://planningcommission.nic.in/news/pre_pov2307.pdf

⁴ Based on the average number of household members per state (4.5) at http://www.censusindia.gov.in/vital_statistics/AHSBulletins/AHS_Factsheets_2011_12

will contribute to improving basic access to markets and employment as well as administrative, health and educational facilities.

4. Other social and poverty issues. No other social and poverty issues were found during the due diligence.

5. Design features. The participatory approach conducted during the subproject road preparation has led to the inclusion of elderly, child and women friendly design features, such as speed breakers, rumble strips, cautionary/informative signage at required location, and even in rare occasions, changes in the alignment at the request of the community.

II. PARTICIPATION AND EMPOWERING THE POOR

1. Summarize the participatory approaches and the proposed project activities that strengthen inclusiveness and empowerment of the poor and vulnerable in project implementation.

The program uses a participatory, pro-poor approach. The design phase follows the approach outlined in the state-specific Community Participatory Framework (CPF), prepared during the approval of the MFF and disclosed on ADB website.⁵ The CPFs include a comprehensive consultation process, with the requirement of conducting transect walks with community residents along each subproject road, with the objective of selecting the alignment that best suits the community's needs and minimizes adverse social impacts. Another key objective is to identify affected households and among these, vulnerable individuals, who will then be linked with state or national government-sponsored poverty alleviation schemes.⁶ Transect Walks findings and discussions are documented by Project Implementation Consultant (PIC) and have proven effective in improving road designs or screening for roads that do not fulfill the CPF criteria. Under Project 3, 43,657 people participated in the transect walks.

2. If civil society has a specific role in the project, summarize the actions taken to ensure their participation. Civil society has actively been consulted in the project design through transect walks and public participation meetings. Notices with project information have been disclosed prior to the transect walks and the compliance and due diligence reports prepared for each state are disclosed on ADB website.⁷

3. Explain how the project ensures adequate participation of civil society organizations in project implementation. Given the nature of the project with minimal social and environmental impacts, civil society organizations' participation has been limited to information-sharing during the overall consultation process.

4. What forms of civil society organization participation is envisaged during project implementation?

M Information gathering and sharing **L** Consultation **L** Collaboration **N/A** Partnership

5. Will a project level participation plan be prepared to strengthen participation of civil society as interest holders for affected persons particularly the poor and vulnerable?

☒ Yes. ☐ No.

Detailed guidelines for community consultations and support to the poor and vulnerable have already been prepared and are included in the state-specific CPFs. Moreover, community members are represented in the grievance redress committee established for each subproject road.

III. GENDER AND DEVELOPMENT

Gender mainstreaming category: Effective Gender Mainstreaming (EGM)

A. Key issues.

The investment program is classified as Effective Gender Mainstreaming (EGM), and Gender Action Plans (GAPs) have been developed at the program and project-specific levels. The initial gender analysis highlighted the benefits of all-weather roads on women's access to educational and health services. Consultations with women confirmed their support for greater connectivity and need to access secondary education facilities, health services and markets. These expectations were shared during Project 3 transect walk activities, which involved 11,330 women across the five states, representing close to 26% of total participants.

Moreover, experience from the implementation of the Projects 1 and 2 GAPs shows that the project can create income-generating opportunities for women. Under projects 1 and 2, 8,700 women were employed in construction activities, representing 25 to 43% of the total workforce depending on the state. Female representation was not uniform however, and depended on their existing workload and social status. Women and girls have also benefitted from the road safety awareness sessions that take place at the schools bordering the project roads.

⁵ <http://www.adb.org/projects/40423-013/documents>

⁶ Under Projects 1 and 2, 1082 vulnerable affected persons were linked to these programs as a result of RCIP.

⁷ Reports are expected to be disclosed by May 20, 2015.

B. Key actions.

☒ **Gender action plan** ☐ Other actions or measures ☐ No action or measure

Project 3 is also classified as EGM and a GAP specific to the project has been prepared, taking into account the lessons learned from the implementation of Projects 1 and 2. Gender activities and targets that were not implemented or achieved have been revised to reflect this experience. For example, it was realized that it was difficult to monitor the targets of 33% female representation in road maintenance staff as well as female representation in trainings provided in the RRNMUs built under the MFF, as these activities would be undertaken after completion and thus impossible to monitor during implementation. As for the target that women represent 25% of all RRNMUs, given the already limited pool of professional female staff within the IAs, allocating them to these training centers to fulfill this target may have hindered other career advancement options.

The key activities under this GAP are: (i) women's participation in construction activities (33% of construction workforce); (ii) Women's participation in the road design (20% transect walk participants); (iii) Women's participation to Grievance Redress Committees (30% members are female); (iv) school girls' participation to road safety awareness campaigns (40% total participants)

IV. ADDRESSING SOCIAL SAFEGUARD ISSUES**A. Involuntary Resettlement**

Safeguard Category: ☐ A ☐ B ☒ C ☐ FI

Key impacts.

Project 3 is categorized C for resettlement impacts. Road improvement will be conducted in the existing right of way and impacts are marginal, with minor widening and realignment in few cases, which require narrow strips of land to be made available. The voluntary land donation system has been used under the PMGSY and other rural development schemes across India and proved effective. It was refined with the guidelines of the state-specific Community Participation Frameworks (CPFs) to comply with the ADB's Safeguards Policy Statement (2009). The CPFs are disclosed on ADB website.⁸

The social due diligence for Project 3 confirmed that the communities and affected persons were consulted about the project roads. As per PMGSY and CPF guidelines, transect walks were conducted for all project roads, involving in the process 43,657 participants. During the transect walks and subsequent consultations, affected persons were made aware that they had the option to refuse land donation and as a result, some of the roads initially screened were dropped from the project. Census surveys were conducted and identified a total of 2,675 affected persons among whom 823 are considered vulnerable. Vulnerable affected individuals who are not already benefiting from state or national government-sponsored poverty alleviation schemes will be actively linked to these programs by the project.

The surveys revealed that no physical relocation would result from the project, as impacts identified were minor, affecting 5% or less of an individual's plot of land and in rare instances, external sections of privately owned structures (i.e. fences, stairs and verandahs), which the panchayats will support in rebuilding. No AP has fallen under the poverty line as a result of the donations. Memorandums of Understandings (MoUs) with each affected individuals have been secured by the PIUs and verified by a third party. A Grievance Redress Committee has also been set up for each project road. For more information, state-specific social compliance reports for the Project 3 roads have been disclosed on ADB website.⁹

The due diligence also included the review of ongoing Projects 1 and 2, which reveals no outstanding claims regarding land donation and no physical relocation. More information can be found in the combined social due diligence report for Projects 1 and 2, which is also disclosed on ADB website (footnote 9).

As for the pilot RCTRC and RRNMU buildings to be built under Project 1 and 3 respectively, the sites allocated are on government land and have been screened for resettlement impact by the external monitor. The social compliance report for the pilots is also disclosed on ADB website (footnote 9). All future RRNMU site selection will follow the same approach.

⁸ <http://www.adb.org/projects/40423-013/documents>

⁹ <http://www.adb.org/projects/40423-053/documents>

2. Strategy to address the impacts.

In most instances the community support in the reconstruction of fences or boundary walls affected. If fruit trees are affected, the Panchayat handles the compensation process. As for land, given that donation is voluntary and impact minor, there is no compensation.

3. Plan or other Actions.

- | | |
|---|--|
| <input type="checkbox"/> Resettlement plan | <input type="checkbox"/> Combined resettlement and indigenous peoples plan |
| <input type="checkbox"/> Resettlement framework | <input type="checkbox"/> Combined resettlement framework and indigenous peoples planning framework |
| <input type="checkbox"/> Environmental and social management system arrangement | <input type="checkbox"/> Social impact matrix |
| <input type="checkbox"/> No action | <input checked="" type="checkbox"/> Community Participation Framework |

B. Indigenous Peoples

Safeguard Category: ☐ A ☐ B ☒ C ☐ FI

1. Key impacts. Project 3 is categorized C for impacts on Indigenous Peoples in accordance with ADB's Safeguards Policy Statement (2009). Through the census survey Scheduled Tribes (ST) and Scheduled Castes (SC) 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 to any of the STs and SCs in the areas. Moreover, the CPF calls for proactive measures to link any affected family categorized as vulnerable, which includes STs and SCs, to the national and state-sponsored poverty alleviation and livelihood enhancement schemes.

Is broad community support triggered? ☐ Yes ☒ **No**

2. Strategy to address the impacts. If there are impacts on scheduled tribe households, these will be addressed in the community participation framework.

3. Plan or other actions.

- | | |
|---|--|
| <input type="checkbox"/> Indigenous peoples plan | <input type="checkbox"/> Combined resettlement plan and indigenous peoples plan |
| <input type="checkbox"/> Indigenous peoples planning framework | <input type="checkbox"/> Combined resettlement framework and indigenous peoples planning framework |
| <input type="checkbox"/> Environmental and social management system arrangement | <input type="checkbox"/> Indigenous peoples plan elements integrated in project with a summary |
| <input type="checkbox"/> Social impact matrix | |
| <input checked="" type="checkbox"/> No action | |

V. ADDRESSING OTHER SOCIAL RISKS**A. Risks in the Labor Market****1. Relevance of the project for the country's or region's or sector's labor market.**

L unemployment L underemployment L retrenchment L core labor standards

This project has no impact on the country's labor market.

2. Labor market impact. During construction, employment opportunities will be available for men and women from the local communities. The Gender Action Plan (GAP) actually provides for a target of 30% female employment.

B. Affordability

There is no any affordability issue in the proposed road construction.

C. Communicable Diseases and Other Social Risks

1. Indicate the respective risks, if any, and rate the impact as high (H), medium (M), low (L), or not applicable (NA):

L Communicable diseases L Human trafficking

2. Describe the related risks of the project on people in project area.

The social due diligence and review of ongoing tranches reveals that the risk of the project to increase the spread of HIV/AIDS and human trafficking is very low. Construction activities usually employ local labor and labor needs remain low, without the need to establish construction camps. However, the executing agency will ensure that all civil works comply with all applicable labor laws and do not employ child labor for construction and maintenance activities. Moreover, HIV/AIDS awareness activities have been conducted selectively during the implementation of Projects 1 and 2. Around 450 HIV/AIDS awareness sessions were conducted benefitting to more than 5,000 participants. The same approach will be undertaken in Project 3.

VI. MONITORING AND EVALUATION

1. Targets and indicators: Relevant impact assessment indicators have been established by the Technical Support Consultant in consultation with ADB and a baseline established. An impact assessment report will be produced for each state.

2. Required human resources: Social experts will be included in the team of the Project Implementation Consultant and Technical Support Consultant and have been adequately budgeted. South Asia Transport and Communications Division's social development specialist and India Resident Mission will oversee the implementation and monitoring of the project's social dimensions.

3. Information in FAM and tranche-specific PAM: The frequency of project reviews, monitoring, and timing of completion reports is included.

4. Monitoring tools: Monitoring will be undertaken on a day-to-day level by the Project Implementation Unit. The PIC will undertake monthly monitoring. The TSC will undertake overall monitoring of the safeguards and relevant social issues and prepare annual monitoring reports to the EA and ADB.

L2881-IND: Rural Connectivity Investment Program (Project 1)**Status of Compliance with Loan Covenants
(as of March 2015)**

Article/ Section	Covenant	Status
Loan Agreement		
Article II: The Loan		
2.02	The borrower shall pay to ADB interest on the principal amount of the loan withdrawn and outstanding from time to time at a rate for each interest period equal to the sum of: (a) LIBOR; (b) 0.60% as provided by Section 3.02 of the loan regulations, less a credit of 0.20%, as provided by Section 3.03 of the Loan Regulations; and (c) A maturity premium of 0.20%, as provided by Section 3.03 of the Loan Regulations.	Not yet due.
2.03	The borrower shall pay a commitment charge of 0.15% per annum. Such charge shall accrue on the full amount of the loan (less amounts withdrawn from time to time), commencing 60 days after the date of this Loan Agreement.	Being complied with.
2.05	The borrower shall repay the principal amount of the loan withdrawn from the loan account in accordance with the provisions of Schedule 2 to this Loan Agreement.	Being complied with.
Article III: Use of the Proceeds of the Loan		
3.01	The borrower shall (i) make the proceeds of the loan available to MORD and the States upon terms and conditions mutually acceptable to ADB and the Borrower, and (ii) cause MORD and the States to apply such proceeds the financing of the expenditures on the Project in accordance with the provisions of this loan agreement and the project agreements.	Being complied with.
3.02	The proceeds of the loan shall be allocated and withdrawn in accordance with the provisions of Schedule 3 to this loan agreement, as such schedule may be amended from time to time by agreement between the borrower and ADB.	Being complied with.
3.03	Except as ADB may otherwise agree, the borrower shall procure, or cause to be procured, the items of expenditure to be	Being complied with.

Article/ Section	Covenant	Status
	financed out of the proceeds of the loan in accordance with the provisions of Schedule 4 to this loan agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	
3.04	Except as ADB may otherwise agree, the borrower shall cause all items of expenditure financed out of the proceeds of the loan to be used exclusively in carrying out the Project.	Being complied with.
Article IV: Particular Covenants		
4.01	<p>(a) The borrower shall cause MORD, Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal to carry out the project with due diligence and efficiency and in conformity with sound applicable technical, financial, business, and rural roads development and maintenance practices.</p> <p>(b) In the carrying out of the project and operation of the project facilities, the borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to this loan agreement.</p>	<p>Being complied with.</p> <p>Being complied with. Obligations as stated are being performed.</p>
4.02	The borrower shall make available to MORD, Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal, promptly as needed, the funds, facilities, services, and other resources, as required, in addition to the proceeds of the loan, for the carrying out of the project.	Being complied with.
4.03	The borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the project and operation of the project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.	Being complied with.
4.04	The borrower shall enable ADB's representatives to inspect the project, the goods and works, and any relevant records and documents.	Being complied with.
4.05	The borrower shall take all actions which	Being complied with.

Article/ Section	Covenant	Status
	shall be necessary on its part to enable MORD, Assam, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal to perform its obligations under the project agreement, and shall not take or permit any action which would interfere with the performance of such obligations.	
4.06	<p>(a) In relation to the project, the borrower shall exercise its rights under the financing arrangements in such a manner as to protect the interests of the borrower and ADB to accomplish the purposes of the loan.</p> <p>(b) In relation to the project, no rights or obligations under such financing arrangements shall be assigned, amended, abrogated or waived without prior notice to ADB.</p>	Being complied with.
Article V: Suspension; Acceleration of maturity		
5.01	The following is specified as an additional event for suspension of the right of the borrower to make withdrawals from the loan account for the purposes of Section 9.01(l) of the loan regulations: the PMGSY guidelines or any provision thereof shall have been repealed, suspended or amended in any manner in so far as it relates to the project, which in the reasonable opinion of ADB shall or may adversely affect the carrying out of the project or the operation of the project facilities.	Being complied with.
5.02	The following is specified as an additional event for acceleration of maturity for the purposes of Section 9.07(a)(iv) of the loan regulations: the event specified in Section 5.01 of this loan agreement shall have occurred.	Being complied with.
Schedule 3: Allocation and withdrawal of loan proceeds		
Disbursement procedures	Except as ADB may otherwise agree, the loan proceeds shall be disbursed in accordance with the loan disbursement handbook.	Being complied with.
Schedule 4: Procurement of goods, works and consulting services		
Goods and works	Except as ADB may otherwise agree, goods and works shall only be procured on the basis of the methods of procurement set forth below:	Being complied with. Procurement done through NCB.

Article/ Section	Covenant	Status
	<p>(a) National competitive bidding (b) Shopping</p> <p>The methods of procurement are subject to, among other things, the detailed arrangements and threshold values set forth in the procurement plan. The borrower may only modify the methods of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the procurement plan.</p>	<p>Being complied with. Procurement being done according to the procurement plan.</p>
National competitive bidding	<p>The borrower, through MORD and the relevant state, and ADB shall ensure that any procurement activity under national competitive bidding is consistent with the Procurement Guidelines. The PMGSY standard bidding document, and procurement procedures, each of such standard bidding document, and procurement procedures as amended by agreement by ADB, and used for national competitive bidding under RRII Loans 2248, 2414, 2445, 2535, 2651, as further described in the FAM, shall apply to the subprojects financed with the proceeds of the loan. Any modifications or clarifications to such procedures agreed between the borrower and ADB shall be set out in the procurement plan. Any subsequent change to the agreed modifications and clarifications shall become effective only after concurrence of such change by the borrower and ADB.</p>	<p>Complied with. Procurement consistent with PMGSY and ADB guidelines.</p>
Procurement reviews	<p>The borrower, through MORD, shall cause the states to allow ADB to carry out procurement audits during project implementation as part of its regular review process.</p>	<p>Being complied with.</p>
Conditions for award of contract	<p>The borrower and the states shall ensure that no works contract is awarded until the project executing agency has incorporated the relevant provisions from the relevant EMP into the works contract.</p> <p>The borrower and the states shall ensure that no works contract is awarded for a subproject until the project executing agencies have prepared a CPF for the</p>	<p>Complied with. EMP incorporated into the works contracts.</p> <p>Complied with.</p>

Article/ Section	Covenant	Status
	<p>subproject.</p> <p>The borrower and the states shall ensure that no works contracts are awarded until the requirements described in paragraphs 26 and 39 of Schedule 5 to this loan agreement have been complied with by the project executing agencies.</p>	Being complied with.
Consulting services	<p>Except as ADB may otherwise agree, the borrower through MORD and the relevant state shall apply quality- and cost-based selection for selecting and engaging consulting services, in accordance with, among other things, the procedures set forth in the procurement plan.</p> <p>The borrower's standard procedures for selecting and engaging domestic consultants are subject to the following modifications:</p> <p>(a) The selection and engagement of international and national consultants undertaking activities financed out of the proceeds of the loan shall be subject to the approval of ADB with regard to their competence and experience for carrying out the assignment and shall be in accordance with the detailed procedures set out in the FAM.</p> <p>(b) The selection and engagement of national consultants undertaking activities financed from the borrower's own resources (hereinafter referred to as the PICs as described more fully in paragraph 4 of Schedule 5 to this loan agreement and the FAM) shall be in accordance with the PMGSY procedures found acceptable to ADB.</p>	<p>Being complied with.</p> <p>Being complied with.</p>
Industrial or Intellectual Property Rights	<p>(a) The borrower, MORD, and the relevant state shall ensure that all goods and works procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim for any third party.</p> <p>(b) The borrower, MORD and the relevant state shall ensure that all contracts</p>	Being complied with. Procurement done according to PMGSY and ADB guidelines.

Article/ Section	Covenant	Status
	<p>for the procurement of goods and works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.</p> <p>The borrower, MORD, and the relevant state shall ensure that all ADB-financed contracts with consultants contain appropriate representations, warranties and, if appropriate, indemnities from the consultants to ensure that the consulting services provided do not violate or infringe any industrial property or intellectual property right or claim of any third party.</p>	Being complied with.
Schedule 5: Execution of project and operation of project facilities		
Execution and implementation arrangements	<p>The borrower and the project executing agencies shall ensure that the project is implemented in accordance with the detailed arrangements set forth in the FAM. Any subsequent change to the FAM shall become effective only after approval of such change by the borrower and ADB. In the event of any discrepancy between the FAM and this loan agreement, the provisions of this loan agreement shall prevail. The borrower shall ensure that the project executing agencies undertake all activities as included in this loan agreement.</p> <p>The project executing agencies shall ensure that the IAs employ sufficient staff for the duration of the project with adequate and relevant expertise in the field of project management, financial management, engineering, construction supervision, procurement, construction, road maintenance and safety, and environmental and social safeguards implementation. The project executing agencies shall keep the IAs equipped with the necessary office space, facilities, equipment, support staff and management information systems, and cover the costs of the social impact mitigation, utility relocation, and road maintenance through annual budget allocations. The project executing agencies shall normally (i) maintain assignment of the</p>	<p>Implementation done in accordance with the loan agreement and FAM.</p> <p>Being complied with.</p>

Article/ Section	Covenant	Status
	<p>same persons to key positions in the IAs for at least three consecutive years, (ii) not leave key positions vacant for more than 30 days, and (iii) not transfer more than one key staff within a 6-month period.</p> <p>Each state shall assist the related IA in obtaining approvals and clearances for timely project execution under the PMGSY guidelines and other applicable laws and regulations of the borrower and that relevant state.</p>	Being complied with.
Counterpart support	<p>Each state shall provide, as necessary, respective counterpart staff, land, facilities, and counterpart funding required for timely and effective implementation of the project including, without limitation, any funds required, (a) to meet any shortfall between cost and revenues for the operation and maintenance of the facilities created or rehabilitated under the project, (b) to mitigate unforeseen environmental and social impacts, (c) to meet additional costs arising from utility relocation, design changes, price escalation in construction costs and/or unforeseen circumstances, and (d) for maintenance of the road facilities to be constructed and/or upgraded under the project. The borrower and/or state shall make the resources thus required available on an annual basis for each fiscal year.</p> <p>Each state shall ensure that the PICs continue to assist with the implementation of the provisions of the CPF and the EARF, IEE and EMPs for all subprojects under the facility along with road safety and road maintenance tasks, and that the PICs shall include, as a minimum, specialists in road maintenance, road safety, social safeguards, gender and environmental safeguards.</p>	<p>Being complied with.</p> <p>Complied with. PICs in the 5 states mobilized.</p>
Selection criteria and approval process for subprojects	<p>The borrower through the states and the project executing agencies shall ensure that all subprojects are selected and approved in accordance with the selection criteria and approval process stipulated in Schedule 4 to the FFA.</p> <p>The states and the project executing</p>	<p>Subprojects selected according to the criteria and approval process set.</p> <p>Being complied with.</p>

Article/ Section	Covenant	Status
	<p>agencies shall ensure that all documents forming the basis for screening, selection and processing of subprojects are made available to ADB upon request and are kept available for such purposes for a minimum period of five years from the date of the project completion report for the project.</p> <p>The states and the project executing agencies shall analyze the recommendations made by the consultants engaged under the project, and/or associated technical assistance(s) for the project, and inform ADB on the extent and manner of their implementation.</p>	Being complied with. The government is in constant contact with ADB.
Coordination committees	The borrower shall ensure that Coordination Committees at MORD and state levels are established, not later than 3 months of effective date, as set forth in Schedule 6 to the FFA.	Complied with.
Project implementation units	Each state shall ensure that the PIUs and the RRNMUs shall implement the subprojects and carry out necessary coordination with the concerned departments in the state and panchayats to ensure the smooth implementation of the subprojects.	PIUs established as required. RRNMUs being established.
Road maintenance and RRNMUs	<p>In accordance with the PMGSY guidelines, each state shall provide adequate and timely funding for proper maintenance of the PMGSY roads. Any increases in the actual amounts to be provided shall be met by the respective state through its respective additional budget allocations, or other alternative sources of financing.</p> <p>Except as ADB may otherwise agree, each state shall require the respective IA (through the PIUs and RRNMUs) to ensure proper maintenance of the PMGSY roads until these roads are transferred to the designated zilla panchayats in accordance with the PMGSY guidelines. Each state shall also allocate the requisite funds to the relevant functionaries at either zilla panchayat or the PIUs and RRNMUs, as the case may be, for such maintenance in accordance with the requirements of the</p>	<p>Being complied with. Budget provided for maintenance of roads under the project.</p> <p>Being complied with.</p>

Article/ Section	Covenant	Status
	<p>PMGSY guidelines.</p> <p>Each state shall ensure that either zilla panchayat or the PIU or RRNMU, as the case may be, shall ensure further maintenance of roads after completion of the initial 5-year maintenance period under the related contracts.</p> <p>Each state shall establish one pilot RRNMU during the first year, and approximately five additional RRNMUs by no later than the end of the third-year of implementation of the Investment Program (30 RRNMUs in total). The RRNMUs shall be created based on the existing PIUs for rural roads and shall have staffing, equipment, and facilities adequate to provide effective management of the rural road network. The states shall ensure full RRNMU staffing and budget adequate for the full implementation of RRNMU tasks. The states shall prepare the design of RRNMU facilities and shall normally (i) not transfer key staff from the RRNMU for at least 3 consecutive years, (ii) not leave key positions vacant for more than 30 days, and (iii) not transfer more than one key staff within a 6-month period.</p> <p>Each state shall review the experience and lessons learned regarding the operation of RRNMUs and make a decision on converting the remaining PIUs into RRNMUs.</p>	<p>Being complied with.</p> <p>Being complied with.</p> <p>Not yet due.</p>
Road safety	<p>Each state shall incorporate on a representative sample basis road safety audits accompanied by road safety awareness sessions in the subproject design process, during construction, and on existing roads and shall ensure that recommendations of the road safety audits are reviewed and promptly incorporated in the design and implemented on existing roads, as appropriate.</p> <p>Each state shall ensure that concerned staff of the PIU or RRNMU, as the case may be, participates in road safety audits and</p>	<p>Being complied with.</p> <p>Being complied with.</p>

Article/ Section	Covenant	Status
	develops capacities to conduct the process in-house or to manage the process effectively.	
Subproject design	MORD shall cause the states to ensure that the subprojects' design is conducted in accordance with the process as specified in Schedule 3 of the FFA.	Being complied with.
RCTRC	Each state shall establish one RCTRC during the second year of implementation of investment program to (i) conduct systematic training of engineers involved in the management of the rural road network, technicians, site supervisors, concerned staff of panchayat raj institutions, design consultants and contractors, and (ii) support a sustainable practice-oriented research on rural roads. The RCTRCs shall have staffing, equipment, and facilities adequate to provide high-quality and large scale training, both in house and with the use of external resource persons. Each state shall ensure full RCTRC staffing and budget adequate for the full implementation of RCTRC tasks. The states shall prepare the design of RCTRC facilities and shall normally (i) not transfer key staff from RCTRCs for at least 3 consecutive years, (ii) not leave key positions vacant for more than 40 days, and (iii) not transfer more than one key staff within a 6-month period.	Being complied with.
Environment	<p>The borrower and the states shall ensure or cause the relevant project executing agency and IA to ensure, in respect of the relevant state, that the preparation, design, construction, implementation, operation and decommissioning of each subproject comply with applicable laws and regulations of the borrower and of the relevant state relating to environment, health and safety, the environmental safeguards, the EARF and ECOP, and all measures and requirements set forth in the relevant IEE and EMP, and any corrective or preventative actions set forth in a safeguards monitoring report.</p> <p>Only those projects that meet the eligibility requirements set out in subproject selection criteria and procedures included in Schedule</p>	<p>Complied with. Due diligence has been conducted.</p> <p>Being complied with.</p>

Article/ Section	Covenant	Status
	<p>4 of the FFA, and which adhere to relevant requirements of the PMGSY guidelines, Safeguard Policy Statement, the EARF and ECOP and related IEE, and other applicable guidelines for subproject implementation, shall be eligible for financing from the loan proceeds. Each state shall monitor the implementation of subprojects through to the completion of each subproject and report to NRRDA and ADB on the results of such monitoring.</p> <p>Each state shall require the respective IA to ensure that preparation, design, construction, implementation, operation and decommissioning of each subproject comply with (a) applicable laws and regulations of the borrower and of the relevant state relating to environment, health, and safety; (b) the environmental safeguards; (c) the EARF and ECOP; and (d) all measures and requirements set forth in the work relevant IEE and EMP, and any corrective or preventative actions set forth in a safeguards monitoring report. No construction work shall be undertaken on sections of subprojects that pass through a forest reserve unless clearance from appropriate authorities is obtained under applicable laws and regulations of the borrower and each state, and no subproject shall be located within an environmentally sensitive areas such as a wildlife sanctuary, national park, or other areas with significant ecological functions that are declared as national parks, sanctuaries, or national/international cultural heritage. In accordance with the EARF and ECOP each state shall require the IA to prepare ECOP checklists for each and every road and bridges longer than 50 meters, based on which subproject specific EMPs and the IEEs shall be prepared.</p>	Being complied with.
Land availability and community participation framework	The borrower and the states shall ensure or cause the relevant project executing agency to ensure, in respect of the relevant state, that the respective IA implements the provisions of the CPF for all subprojects as agreed upon with ADB and in conformity	Complied with.

Article/ Section	Covenant	Status
	<p>with all relevant applicable laws and regulations of the borrower and each state.</p> <p>The borrower and the states shall ensure or cause the relevant project executing agency to ensure, in respect of the relevant state, that the respective IA shall, subject to compliance with the relevant provisions of the CPF, EARF/ECOP and related IEE, EMP, and any corrective or preventative actions set forth in a safeguards monitoring report, and in accordance with all relevant applicable laws and regulations of the borrower and each state, acquire or make available the land and rights to land free from any encumbrances, clear the utilities, trees and any other obstruction from such land, required for commencement of construction activities in accordance with the schedule agreed under the related works contract.</p> <p>The borrower shall cause each state to ensure that subsequent to award of works contract under any subproject, no section or part thereof under the works contract shall be handed over to the contractor unless the applicable provisions of the CPF have been complied with.</p> <p>The borrower shall cause each state to ensure that (a) the respective IA shall (i) carry out the community consultation process for all subprojects in accordance with the PMGSY guidelines as supplemented by the CPF, EARF and ECOP, (ii) disseminate the information on process of land transfer/availability as the case may be, support/assistance provisions and grievance provisions procedures to the project-affected communities in a timely manner so that all related issues are resolved before awarding works contracts, and (iii) ensure that in case of voluntary land donations/transfer, these are undertaken in a transparent manner, under proper documentation, and avoid any kind of coercion or forced donations/transfer; and in this regard shall not exercise any eminent</p>	<p>Being complied with.</p> <p>Being complied with.</p> <p>Complied with.</p>

Article/ Section	Covenant	Status
	domain or related mechanisms that may be deemed to be compulsory acquisition of land; and (b) the details of land made available in accordance with the procedures prescribed in the PMGSY guidelines, are reflected in the local land records in a timely manner, to avoid disputes.	
Social impacts and community participation framework	<p>The Borrower and each state shall ensure acceptance of the project through effective community participation in selecting and implementing subprojects in accordance with the PMGSY guidelines as supplemented by the CPF, EARF, and ECOP.</p> <p>In case of any significant or related impacts on scheduled tribes under any subproject, the mitigation shall follow the requirements as set out in the CPF as agreed by ADB. 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 borrower and the related state pertaining to land transfer shall be followed.</p>	<p>Complied with.</p> <p>Complied with.</p>
Labor standards	<p>The borrower and the states shall ensure, or cause the project executing agencies to ensure, that works contracts follow all applicable labor laws of the borrower and the relevant state, if any, and that these further include provisions to the effect that contractors (i) carry out HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of the health and safety measures for those employed during construction; (ii) follow and implement all statutory provisions on labor (including not employing or using children as labor, equal pay for equal work), health, safety, welfare, sanitation, and working conditions; and (iii) maximize employment of females and local poor and disadvantaged persons for construction and routine maintenance purposes, provided that the requirements for efficiency are adequately met.</p> <p>The states shall ensure that the PIUs and</p>	<p>Being complied with.</p> <p>Being complied with.</p>

Article/ Section	Covenant	Status
	RRNMUs will coordinate with state AIDS Control Society and other public health agencies to carry out HIV/AIDS awareness programs for labor and dissemination of information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction.	
Human and financial resources to implement safeguards requirements	The borrower and the states shall make available, or cause the relevant project executing agency to make available, in respect of the relevant state, necessary budgetary and human resources to prepare in accordance with CPF and EARF and fully implement the CPFs and EMPs.	Being complied with.
Bidding documents and execution of civil works contracts	<p>The borrower and the states shall ensure, or cause the relevant project executing agency to ensure, that in respect of the relevant state, all bidding documents and contracts for works contain provisions that require contractors to:</p> <ul style="list-style-type: none"> (a) Comply with the measures and requirements relevant to the contractor set forth in the IEEs, ECOPs, EMPs and CPF (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a safeguards monitoring report; (b) Make available a budget for all such environmental and social measures; (c) Provide the project executing agency with a written notice of any unanticipated environmental, social impacts that arise during construction, implementation or operation of the project that were not considered in the IEEs, ECOPs, EMPs and CPFs; (d) Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and (e) Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction. <p>Subject to compliance with the requirements of the CPF, EARF, ECOP and related IEE, each state shall (i) include a standard EMP</p>	<p>Being complied with. Required provisions in the safeguards documents incorporated in the bidding documents and works contracts.</p> <p>EMPs incorporated in the bidding documents and detailed project reports.</p>

Article/ Section	Covenant	Status
	<p>into the bidding documents; and (ii) prepare and provide with the detailed project report a subproject specific EMP, to enable the contractor to estimate and include the cost required for implementing the EMP in its bid.</p> <p>Each state shall ensure that any changes to the land alignment or any environmental or social impacts arising following or during the preparation of detailed designs of related subproject roads or during implementation shall be subject to prior approval by ADB or related project executing agency, as the case may be, in accordance with the subproject selection criteria and procedures included in Schedule 4 to the FFA.</p>	Being complied with.
Safeguards monitoring and reporting	<p>The borrower and the states shall do the following, or shall cause the relevant project executing agency, in respect of the relevant state, to do the following:</p> <p>(a) Submit annual social safeguards monitoring reports to NRRDA. MORD through NRRDA shall provide ADB with the annual safeguard monitoring reports to be disclosed on the ADB website in accordance with ADB's Public Communications Policy (2011) and disclose relevant information from such reports to affected persons promptly upon submission.</p> <p>(b) Submit to NRRDA annual safeguards monitoring reports for environmental category B project and semi-annual safeguards monitoring reports for environmental category A project. MORD through NRRDA shall provide ADB with the safeguards monitoring reports to be disclosed on the ADB website in accordance with ADB's Public Communications Policy (2011).</p> <p>(c) If any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the project that were not considered in the IEEs, ECOPs, EMPs and CPFs, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and</p> <p>(d) Report any breach of compliance</p>	Being complied with. Report submission is on an annual/ semi-annual basis.

Article/ Section	Covenant	Status
	with the measures and requirements set forth in the EMPs and CPFs promptly after becoming aware of the breach.	
Prohibited list of investments	The borrower and the states shall ensure or cause the project executing agencies to ensure that no proceeds of the loans are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	Being complied with.
Gender	The borrower and the states shall ensure that the project executing agencies adopt and implement the GAP in a timely manner over the entire investment program period, and that adequate resources are allocated for this purpose. In particular, the borrower and the states shall ensure that (i) at least 10% of project beneficiaries are female-headed households, and 40% of project beneficiaries are from vulnerable groups (poor, scheduled tribes, scheduled castes, women and physically handicapped); (ii) at least 33% of the routine road maintenance works are done by women; (iii) and that the remaining targets stated in the GAP are achieved. The project executing agencies shall conduct training on GAP implementation for all staff involved in implementation of the project. Implementation of the GAP will be closely monitored, and the progress will be reported to ADB.	Being complied with.
Development Coordination	The borrower, MORD and each state shall keep ADB informed of discussions with other multilateral, bilateral, and national aid agencies that may have implications for the implementation of the project. The borrower and each state shall provide ADB with an opportunity to comment on any resulting policy reform and/or investment proposals, and shall take into account ADB's views before finalizing and implementing any such proposals.	Being complied with.
Governance and anticorruption	The borrower, MORD, the states and project executing agencies shall ensure that anticorruption provisions acceptable to ADB are included in all bidding documents and contracts, including provisions specifying the right of ADB to review and examine the	Being complied with.

Article/ Section	Covenant	Status
	<p>records and accounts of the executing and implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the project.</p> <p>The borrower, MORD, the states and the project executing agencies shall comply with ADB's Anticorruption Policy (1998, as amended to date), and shall allow and assist ADB's representatives to carry out random spot checks on the work in progress and utilization of funds for the project and subprojects.</p> <p>Each state shall ensure that under the PMGSY website, the project related information about project activities and procurement are disclosed as set out in details in the FAM.</p> <p>The states shall cause the project executing agencies through the independent quality monitors under PMGSY to conduct periodic inspections and random spot checks of contractors' project related activities, bills and supporting documents.</p>	<p>Being complied with.</p> <p>Being complied with.</p> <p>Being complied with.</p>
Monitoring and reporting	<p>MORD, through NRRDA, shall have established within 3 months following the date of the FFA, a systematic overall project performance management system, in form and substance acceptable to ADB, to be used throughout the life of the project (PPMS).</p> <p>NRRDA, with the support of the TSC, shall establish, within 3 months following the effective date, a baseline for performance indicators to be used for monitoring implementation of the project. It shall conduct annual evaluation surveys for each project, in accordance with the PPMS, to evaluate the scope, implementation arrangements, progress, and achievement of the outcomes and outputs. Further details of performance monitoring and evaluation are described in the FAM.</p> <p>Each state through the respective IA, assisted by TSC, PICs and other consultants</p>	<p>Being complied with. Monitoring system of other ADB rural road projects adopted for this MFF.</p> <p>Baseline indicators identified; evaluation activities continuously being done.</p> <p>Being complied with.</p>

Article/ Section	Covenant	Status
	<p>as required, shall establish and assist with the implementation of a PPMS in respect of that state (state PPMS). Each state through the respective IA shall undertake periodic subproject performance review under the project, in accordance with the state PPMS, to evaluate the scope, implementation arrangements, progress and achievements of objectives of the project.</p> <p>Without limiting the generality of Section 2.08 of the project agreements, each state through the respective IA shall submit to MORD the monthly progress reports on the implementation of the subprojects under the project. Based on these reports, MORD through NRRDA shall prepare and provide ADB with quarterly progress reports on the implementation of the subprojects under the project within 45 days of the close of each quarter.</p> <p>Without limiting the generality of Section 2.08 (c) of the project agreements and Section 7.04 of the loan regulations, MORD/NRRDA through the borrower shall submit to ADB a project completion report within 3 months of physical completion of the project. The report shall include a detailed evaluation of the project, covering the design, costs, contractors' performance, social and economic impact, economic rate of return, implementation of social and environmental safeguard measures and other details relating project, as may be requested by ADB.</p> <p>ADB, the borrower, MORD, and each state shall meet regularly as required to discuss project progress and any changes to implementation arrangements or remedial measures required to be undertaken towards achieving overall project objectives.</p>	<p>Monthly reports being submitted by the IAs.</p> <p>Not yet due. Report due 3 months after physical completion.</p> <p>Being complied with.</p>
Undertakings	The borrower shall ensure compliance with the undertaking set forth in Schedule 6 of the FFA.	Being complied with.
Project Agreement		
Article II: Particular Covenants		

Article/ Section	Covenant	Status
2.01	(a) MORD and the state shall carry out the project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and rural road development and maintenance practices. (b) In the carrying out of the project and operation of the project facilities, MORD and the states shall perform all obligations set forth in the loan agreement to the extent that they are applicable to MORD and the state.	Being complied with.
2.02	MORD and the state shall make available, promptly as needed, the funds, facilities, services, equipment, land and other resources as required, in addition to the proceeds of the loan, for the carrying out of the project.	Being complied with.
2.03	(a) In the carrying out of the project, MORD and the state shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB. (b) Except as ADB may otherwise agree, MORD and the state shall procure all items of expenditures to be financed out of the proceeds of the loan in accordance with the provisions of Schedule 4 and Schedule 5 to the loan agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	Being complied with.
2.04	MORD and the state shall carry out the project in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to ADB. MORD and the state shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such details as ADB shall reasonably request.	Being complied with.
2.05	(a) MORD and the state shall take out and maintain with responsible insurers, or make other arrangements satisfactory to	Being complied with.

Article/ Section	Covenant	Status
	<p>ADB for, insurance of project facilities to such extent and against such risks and in such amounts shall be consistent with sound practice.</p> <p>(b) Without limiting the generality of the foregoing, MORD and the state undertake to insure, or cause to be insured, the goods to be imported for the project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such goods.</p>	
2.06	MORD and the state shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the loan, to disclose the use thereof in the project, to record the progress of the project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.	Being complied with.
2.07	<p>(a) ADB, MORD and the state shall cooperate fully to ensure that the purposes of the loan will be accomplished.</p> <p>(b) MORD and the state shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the project, the performance of its obligations under this project agreement, or the accomplishment of the purposes of the loan.</p> <p>(c) ADB, MORD and the state shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the project and the loan.</p>	<p>Being complied with.</p> <p>Being complied with.</p> <p>ADB, MORD and the states in constant communication regarding the project.</p>
2.08	(a) MORD and the state shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the loan and the expenditure of the proceeds thereof; (ii) the items of expenditure out of such proceeds; (iii) the project; (iv) the administration, operations and financial	Being complied with.

Article/ Section	Covenant	Status
	<p>status of MORD and the state in so far as it relates to the project; and (v) any other matters relating to the purposes of the loan.</p> <p>(b) Without limiting the generality of the foregoing, MORD and the state shall furnish to ADB quarterly reports on the execution of the project and on the operation and management of project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.</p> <p>(c) Promptly after physical completion of the project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, MORD and the state shall prepare and furnish to ADB a report, in such form and in such details as ADB shall reasonably request, on the execution and initial operation of the project, including its cost, the performance by MORD and the state of its obligations under this project agreement and the accomplishment of the purposes of the loan.</p>	<p>To be complied with. Quarterly reports are due 45 days after the end of the relevant quarter.</p> <p>Not yet due.</p>
2.09	<p>(a) MORD and the state shall maintain separate accounts and records for the project; (ii) prepare annual financial statements for the project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the project 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 loan agreement and statement of expenditures) and a management letter</p>	<p>Being complied with. Submission deadline is 9 months after the end of the relevant fiscal year; disclosure is 30 days from receipt by ADB.</p>

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	<p>(which sets out the deficiencies in the internal control of the project that were identified in the course of the audit, if any); and (v) furnish to ADB, no later than 9 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.</p> <p>(b) ADB shall disclose the annual audited financial statements for the project within 30 days of the date of their receipt by posting them on ADB's website.</p> <p>(c) MORD and the state shall enable ADB, upon ADB's request, to discuss the financial statements for the project with the auditors appointed by (i) MORD and (ii) the state, and shall 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 MORD or the state, unless MORD or the state shall otherwise agree.</p>	
2.10	In so far as it relates to the project, MORD and the state shall enable ADB's representatives to inspect the project, the goods and works and any relevant records and documents.	Being complied with.
2.11	<p>(a) MORD and the state shall, promptly as required, take all action within its powers to carry on its operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the project or in the conduct of its operations.</p> <p>(b) In so far as it relates to the project, MORD and the state shall at all times operate and maintain its plants, equipment and other property, and from time to time, promptly as needed, make all necessary repairs and renewals thereof, all in accordance with sound applicable technical, financial, business, rural road development, operational and maintenance practices.</p>	Being complied with.

Article/ Section	Covenant	Status
2.12	Except as ADB may otherwise agree, MORD and the state shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this project agreement.	Being complied with.
2.13	Except as ADB may otherwise agree, MORD and the state shall apply the proceeds of the loan to the financing of expenditures on the project in accordance with the provisions of the loan agreement and this project agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the project.	Being complied with.
2.14	MORD shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of the PMGSY guidelines, which if implemented, could affect the project or the operation of the project facilities.	Being complied with.

L3065-IND: Rural Connectivity Investment Program (Project 2)**Status of Compliance with Loan Covenants
(as of March 2015)**

Article/ Section	Covenant	Status
Loan Agreement		
Article II: The Loan		
2.02	The borrower shall pay to ADB interest on the principal amount of the loan withdrawn and outstanding from time to time at a rate for each interest period equal to the sum of: (a) LIBOR; (b) 0.60% as provided by Section 3.02 of the loan regulations, less a credit of 0.20%, as provided by Section 3.03 of the Loan Regulations; and (c) A maturity premium of 0.10%, as provided by Section 3.03 of the Loan Regulations.	Not yet due
2.03	The borrower shall pay a commitment charge of 0.15% per annum. Such charge shall accrue on the full amount of the loan (less amounts withdrawn from time to time), commencing 60 days after the date of this Loan Agreement.	Being complied with
2.04	Interest and other charges on the Loan shall be payable semiannually on 01 June and 01 December in each year.	Being complied with
2.05	The borrower shall repay the principal amount of the loan withdrawn from the loan account in accordance with the provisions of Schedule 2 to this Loan Agreement.	Being complied with
Article III: Use of the Proceeds of the Loan		
3.01	The borrower shall (i) make the proceeds of the loan available to MORD and the States upon terms and conditions mutually acceptable to ADB and the Borrower, and (ii) cause MORD and the States to apply such proceeds the financing of expenditures on the Project in accordance with the provisions of this loan agreement and the project agreements.	Being complied with
3.02	The proceeds of the loan shall be allocated and withdrawn in accordance with the provisions of Schedule 3 to this loan agreement, as such schedule may be amended from time to time by agreement between the borrower and ADB.	Being complied with

Article/ Section	Covenant	Status
3.03	Except as ADB may otherwise agree, the borrower shall procure, or cause to be procured, the items of expenditure to be financed out of the proceeds of the loan in accordance with the provisions of Schedule 4 to this loan agreement. ADB may refuse to finance a contract where any such item has not been procured under procedures substantially in accordance with those agreed between the borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	Being complied with
3.04	Except as ADB may otherwise agree, the borrower shall cause all items of expenditure financed out of the proceeds of the loan to be used exclusively in carrying out the Project.	Being complied with
Article IV: Particular Covenants		
4.01	(a) The borrower shall cause MORD and the States to carry out the project with due diligence and efficiency and in conformity with sound applicable technical, financial, business, and rural roads development and maintenance practices. (b) In the carrying out of the project and operation of the project facilities, the borrower shall perform, or cause to be performed, all obligations set forth in Schedule 5 to this loan agreement.	Being complied with Being complied with.
4.02	The borrower shall make available to MORD and the States promptly as needed, the funds, facilities, services, and other resources, as required, in addition to the proceeds of the loan and the Government Contribution, for the carrying out of the project.	Being complied with
4.03	The borrower shall ensure that the activities of its departments and agencies with respect to the carrying out of the project and operation of the project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.	Being complied with
4.04	The borrower shall enable ADB to inspect the project, the goods and works, and any relevant records and documents.	Being complied with
4.05	Insofar as it relates to the project, the	Being complied with.

Article/ Section	Covenant	Status
	borrower shall take all actions which shall be necessary on its part to enable the project executing agencies to perform their respective obligations under the project agreements, and shall not take or permit any action which would interfere with the performance of such obligations.	
4.06	(a) The borrower shall exercise its rights under the financing arrangements in such a manner as to protect the interests of the borrower and ADB to accomplish the purposes of the loan. (b) Insofar as it relates to the project, no rights or obligations under the financing arrangements shall be assigned, amended, abrogated or waived without prior notice to ADB.	Being complied with Being complied with
Article V: Suspension; Acceleration of maturity		
5.01	The following is specified as an additional event for suspension of the right of the borrower to make withdrawals from the loan account for the purposes of Section 9.01(l) of the loan regulations: the PMGSY guidelines or any provision thereof shall have been repealed, suspended or amended in any manner in so far as it relates to the project, which in the reasonable opinion of ADB shall or may adversely affect the carrying out of the project.	Being complied with
5.02	The following is specified as an additional event for acceleration of maturity for the purposes of Section 9.07(a) (iv) of the loan regulations: the event specified in Section 5.01 of this loan agreement shall have occurred.	Being complied with
Schedule 3: Allocation and withdrawal of loan proceeds		
Disbursement procedures	Except as ADB may otherwise agree, the loan proceeds shall be disbursed in accordance with the loan disbursement handbook.	Being complied with
Schedule 4: Procurement of goods, works and consulting services		
General	The procurement of goods and works shall be subject to and governed by the Procurement Guidelines.	Being complied with
Goods and works	Except as ADB may otherwise agree, goods and works shall only be procured on the	Being complied with

Article/ Section	Covenant	Status
	<p>basis of the methods of procurement set forth below: (a) National competitive bidding (b) Shopping</p> <p>The methods of procurement are subject to, among other things, the detailed arrangements and threshold values set forth in the procurement plan. The borrower may only modify the methods of procurement or threshold values with the prior agreement of ADB, and modifications must be set out in updates to the procurement plan.</p>	Being complied with.
National competitive bidding	<p>The borrower, through MORD and the relevant state to, and ADB shall, ensure that any procurement activity under national competitive bidding is consistent with the Procurement Guidelines. The PMGSY standard bidding document, and procurement procedures each of such standard bidding document, and procurement procedures as amended by agreement by ADB, and used for national competitive bidding under RRII (Loans 2248, 2414, 2445, 2535, 2651), as further described in the FAM, shall apply to the road subprojects financed with the proceeds of the loans under the facility. Any modifications or clarifications to such procedures agreed between the borrower and ADB shall be set out in the procurement plan. Any subsequent change to the agreed modifications and clarifications shall become effective only after concurrence of such change by the borrower and ADB.</p>	Being complied with.
Procurement reviews	<p>The borrower shall cause MORD and the states to allow ADB to carry out procurement audits during project implementation as part of its regular review process.</p>	Being complied with
Conditions for award of contract	<p>The borrower shall cause MORD and the states to ensure that no works contract is awarded until the relevant project executing agency has incorporated the relevant provisions from the EMP into the works contract.</p> <p>The borrower shall cause MORD and the states to ensure that no works contract is</p>	Being complied with

Article/ Section	Covenant	Status
	<p>awarded by the relevant project executing agency for a subproject until a CPF for the subproject has been prepared.</p> <p>The borrower shall cause MORD and the states to ensure that no works contracts are awarded by the relevant project executing agency until the requirements described in paragraphs 17 (subparagraph (a)), 26, 27 (subparagraphs (a) through (c)), and 34 to this loan agreement have been complied with.</p>	Being complied with
Industrial or Intellectual Property Rights	<p>(a) Each project executing agency shall ensure that all goods and works procured (including without limitation all computer hardware, software and systems, whether separately procured or incorporated within other goods and services procured) do not violate or infringe any industrial property or intellectual property right or claim for any third party.</p> <p>(b) Each project executing agency shall ensure that all contracts for the procurement of goods and works contain appropriate representations, warranties and, if appropriate, indemnities from the contractor or supplier with respect to the matters referred to in subparagraph (a) of this paragraph.</p>	<p>Being complied with</p> <p>Being complied with</p>
Schedule 5: Execution of project		
Execution and implementation arrangements	<p>The borrower and the project executing agencies shall ensure that the project is implemented in accordance with the detailed arrangements set forth in the FAM. Any subsequent change to the FAM shall become effective only after approval of such change by the borrower and ADB. In the event of any discrepancy between the FAM and this loan agreement, the provisions of this loan agreement shall prevail. The borrower shall ensure that the project executing agencies undertake all activities as included in this loan agreement.</p> <p>The project executing agencies shall ensure that the IAs employ sufficient staff for the duration of the project with adequate and relevant expertise in the field of project</p>	<p>Being complied with</p> <p>Being complied with</p>

Article/ Section	Covenant	Status
	<p>management, financial management, engineering, construction supervision, procurement, construction, road maintenance and safety, and environmental and social safeguards implementation. The project executing agencies shall keep the IAs equipped with the necessary office space, facilities, equipment, support staff and management information systems, and cover the costs of the social impact mitigation, utility relocation, and road maintenance through annual budget allocations. The project executing agencies shall normally (i) maintain assignment of the same persons to key positions in the IAs for at least three consecutive years, (ii) not leave key positions vacant for more than 30 days, and (iii) not transfer more than one key staff within a 6-month period.</p> <p>Each project executing agency shall assist the related IA in obtaining approvals and clearances for timely project execution under the PMGSY guidelines and other applicable laws and regulations of the borrower and that relevant state.</p> <p>The borrower and the project executing agencies shall ensure that towards smooth implementation of the project, grievances if any from stakeholders relating to any subproject implementation or use of funds under the Project are addressed effectively and efficiently.</p>	<p>Being complied with</p> <p>Being complied with</p>
Counterpart support	Each project executing agency shall provide, as necessary, respective counterpart staff, land, facilities, and counterpart funding required for timely and effective implementation of the project including, without limitation, any funds required, (a) to meet any shortfall between cost and revenues for the operation and maintenance of the facilities created or rehabilitated under the project, (b) to mitigate unforeseen environmental and social impacts, (c) to meet additional costs arising from utility relocation, design changes, price escalation in construction costs and/or unforeseen circumstances, and (d) for maintenance of	Being complied with

Article/ Section	Covenant	Status
	<p>the road facilities to be constructed and/or upgraded under the project. The borrower and/or relevant project executing agency shall make the resources thus required available on an annual basis for each fiscal year.</p> <p>Each project executing agency shall ensure that the PICs continue to assist with the implementation of the provisions of the CPF and the EARF, IEE and EMPs for all subprojects under the facility along with road safety and road maintenance tasks, and that the PICs shall include, as a minimum, specialists in road maintenance, road safety, social safeguards, gender and environmental safeguards.</p>	Being complied with
Project implementation units	Each project executing agency shall ensure that the PIUs and the RRNMUs shall implement the subprojects and carry out necessary coordination with the concerned departments in the state and panchayats to ensure the smooth implementation of the subprojects.	Being complied with
Road maintenance and RRNMUs	<p>In accordance with the PMGSY guidelines, each project executing agency shall provide adequate and timely funding for proper maintenance of the PMGSY roads. Any increases in the actual amounts to be provided shall be met by the respective state through its respective additional budget allocations, or other alternative sources of financing.</p> <p>Except as ADB may otherwise agree, each project executing agency shall require the respective IA (through the PIUs) to ensure proper maintenance of the PMGSY roads until these roads are transferred to the designated zilla panchayats in accordance with the PMGSY guidelines. Each state shall also allocate the requisite funds to the relevant functionaries at either the zilla panchayat or the PIU, as the case may be, for such maintenance in accordance with the requirements of the PMGSY guidelines.</p> <p>Each project executing agency shall ensure that either zilla panchayat or the PIU, as the</p>	<p>Being complied with</p> <p>Being complied with.</p> <p>Being complied with</p>

Article/ Section	Covenant	Status
	case may be, shall ensure further maintenance of roads after completion of the initial 5-year maintenance period under the related contracts.	
Road safety	<p>Each project executing agency shall incorporate on a representative sample basis road safety audits accompanied by road safety awareness sessions in the subproject design process, during construction, and on existing roads and shall ensure that recommendations of the road safety audits are reviewed and promptly incorporated in the design and implemented on existing roads, as appropriate.</p> <p>Each project executing agency shall ensure that concerned staff of the PIU, participates in road safety audits and develops capacities to conduct the process in-house or to manage the process effectively.</p>	<p>Being complied with</p> <p>Being complied with</p>
Environment	<p>The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that the preparation, design, construction, implementation, operation and decommissioning of each subproject comply with (a) all applicable laws and regulations of the borrower and of the relevant state relating to environment, health and safety; (b) the environmental safeguards; (c) the EARF and ECOP; and (d) all measures and requirements set forth in the relevant IEE and EMP, and any corrective or preventative actions set forth in a safeguards monitoring report.</p> <p>The Borrower shall cause MORD and the states to ensure that the relevant project executing agency monitors the implementation of subprojects through to the completion of each subproject and report to NRRDS and ADB on the results of such monitoring.</p> <p>The Borrower shall cause MORD and the states to ensure that the relevant project executing agency shall require the respective IA to ensure that the preparation, design, construction, implementation,</p>	<p>Complied with. Due diligence has been conducted.</p> <p>Being complied with</p> <p>Being complied with</p>

Article/ Section	Covenant	Status
	<p>operation and decommissioning of each subproject comply with (a) applicable laws and regulations of the borrower and of the relevant state relating to environment, health, and safety; (b) the environmental safeguards; (c) the EARF and ECOP; and (d) all measures and requirements set forth in the work relevant IEE and EMP, and any corrective or preventative actions set forth in a safeguards monitoring report. No construction work shall be undertaken on sections of subprojects that pass through a forest reserve unless clearance from appropriate authorities is obtained under applicable laws and regulations of the borrower and each state, and no subproject shall be located within an environmentally sensitive areas such as a wildlife sanctuary, national park, or other areas with significant ecological functions that are declared as national parks, sanctuaries, or national/international cultural heritage. In accordance with the EARF and ECOP each project executing agency shall require the IA to prepare ECOP checklists for each and every road and bridges longer than 50 meters, based on which subproject specific EMPs and the IEEs shall be prepared.</p>	
Land availability and community participation framework	<p>The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that the IAs implement the provisions of the CPF for all subprojects as agreed upon with ADB and in conformity with all relevant applicable laws and regulations of the borrower and each state.</p> <p>The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that the IAs shall, subject to compliance with the relevant provisions of the CPF, EARF/ECOP and related IEE, EMPs, and any corrective or preventative actions set forth in a safeguards monitoring report, and in accordance with all relevant applicable laws and regulations of the borrower and each state, acquire or make available the land and rights to land free from any</p>	<p>Complied with.</p> <p>Being complied with</p>

Article/ Section	Covenant	Status
	<p>encumbrances, clear the utilities, trees and any other obstruction from such land, required for commencement of construction activities in accordance with the schedule agreed under the related works contract.</p> <p>The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that subsequent to award of works contract under any subproject, no section or part thereof under the works contract shall be handed over to the contractor unless the applicable provisions of the CPF have been complied with.</p> <p>The borrower shall cause MORD and the states to ensure that (a) the IAs shall (i) carry out the community consultation process for all subprojects in accordance with the PMGSY guidelines as supplemented by the CPF, EARF and ECOP, (ii) disseminate the information on process of land transfer/availability as the case may be, support/assistance provisions and grievance procedures to the project-affected communities in a timely manner so that all related issues are resolved before awarding works contracts, and (iii) ensure that in case of voluntary land donations/transfer, these are undertaken in a transparent manner, under proper documentation, and avoid any kind of coercion or forced donations/transfer; and in this regard shall not exercise any eminent domain or related mechanisms that may be deemed to be compulsory acquisition of land; and (b) the details of land made available in accordance with the procedures prescribed in the PMGSY guidelines, are reflected in the local land records in a timely manner.</p>	<p>Being complied with</p> <p>Complied with.</p>
Social impacts and community participation framework	The Borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures acceptance of the project through effective community participation in implementing subprojects in accordance with the PMGSY guidelines as supplemented by the CPF, EARF, and	Complied with.

Article/ Section	Covenant	Status
	<p>ECOP.</p> <p>In case of any significant or related impacts on scheduled tribes under any subproject, the mitigation shall follow the requirements as set out in the CPF as agreed by ADB. 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 borrower and the related state pertaining to land transfer shall be followed.</p>	Being complied with.
Labor standards	<p>The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures, that works contracts follow all applicable labor laws of the borrower and the relevant state, if any, and that these further include provisions to the effect that contractors (i) carry out HIV/AIDS awareness programs for labor and disseminate information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of the health and safety measures for those employed during construction; (ii) follow and implement all statutory provisions on labor (including not employing or using children as labor, equal pay for equal work), health, safety, welfare, sanitation, and working conditions; and (iii) maximize employment of females and local poor and disadvantaged persons for construction and routine maintenance purposes, provided that the requirements for efficiency are adequately met.</p> <p>The Borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that the PIUs and RRNMUs will coordinate with state AIDS Control Society and other public health agencies to carry out HIV/AIDS awareness programs for labor and dissemination of information at worksites on risks of sexually transmitted diseases and HIV/AIDS as part of health and safety measures for those employed during construction.</p>	<p>Being complied with</p> <p>Being complied with</p>
Human and financial resources to	The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that all necessary	Being complied with

Article/ Section	Covenant	Status
implement safeguards requirements	budgetary and human resources to prepare, in respect of the relevant state, the CPF and EARF, and to fully implement, in respect of the relevant state, the CPFs and EMPs.	
Bidding documents and execution of civil works contracts	<p>The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that all bidding documents and contracts for works contain provisions that require contractors to:</p> <p>(a) Comply with the measures and requirements relevant to the contractor set forth in the IEEs, ECOPs, EMPs and CPF (to the extent they concern impacts on affected people during construction), and any corrective or preventative actions set out in a safeguards monitoring report;</p> <p>(b) Make available a budget for all such environmental and social measures;</p> <p>(c) Provide the project executing agency with a written notice of any unanticipated environmental, social impacts that arise during construction, implementation or operation of the project that were not considered in the IEEs, ECOPs, EMPs and CPFs;</p> <p>(d) Adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and</p> <p>(e) Fully reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction.</p> <p>Subject to compliance with the requirements of the CPF, EARF, ECOP and related IEE, the borrower shall cause MORD and the states to ensure that the relevant project executing agency shall (i) include a standard EMP into the bidding documents; and (ii) prepare and provide with the detailed project report a subproject specific EMP, to enable the contractor to estimate and include the cost required for implementing the EMP in its bid.</p> <p>The borrower shall cause MORD and the states to ensure that the relevant project</p>	<p>Being complied with</p> <p>Being complied with</p> <p>Being complied with</p>

Article/ Section	Covenant	Status
	executing agency ensures that any changes to the land alignment or any environmental or social impacts arising following or during the preparation of detailed designs of related subproject roads or during implementation shall be subject to prior approval by ADB or related project executing agency, as the case may be, in accordance with the subproject selection criteria and procedures included in Schedule 4 to the FFA.	
Safeguards monitoring and reporting	<p>The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures the following:</p> <p>(a) Submit annual social safeguards monitoring reports to NRRDA, ensure that copies thereof are promptly provided to ADB for disclosure on the ADB website, and disclose relevant information from such reports to affected persons promptly upon submission.</p> <p>(b) Submit semi-annual safeguards monitoring reports to NRRDA, ensure that copies thereof are promptly provided to ADB for disclosure on the ADB website, and disclose relevant information from such reports to affected persons promptly upon submission.</p> <p>(c) If any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the project that were not considered in the IEEs, ECOPs, EMPs and CPFs, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and</p> <p>(d) Report any breach of compliance with the measures and requirements set forth in the EMPs and CPFs promptly after becoming aware of the breach.</p>	Being complied with. Report submission is on an annual/ semi-annual basis.
Prohibited list of investments	The borrower shall cause MORD and the states to ensure that the relevant project executing agency ensures that no proceeds of the loans are used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of the SPS.	Being complied with.
Gender	The borrower, states and the project executing agencies shall ensure that the	Being complied with.

Article/ Section	Covenant	Status
	project is undertaken in conformity with the fender action plan included in the FAM.	
Development Coordination	The borrower, states and the project executing agencies shall keep ADB informed of discussions with other multilateral, bilateral, and national aid agencies that may have implications for the implementation of the project. The borrower and the project executing agency each state shall provide ADB with an opportunity to comment on any resulting policy reform and/or investment proposals, and shall take into account ADB's views before finalizing and implementing any such proposals.	Being complied with.
Governance and anticorruption	The borrower, MORD, the states and project executing agencies shall ensure that anticorruption provisions acceptable to ADB are included in all bidding documents and contracts, including provisions specifying the right of ADB to review and examine the records and accounts of the executing and implementing agencies and all contractors, suppliers, consultants, and other service providers as they relate to the project.	Being complied with.
	The borrower, MORD, the states and the project executing agencies shall comply with ADB's Anticorruption Policy (1998, as amended to date), and shall allow and assist ADB's representatives to carry out random spot checks on the work in progress and utilization of funds for the project and subprojects.	Being complied with.
	The project executing agency shall ensure that under the PMGSY website, the project related information about project activities and procurement are disclosed as set out in detail in the FAM.	Being complied with.
	The project executing agencies through the independent quality monitors under PMGSY shall conduct periodic inspections and random spot checks of contractors' project related activities, bills and supporting documents.	Being complied with.
Monitoring and reporting	MORD, through NRRDA, shall establish and maintain a systematic overall project	Being complied with.

Article/ Section	Covenant	Status
	<p>performance management system, in form and substance acceptable to ADB, to be used throughout the life of the project (PPMS). NRRDA, with the support of the TSC, shall establish, within 3 months following the effective date, a baseline for performance indicators to be used for monitoring implementation of the project. It shall conduct annual evaluation surveys for each project, in accordance with the PPMS, to evaluate the scope, implementation arrangements, progress, and achievement of the outcomes and outputs. Further details of performance monitoring and evaluation are described in the FAM.</p> <p>Each project executing agency through the respective IA, assisted by TSC, PICs and other consultants as required, shall establish and assist with the implementation of a PPMS in respect of that state (state PPMS). Each project executing agency through the respective IA shall undertake periodic subproject performance review under the project, in accordance with the state PPMS, to evaluate the scope, implementation arrangements, progress and achievements of objectives of the project.</p> <p>Without limiting the generality of Section 2.08 of the project agreements, each state through the respective IA shall submit to MORD the monthly progress reports on the implementation of the subprojects under the project. Based on these reports, MORD through NRRDA shall prepare and provide ADB with quarterly progress reports on the implementation of the subprojects under the project within 45 days of the close of each quarter.</p> <p>Without limiting the generality of Section 2.08 (c) of the project agreements and Section 7.04 of the loan regulations, MORD/NRRDA shall through the borrower submit to ADB a project completion report within 3 months of physical completion of the project. The report shall include a detailed evaluation of the project, covering the</p>	<p>Being complied with.</p> <p>Being complied with.</p> <p>Not yet due.</p>

Article/ Section	Covenant	Status
	<p>design, costs, contractors' performance, social and economic impact, economic rate of return, implementation of social and environmental safeguard measures and other details relating project, as may be requested by ADB.</p> <p>ADB, the borrower, and project executing agencies shall meet regularly as required to discuss project progress and any changes to implementation arrangements or remedial measures required to be undertaken towards achieving overall project objectives.</p>	Being complied with.
Undertakings	The borrower shall ensure compliance with the undertaking set forth in Schedule 6 of the FFA.	Being complied with.
Project Agreement		
Article II: Particular Covenants		
2.01	<p>(a) MORD and the state shall carry out the project with due diligence and efficiency, and in conformity with sound applicable technical, financial, business, and rural road development and maintenance practices.</p> <p>(b) In the carrying out of the project and operation of the project facilities, MORD and the states shall perform all obligations set forth in the loan agreement to the extent that they are applicable to the project executing agencies.</p>	Being complied with.
2.02	MORD and the State shall make available, promptly as needed, and on terms and conditions acceptable to ADB, the funds, facilities, services, land and other resources as required, in addition to the proceeds of the Loan, for the carrying out of the Project.	Being complied with.
2.03	<p>(a) In the carrying out of the project, MORD and the state shall employ competent and qualified consultants and contractors, acceptable to ADB, to an extent and upon terms and conditions satisfactory to ADB.</p> <p>(b) Except as ADB may otherwise agree, MORD and the state shall procure all items of expenditures to be financed out of the proceeds of the loan in accordance with the provisions of Schedule 4 to the loan agreement. ADB may refuse to finance a contract where any such item has not been</p>	Being complied with.

Article/ Section	Covenant	Status
	procured under procedures substantially in accordance with those agreed between the borrower and ADB or where the terms and conditions of the contract are not satisfactory to ADB.	
2.04	MORD and the state shall carry out the project in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to ADB. MORD and the state shall furnish, or cause to be furnished, to ADB, promptly after their preparation, such plans, design standards, specifications and work schedules, and any material modifications subsequently made therein, in such details as ADB shall reasonably request.	Being complied with.
2.05	(a) MORD and the state shall take out and maintain with responsible insurers, or make other arrangements satisfactory to ADB for, insurance of project facilities to such extent and against such risks and in such amounts shall be consistent with sound practice. (b) Without limiting the generality of the foregoing, MORD and the state undertake to insure, or cause to be insured, the goods to be imported for the project against hazards incident to the acquisition, transportation and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such goods.	Being complied with.
2.06	MORD and the state shall maintain, or cause to be maintained, records and accounts adequate to identify the items of expenditure financed out of the proceeds of the loan, to disclose the use thereof in the project, to record the progress of the project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition.	Being complied with.
2.07	(a) ADB, MORD and the state shall cooperate fully to ensure that the purposes of the loan will be accomplished. (b) MORD and the state shall promptly	Being complied with. Being complied with.

Article/ Section	Covenant	Status
	<p>inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the project, the performance of its obligations under this project agreement, or the accomplishment of the purposes of the loan.</p> <p>(c) ADB, MORD and the state shall from time to time, at the request of either party, exchange views through their representatives with regard to any matters relating to the project and the loan.</p>	Being complied with.
2.08	<p>(a) MORD and the state shall furnish to ADB all such reports and information as ADB shall reasonably request concerning (i) the loan and the expenditure of the proceeds thereof; (ii) the items of expenditure out of such proceeds; (iii) the project; (iv) the administration, operations and financial status of MORD and the state in so far as it relates to the project; and (v) any other matters relating to the purposes of the loan.</p> <p>(b) Without limiting the generality of the foregoing, MORD and the state shall furnish to ADB quarterly reports on the execution of the project and on the operation and management of project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made and problems encountered during the period under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following period.</p> <p>(c) Promptly after physical completion of the project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, MORD and the state shall prepare and furnish to ADB a report, in such form and in such details as ADB shall reasonably request, on the execution and initial operation of the project, including its cost, the performance by MORD and the state of its obligations under this project agreement and the accomplishment</p>	<p>Being complied with.</p> <p>Being complied with.</p> <p>Not yet due.</p>

Article/ Section	Covenant	Status
	of the purposes of the loan.	
2.09	<p>(a) MORD and the state shall maintain separate accounts and records for the project; (ii) prepare annual financial statements for the project in accordance with accounting principles acceptable to ADB; (iii) have such financial statements for the project 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 loan agreement and statement of expenditures) and a management letter (which sets out the deficiencies in the internal control of the project 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.</p> <p>(b) ADB shall disclose the annual audited financial statements for the project within 30 days of the date of their receipt by posting them on ADB's website.</p> <p>(c) MORD and the state shall enable ADB, upon ADB's request, to discuss the financial statements for the project and its financial affairs where they relate to the Project with the auditors appointed by MORD and the State pursuant to subsection (a)(iii) hereinabove, and shall 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 MORD or the State, unless MORD or the State shall otherwise agree.</p>	Not yet due.

Article/ Section	Covenant	Status
2.10	In so far as it relates to the project, MORD and the state shall enable ADB's representatives to inspect the project, the goods and works and any relevant records and documents.	Being complied with.
2.11	(a) MORD and the state shall, promptly as required, take all action within their powers to maintain their corporate existence, to carry on their operations, and to acquire, maintain and renew all rights, properties, powers, privileges and franchises which are necessary in the carrying out of the Project or in the conduct of their operations. (b) In so far as it relates to the project, MORD and the state shall at all times conduct their operations in accordance with sound applicable technical, financial, business, development and operational practices, and under the supervision of competent and experienced management and personnel.	Being complied with. Being complied with.
2.12	Except as ADB may otherwise agree, MORD and the state shall not sell, lease or otherwise dispose of any of its assets which shall be required for the efficient carrying on of its operations or the disposal of which may prejudice its ability to perform satisfactorily any of its obligations under this project agreement.	Being complied with.
2.13	Except as ADB may otherwise agree, MORD and the state shall apply the proceeds of the loan to the financing of expenditures on the project in accordance with the provisions of the loan agreement and this project agreement, and shall ensure that all items of expenditures financed out of such proceeds are used exclusively in the carrying out of the project.	Being complied with.
2.14	MORD shall promptly notify ADB of any proposal to amend, suspend or repeal any provision of the PMGSY guidelines, which if implemented, could affect the project or the operation of the project facilities.	Being complied with.
IV. Miscellaneous		
4.01	Any notice or request required or permitted to be given or made under this Project Agreement and any agreement between the	Being complied with.

Article/ Section	Covenant	Status
	<p>parties contemplated by this Project Agreement shall be in writing. Such notice or request shall be deemed to have been duly given or made when it shall be delivered by hand, mail or facsimile to the party to which it is required or permitted to be given or made at its address hereinafter specified, or at such other address as such party shall have designated by notice to the party giving such notice or making such request.</p>	
4.02	<p>(a) Any action required or permitted to be taken, and any documents required or permitted to be executed, under this Project Agreement by or on behalf of (i) MORD may be taken or executed by its Joint Secretary or by such other person or persons as he or she shall so designate in writing notified to ADB; and (ii) the State may be taken or executed by its Commissioner and Special Secretary cum CEO, Public Works Roads Department or by such other person or persons as he or she shall so designate in writing notified to ADB.</p> <p>(b) MORD and the state shall furnish to ADB sufficient evidence of the authority of each person who will act under subsection (a) hereinabove, together with the authenticated specimen signature of each such person.</p>	Being complied with.
4.03	<p>No delay in exercising, or omission to exercise, any right, power or remedy accruing to either party under this Project Agreement upon any default shall impair any such right, power or remedy or be construed to be a waiver thereof or an acquiescence in such default; nor shall the action of such party in respect of any default, or any acquiescence in any default, affect or impair any right, power or remedy of such party in respect of any other or subsequent default.</p>	Being complied with.

A Project Climate Risk Assessment and Management

I. Basic Project Information
Project Title: Road Connectivity Investment Program – Tranche 3
Project Budget: \$506.89 million
Location: Assam, Chhattisgarh, Madhya Pradesh, Odisha, West Bengal
Sector: Transport
Theme: Inclusive Economic Growth, Environmentally Sustainable Growth
<ol style="list-style-type: none"> 1. <i>Pradhan Mantri Gram Sadak Yojana</i> (PMGSY)¹ aims to provide all-weather road connectivity to currently unserved habitations in India's rural areas, where 70% of the national population live. The Government of India launched PMGSY in 2000. The objective of PMGSY is to provide all-weather road connectivity to all rural habitations with a population of more than 500 persons in plains and 250 persons in hill states. This program is implemented through the National Rural Road Development Authority under the Ministry of Rural Development at central level and through the State Rural Road Development Authority/Agencies at state level. 2. The Rural Connectivity Investment Program is the continuation of the Rural Road Sector II Program (RRS IIP) and uses a multi-tranche financing facility modality, that will construct or upgrade to the all-weather standard about 9,000 km of rural roads connecting around 4,200 habitations in the states of Assam, Chhattisgarh, Orissa, Madhya Pradesh and West Bengal (the investment program states).² 3. RCIP is implemented in 3 tranches and Project 3 is the last. Project 1, approved on 22 August 2012, covered 3,461 km of rural roads, whereas Project 2, approved on 25 November 2013, covered 3,693 km of rural roads. The proposed Project 3 will cover 6,124 km of rural roads in the investment program states.
II. Summary of Climate Risk Screening and Assessment
<p>Assam: The implications of the projected increases in temperature and rainfall coupled with the existing natural hazards of the States pose risks to the project roads and bridges' sustainability and viability. The most dominant risk of climate change is flooding along the Brahmaputra River. All areas adjacent to the Brahmaputra River are prone to flood risks with historical records of greater than 50 events per 100 year and major tributaries at 5-50 occurrences. Flooding in Guwahati, Barpeta, Nalbari, Dhuburi, Kokrajhar, Darang, Golaghat, Dibrugarh, and Dhemaji exposes more than 1,000 persons per year resulting to extreme mortality risk. The projected increase in total rainfall and intensity both upstream and downstream of the Brahmaputra within the State of Assam may result to more severe flooding. This is followed by increase in rainfall in earthquake and landslide prone areas that can jeopardize road embankment stability. Almost the entire State has experienced events between 5.0 and 6.0 Modified Mercalli Intensity (MMI) with Dimapur experiencing the most severe earthquakes between 7.1 and 8.0 MMI. Silchar has experienced the most serious ground shaking and most frequent earthquake occurrences at 8-9 MMI and 0.2-0.4 events/year, respectively. Very high landslide risk areas are found along the borders with the states of Manipur and Nagaland, particularly in Dhuburi and Goalpara districts. The predicted 200-300 mm/year increase in rainfall, also increase the risk of rainfall triggered landslide in this area that can weaken road embankments. Finally, the predicted increase in maximum temperature also increases the risk of vegetation fire which is highest in Dibrugarh with a recorded 300-1,000 events per pixel followed by Kamrup with 100-300 events, and low risk of less than 30 events in the Cachar, North Cachar, Anglong, Karbi Anglong, and Golaghat. Bitumen heating and camp site location should ensure that wildfire is avoided particularly near the Marat Longri Wildlife Reserve in Karbi Anglong Autonomous District Council, Borail Sanctuary in Cachar, and all reserved forests.</p> <p>Chhattisgarh: There are limited existing natural hazards that can be affected by the projected changes in temperature and precipitation. The entire state in general is almost free from earthquake and landslide. Tropical depressions have passed over the state particularly the districts of Mahasamund, Bilaspur, Korba, and Raigar causing little damage. The riverine flooding particularly when tropical depression passes the area has resulted to wide displacement but limited mortality. However, there is risk of vegetation fire particularly in Raipur and Bilaspur districts.</p> <p>Madhya Pradesh: The natural hazards that will be compounded by the projected increase in rainfall and temperature are flooding, landslide, and vegetation fire, and tsunami. The central district of Jabalpur and Khandwa are prone to flooding having 5-50 flooding events per 100 years. The capital city of Jabalpur is the only place in the city that is at risk of earthquake. The western band of Jabalpur, Narsinghpur, Hoshagabad, and Betul has high risk of vegetation fire.</p> <p>Odisha: The natural hazards that will be compounded by the projected increase in rainfall and temperature are flooding, landslide, vegetation fire, and tsunami. The east southeastern region of the state that covers the districts of Kendrapara, Jagatsinghpur, Puri, Cuttack, Jalapur, Bhadrak, and Khordha is prone to flooding, having 5-50 flooding events per 100 years. Along the Bay of Bengal on the same region The Port City of Paradwip, Kendrapara District has history of being hit by a tsunami while the entire coastline from Paradwip to Puri is also at risk. The interior districts of</p>

¹ Prime Minister's Rural Road Program

² The total length has increased to 13,278 km, connecting around 5,598 habitations in the investment program states.

Kandhamal, Boudh, and Angul have historical high hazard for vegetation fire.	
<p>West Bengal: The state has several natural hazards that can be exacerbated by the predicted changes in temperature and rainfall. North Paraganas, South 24 Paraganas, and to a limited extent West Medinipur are prone to tsunami. Flood risks exist in Murshidabad, Bardhaman, Hoogli, North 24 Paraganas, South 24 Paraganas, and West Medinipur. The districts of Uttar Dinajpur, Darjeeling, Jalpaiguri, and Koch Bihar are prone to earthquake with 10% probability of having 7-8 MMI in 50 years.</p>	
A. Sensitivity of project component(s) to climate/weather conditions and sea level	
<p><i>Project component</i></p> <ol style="list-style-type: none"> 1. The design of bridges and drainage features. 2. For coastal roads. 3. For landslide prone area 	<p><i>Sensitivity to climate/weather conditions and sea level</i></p> <ol style="list-style-type: none"> 1. Consider future risks of flooding. Design Storm needs to be estimated based on projections of future climate scenarios. 2. Prone to the risks of sea level rise and coastal erosion. 3. Coordinate with NBRO on further road design and construction practice requirements on landslide prone areas.
B. Climate Risk Screening	
<i>Risk topic</i>	<i>Description of the risk</i>
Temperature (°C).	<p>Assam: By the 2050s, there is a general increase in temperature in the project area. The monthly mean daily minimum temperature is expected to increase by 1.93°C to 2.88°C from the reference period of 1961-1990 based on General Circulation Model (GCM) ensemble average. The monthly mean daily maximum temperature and maximum hottest temperatures for the year are also expected to increase by 1.25°C-3°C, and 0.93°C -2.88°C, respectively. The heat wave duration index, defined as the number of days per year within the interval of at least 6 days of maximum temperature is greater than the historic maximum temperature by 5°C, is also expected to increase between 5-42 days. Warmer winter season is expected with the annual coldest temperature to increase between 1.78°C-3.70°C. Geographically, the districts of North Cachar Hills, Cachar, Halakandi, and Karimganj will experience lesser increase in temperature compared to the rest of Assam, but the northeast districts of Dhemaji and Sibjagar will experience higher increase in monthly and annual maximum temperatures.</p> <p>Chhattisgarh: By the 2050s, there is a general increase in temperature in Chhattisgarh with the average annual minimum temperature expected to increase from 1.76°C to 3.10°C from the reference 1961-1990 based on GCM ensemble average. The annual average maximum temperature is expected to increase from 0.75°C to 3.00°C while the annual maximum temperature from 0.45°C -3.21°C. Monthly maximum temperature difference occurs on August which could reach 3.8°C. Consistent with the trend, the annual minimum temperature is expected to increase by 1.45°C to 4.48°C.</p> <p>Madhya Pradesh: By the 2050s, there is a general increase in temperature in Madhya Pradesh with the annual average low, average high, maximum, and minimum temperatures increasing from the 1961-1990 reference values by 2.68°C, 1.94°C, 2.20°C, 2.81°C, respectively. The number of warm days is also expected to be more frequent increasing from 9.89% to 43.54% more chances of the daily maximum temperature exceeding the 90th percentile of reference maximum temperature.</p> <p>Odisha: By the 2050s, there is a general increase in temperature in Odisha with the average annual maximum and minimum temperatures expected to increase from 31.07°C to 32.82°C and 20.18°C to 22.41°C, respectively from the 1960-1991 reference period. The future annual maximum and minimum temperatures are expected to increase from 42.65°C – 44.72°C and 7.59°C-10.09°C, respectively. The number of warm days is also expected to be more frequent with a 36.07% more chances of the daily maximum temperature exceeding the 90th percentile of reference maximum temperature and the 44.51% more chances of the daily minimum nighttime temperature exceeds the 90th percentile of the reference minimum temperature.</p> <p>West Bengal: By the 2050s, there is a general warming in West Bengal. The annual average maximum temperature is expected to increase by 0.89°C-3.05°C and the maximum temperature is expected to increase by 0.5°C to 2.86°C. The increase in temperature from historical records is more pronounced during the months of August and September when the chances of future monthly maximum temperatures will exceed the top 10% recorded temperature by 15%-80%, and 21%-66% of the time, respectively. Warmer temperatures will be felt in the northern districts of Maldah, Dakshin Dinajpur, Uttar Dinajpur, Darjeeling, Jalpaiguri, and Koch Bihar with an increase of at least 2°C.</p>
Precipitation (mm).	<p>Assam: Total precipitation is expected to increase in the State from 175.26 mm – 653.29 mm/year in the 2050s. The north eastern and western districts of Dhemaji, Lakhimpur, Kokhrajhar, Dhuburi, and Bongaon will experience greater increase in precipitation than the rest</p>

of the State. Daily rainfall intensity index is also expected to increase in the future by 0.27-4.49 mm/day.

Chhattisgarh: The various GCM models are not in agreement on the trend of change in precipitation in Chhattisgarh by the 2050s. Predicted annual change in rainfall ranges from a decrease of 418.48 mm to an increase of 401.01 mm with a corresponding statistical confidence in change ranging from “marginally significant” (90% p-value on Student’s t-test) to significant (95% p-value).

Madhya Pradesh: The GCM ensemble predicts a substantial increase in annual rainfall from 9,350 mm to 10,819 mm.

Odisha: The GCM ensemble predicts a slight increase in annual rainfall from 1,378 mm to 1,418 mm. The number of wet days or when precipitation is greater than >0.2 mm will decrease from 120 to 117 days but the rainfall intensity (>1 mm/day) will increase from 15 to 16 days.

West Bengal: There was no agreement of the GCM ensemble on the projected change in rainfall ranging from a decrease of 471.7 mm/year to an increase of 600.29 mm/year. Nonetheless, in areas where a significant probability (>95%) in predicted future rainfall exists, annual rainfall will increase in Hoogli and Bardhaman. Finally, with a marginally significant probability (>90% but <95% confidence) the northern most tip of the State particularly Darjeeling, Jalpaiguri, and Koch Bihar will experience increase in rainfall by as much as 400 mm/year with an increase in rainfall intensity index to 2.6

Climate Risk Classification: *Medium*

C. Climate risk assessment

1. Conducted transect walk on all roads to identify flood and erosion prone areas, historical high flood level, and need for flood balancing culverts
2. Assessment of 1/50 year flood return period for all rural bridges and roads embankment and recommend measures to mitigate the flood risks of all planned project roads.
3. Assess records of past storm surges for rural roads located near coastal areas and recommend design standards for all roads within the coastal zones.
4. Assess the impact of rising temperatures on pavement integrity such as softening, traffic-related rutting, embrittlement, and migration of liquid asphalt. Recommend measures to mitigate these negative effects on road stability
5. ADB due diligence involved:
 - a. Review of meteorological, climate, earthquake, seismicity, surface drainage, flooding, and erosion risks to all sample projects and form part of the state-level IEE reports;
 - b. Review and compliance to relevant Indian Road Congress (IRC) Rural Roads Manual (IRC:SP:20-2002) with emphasis on the following: i) IRC: 72-2007 : “Guidelines for Design of Flexible Pavement for Low Volume Rural Roads” for Pavement Design; ii) IRC: SP: 62-2004 : “Guidelines for the Design and construction of Cement Concrete Pavement for Rural Roads” for C.C. Pavement; iii) IRC: SP: 13-2004 : “Guidelines for Design of Small Bridge & Culverts” for Cross Drainage Works; and IRC: SP: 48-1998 : “Hill Road Manual” for Rural Roads in Hilly Terrain;
 - c. Ensured the selection of flexible pavement design accounted for monsoon conditions and frequency of maintenance; and
 - d. Rigid pavement in the road portions susceptible for flooding, due to its higher endurance and lower maintenance costs.

III. Climate Risk Management Response within the Project

Project 3 has earmarked INR 17,512.27 lakhs (equals to \$27.7 million) to address climate change risk by increasing road embankment height on flood and tsunami prone areas, provision of side drains and new culverts, and construction of small bridges representing about 5.8% of the total civil work cost estimated at \$475 million. Details are provided in succeeding table.

State	Cost of Adaptation to Climate Change in Rs Lakh				Total
	Cost of Cross and Side Drains	Cost of Bridges/ culverts	Increasing Embankment height	Slope Stabilization (Pitching, turfing etc.)	
Assam	26.00	156.90	219.22	84.55	486.67
Chhattisgarh	219.37	925.43	43.29	21.37	1,209.46
Madhya Pradesh	1.70	30.00	8.00	12.36	52.06
Odisha	8,487.00	30.26	3,237.30	2,342.66	14,097.22
West Bengal	95.44	10.76	1,032.63	21.58	1,160.42
Total	8,829.51	1,153.35	4,540.45	2,482.52	17,005.83