



Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 23-Apr-2018 | Report No: PIDISDSA23765

**BASIC INFORMATION****A. Basic Project Data**

| | | | |
|---|---|--|--|
| Country India | Project ID P165402 | Project Name Additional Financing for PMGSY Rural Roads Project | Parent Project ID (if any) P124639 |
| Parent Project Name PMGSY Rural Roads Project | Region SOUTH ASIA | Estimated Appraisal Date 05-Apr-2018 | Estimated Board Date 25-May-2018 |
| Practice Area (Lead) Transport & Digital Development | Financing Instrument Investment Project Financing | Borrower(s) The Republic of India, National Rural Roads Development Agency, Ministry of Rural Development | Implementing Agency National Rural Road Development Agency |

Proposed Development Objective(s) Parent

The objective is to strengthen the systems and processes of the national PMGSY rural roads program for the expansion and maintenance of all-season rural accessroads. The result will enhance the road connectivity to economic opportunities and social services for beneficiary communities in the participating states.

Components

PMGSY Program Financing
Institutional Strengthening

Financing (in US\$, millions)

SUMMARY

| | |
|---------------------------|----------|
| Total Project Cost | 1,000.00 |
| Total Financing | 1,000.00 |
| Financing Gap | 0.00 |

DETAILS

| | |
|---|--------|
| Total World Bank Group Financing | 500.00 |
| World Bank Lending | 500.00 |
| Total Government Contribution | 500.00 |



Environmental Assessment Category

Full Assessment (A)

Decision

The review did authorize the preparation to continue

B. Introduction and Context

Project's original objectives, design and scope.

1. In December 2000, the Ministry of Rural Development (MORD), Government of India (GOI) initiated a US\$35 billion-plus flagship program, known as “PMGSY: The Prime Minister’s Rural Roads Program”¹. Its aim is to empower rural India by providing all-weather road access to all habitations² with population greater than 500 (250 in hill states, deserts, tribal and backward districts). PMGSY³ has been recognized amongst the top 50 achievements of India since independence. It has already delivered about 534,822 km of all-weather rural roads connecting 131,658 (out of a total 178,000 eligible) habitations, involving investment of INR2,462 billion (US\$37 billion). The Program has a well-structured implementation framework including: a defined core network to prioritize project selection; standardized procedures for engineering design and contract execution; e-procurement system; independent quality monitoring; 5-year inbuilt maintenance in civil works contracts to create construction quality incentives and strengthen sustainability; a web-based ‘On-line Management, Monitoring, and Accounting system’ (OMMAS); and a comprehensive Operational Manual for implementation. PMGSY has been a game changer in the way rural roads are managed in India. Many states have started to use the PMGSY framework for their state-level rural road programs.

2. The World Bank has supported PMGSY since its inception, through technical assistance and lending operations⁴. The Bank’s current lending operation, known as the PMGSY Rural Roads Project (herein referred to as the ‘Original Project’) includes: (i) **PMGSY Program Lending**, to finance civil works expenditures in eight participating states (Bihar, Himachal Pradesh, Jharkhand, Meghalaya, Punjab, Rajasthan, Uttar Pradesh, and Uttarakhand); and (ii) **Institutional Strengthening**, a technical assistance program designed to strengthen the capacity of relevant agencies to implement and enhance the program.

3. The Original Project has made a successful operation with a Highly Satisfactory rating in achieving its Project Development Objective (PDO) and significant accomplishments on civil works, institutional development, and Disbursement Linked Indicators (DLIs). It is now fully disbursed and overcommitted⁵ and is in compliance with all key loan covenants. The share of the rural population

¹ The programme was envisioned as part of the larger rural poverty-reduction strategy, and funded by the Central Government despite the subject of “rural roads’ being in the domain of the States.

² According to PMGSY Guidelines, a habitation is defined as cluster of dwellings, in an area, the location of which does not change over time. Desam, Dhanis, Tolas, Majras, Hamlets etc. are commonly used terminology to describe the habitations.

³ The program website is published at <http://www.pmgys.nic.in/>.

⁴ These include support to national workshop to develop a national level rural road policy, policy framework for rural roads through a series of regional workshop, US\$7.6 million Technical Assistance for Capacity Building of Rural Road Agencies, and US\$400 million Rural Roads Project, DFAT Trust Funds for Assessment of PMGSY to further enhance its design and implementation, and to develop Asset Management Strategy and Resource Efficiency Framework for Rural Roads in India.

⁵ Total commitments US\$2,000 million against a Bank funding of US\$ 1,375 million for civil works, About US\$150 million from the additional Financing will be used to partially meet this funding gap.



with access to all-season roads in the project participating states (**PDO indicator 1**) has increased to 90 percent compared to the end-project target of 72 percent (and a baseline of 67 percent). The proportion of the road network in good and fair condition (**PDO indicator 2 and DLI3**) has increased to 64 percent against the end-project target of 55 percent (and a baseline of 50 percent). In terms of physical outcome, about 26,000 km rural roads within the Project have already been built and opened to traffic, against a target of 22,520 km. In terms of institutional performance, the states of Meghalaya, Uttarakhand, Jharkhand, and Bihar have demonstrated significant improvement in their performance compared to the pre-project level. (more details are provided hereunder).

4. The intended results for the Original Project were formulated as a series of **Disbursement Linked Indicators (DLIs)**: the DLIs have been fully achieved and have been exceeded in some cases:

- **DLI1: Extent of Habitation Connectivity Achieved:** The cumulative target was 39,331 habitations, (from a baseline of 27,600) but the achievement has been 50,420 habitations.
- **DLI2: Effectiveness of Public Expenditure:** The quality of engineering designs have significantly improved in all the participating states and so the value for money through use of improved design tools, use of new technologies and local materials; five states have established their core network in the GIS (Geographical Information System) platform; the time lag between bid receipts and contract award has been contained within 45 days for more than 90 percent of the bids, even in low capacity states (like Meghalaya and Jharkhand); more than 95 percent works attain satisfactory quality standards in all the participating states; and all the participating states are using the OMMAS generating improvements in project approvals, contract management, and transparency to the delivery of PMGSY.

5. **Achievements of Bank engagement in PMGSY so far:** Leveraging its relatively small share in financing PMGSY nationwide, the Bank has from the outset promoted and supported policy, institutional and process reforms in the rural roads sector in general, and PMGSY in particular, that have improved the effectiveness of sectoral policy, investment, development impact and program management.

Policy effectiveness

- (i) **A national policy framework for rural roads:** The framework highlighted the key sector problems that existed before PMGSY was launched: the need for sound investment criteria; better quality of engineering designs; better quality of construction; previous neglect of asset maintenance; and a weak policy and institutional framework. This framework helped shape the design of PMGSY.
- (ii) **Road Sector Modernization Plan for Rural Roads and Sustainable Development Goals (SDGs):** With Bank support, National Rural Roads Development Agency (NRRDA) prepared the plan for rural road agencies in various states and the role of rural roads in achieving SDGs which include targets that pertain to both low carbon and climate resilience. MORD is preparing a vision for rural roads covering key issues, priorities areas, and a road map for management of rural roads in India.
- (iii) **A national policy framework for rural road maintenance:** This framework underpinned a growing attention to rural road maintenance: 22 states have established maintenance policies and started their implementation; 2 have adopted maintenance management systems; 14 have introduced performance based and/or community based maintenance contracts including those awarded to women self-help groups (SHGs) in 3 states; and substantial grants for rural road maintenance have been made to states by GOI (as per the recommendations of the 13th and 14th Finance Commissions).

Investment effectiveness



- (iv) **Investment prioritization:** This identified India's core rural road network by defining optimal links from each habitation to nearby markets and settlements allowing systematic, rational and data-based investment decisions, and focusing PMGSY on a core rural road network of 1.1 million km out of a total of 4.6 million km of rural roads.
- (v) **Road safety performance:** NRRDA is now integrating road safety engineering measures in the design of PMGSY roads. With Bank support, the Rural Works Department, Bihar, has developed a rural road safety action plan that will serve as a template for other states. A field guide has also been prepared to help retrofit road safety engineering measures and features to existing rural roads.
- (vi) **Asset management:** Asset management system sustain the value of investments and an asset management framework for roads has been developed and used by Assam and Bihar to prepare Asset Management Plans (AMPs), aimed at delivery of an efficient and good quality rural road network minimizing life-cycle cost.

Development impact

- (vii) **Mainstreaming Social and Environmental Considerations in PMGSY:** NRRDA has incorporated the Bank's Environment and Social Management Framework (ESMF) including health and safety provisions, in its Operations Manual and contract conditions.
- (viii) **Environmentally optimized, low carbon, and climate resilient designs:** Guidelines for these advances have been prepared with the help of international experts from South Africa, Australia, USA, and India to utilize local and marginal materials in place of conventionally used hard stone. MORD's policy is now to construct at least 15 percent of PMGSY roads using new technologies and has built about 10,000 km roads using local materials and non-conventional technologies. This has resulted in significant carbon savings by reducing the long haulage involved with convention material in addition to solving the disposal problem associated with industrial by-products like quarry wastes and fly-ash. More importantly, the policy has ushered a sector shift towards a low carbon path⁶. The use of local and marginal material has also provided 25 percent savings in unit costs in addition to the environmental benefits.
- (ix) **Climate resilience and disaster risk management:** the states of Bihar and Uttarakhand have initiated⁷ climate change and disaster risk management strategies for rural roads with the World Bank support, demonstrating how climate change, green growth, and disaster risk can be integrated into the different stages of rural roads programming. The Bank is also supporting NRRDA in preparing best practice guidelines for design and construction of rural roads in hill areas which are frequently affected by climate-induced events (landslides) and other disasters (earthquakes).

Program management

- (x) **Improved delivery framework for PMGSY:** this is now embedded in a comprehensive operations manual containing standard procedures for planning, project delivery, monitoring, funds flow, and

⁶ NRRDA has taken the bold decision to use environmentally optimized, low carbon, and climate resilient designs and new technologies for 30 percent roads under the additional financing compared to 15 percent in PMGSY.

⁷ as an expansion of the National Action Plan on Climate Change (NAPCC) in 2008 and the State Action Plans on Climate Change (SAPCC) developed to implement the National Action Plan.



institutional arrangements across all the states.

(xi) **Improved procurement and contract management:** many states have both reduced the duration of procurement while increasing its transparency by application of standardized procurement procedures, their codification in a procurement and contract management manual and adoption of e-procurement technology.

(xii) **Use of Information Technology applications for improved program management and transparency:** All the states now use OMMAS for monitoring and management of PMGSY: all information regarding release of funds, utilization of funds, status of progress of work and quality monitoring reports are in the public domain and so available to citizens. In addition, e-payment through Electronic Clearing System (ECS) is being used to make direct payment to contractors.

6. **Human resources:** MORD has initiated a comprehensive training framework for empowering road agencies and the construction industry to apply latest technologies, international knowledge, and best practices. It covers all road agency staff and contractors' staff, including the construction workers and supervisory staff⁸.

7. **Assessment of PMGSY and areas for program improvement:** Recognizing certain deficiencies and the scope for further improving the Program, the Bank sponsored a detailed assessment of PMGSY (the 'Assessment Report') to further enhance its design and implementation⁹. The Assessment Report has recently been adopted by MORD. Building on its accomplishments, PMGSY now seeks the support of the Bank in implementing the Assessment Report and meeting the following challenges:

(i) **Need to speed-up implementation:** This issue specifically concerns low capacity states and 267 identified blocks affected by "Left Wing Extremism". Their capacity to use the PMGSY grants in an effective and timely manner to realize the poverty reduction benefits requires more focused attention identified in the Assessment Report.

(ii) **Need to find better approaches in conditions that give rise to high construction costs:** The unit cost of construction has been found to be relatively high for roads connecting to small habitations, in areas lacking good road-building materials, in difficult terrain, or in areas subject to extreme climate-induced events such as high rainfall and floods. Enhanced construction cost-effectiveness in PMGSY roads would be transferable to many state-level rural road programs that provide connectivity to smaller habitations not covered under PMGSY.

(iii) **Need to reduce the variability of compliance with PMGSY systems and procedures:** while PMGSY has uniform systems and procedures, the compliance is variable across the states. The Assessment Report contains many recommendations to address this issue.

(iv) **Extend institutional strengthening to the private contracting sector:** PMGSY has helped improve the performance of rural road agencies: while this should continue to be strengthened, the program must also boost the capability of the local roads construction industry to build quality

⁸ The training framework is being implemented by the Indian Academy of Highway Engineers and National Institute of Rural Development.

⁹ The Assessment Report has two volumes – Volume one: Recommendations to enhance the PMGSY design and its implementation and Volume Two: Appendix on including Training & Capacity Building framework, Young Professional Fellowship Programme, Local Roads Network Framework and Synthesis of previous impact evaluation studies.



infrastructure fast, and to maintain it better; this would provide spill-over benefits to all parts of the 4.6 million km rural road network.

- (v) **Need to reinforce and propagate early successes in raising the status of rural road maintenance:** While PMGSY itself confers the appropriate balance, many rural road agencies still give disproportionate attention to construction over maintenance. MoRD's priority is to ensure adequate maintenance of all the 4.6 million km rural road network.
- (vi) **Need to strengthen road safety management of rural roads:** Road safety is becoming increasingly important for rural roads, especially with increasing penetration of two-wheelers: road safety problems are aggravated by poor geometry, lack of attention to safety features and lack of awareness and driving discipline by road users.
- (vii) **Need to mainstream green growth, low carbon, and climate-resilience:** PMGSY can do more to build in climate-resilience, green and low carbon concepts in rural roads: many parts of the existing network are vulnerable to or have already suffered damage from extreme climatic events such as floods, high rainfall, sudden cloud-bursts and landslides. Thus, building adequate resilience in the existing network to withstand such events is also equally important as for new roads. There are also innovative opportunities to introduce green technologies that would provide environmental gains and often cut costs too both in the short and long-term¹⁰.
- (viii) **Need to capture the potential gender benefits of rural roads programs:** women and girls benefit greatly from the ability of all-weather roads to provide them better access, and security of access, to health, education, economic and social opportunities. But there is also scope for their much greater participation in project life-cycle itself such as in design and construction, road maintenance contracting, supply of transport services using new roads.

A. Rationale for the Additional Financing.

8. MORR has requested the Bank to increase lending by US\$500 million to the Original Project and provide the continuing Bank support which can help tackle the development challenges identified in paragraph 6. Of the US\$500 million, USD150 million would be used to meet the funding gap in the Original Project. The remainder will be used to expand the extent of network to be upgraded while widening the developmental scope to tackle institutional, road safety, low carbon and climate-resilience, gender and other issues described above. (See detailed project components below). The Bank Team is also resolved to work with Indian counterparts to disseminate the PMSGY program internationally as an adaptable model for rural road programs in other countries¹¹. It will demonstrate how climate change agenda should be integrated in the rural roads strategy, planning and actions¹².

9. **Eligibility for Additional Financing:** The proposed Additional Financing meets all criteria of suitability and appropriateness: the activities proposed under the Additional Financing are consistent with the PDOs of the project and strategically aligned with Bank priorities; the ISR ratings for IP/PDO over the most recent 12 months have been either Satisfactory or Highly Satisfactory; the project does not have any unresolved fiduciary, environmental, social or safeguard issues; all activities under Additional Financing are expected to be completed within three years; the Borrower has indicated strong interest in scaling up the development impact of the ongoing project through the Additional

¹⁰ Sound asset management could off-set the increased GSG emissions up to 7 percent annual traffic growth in addition to substantial reduction in the consumption of road building materials.

¹¹ NRRDA is already sharing the PMGSY framework with many countries for their rural road programs.

¹² Contributing towards implementing Government of India's NAPCC and the SAPCC of the respective state governments.



Financing; and the Additional Financing is the most appropriate way to ensure critical Bank support to ongoing reforms in the rural road sector.

C. Proposed Development Objective(s)

Original PDO

The objective is to strengthen the systems and processes of the national PMGSY rural roads program for the expansion and maintenance of all-season rural access roads. The result will enhance the road connectivity to economic opportunities and social services for beneficiary communities in the participating states.

Current PDO

The objective is to strengthen the systems and processes of the national PMGSY rural roads program for the expansion and maintenance of all-season rural access roads. The result will enhance the road connectivity to economic opportunities and social services for beneficiary communities in the participating states.

Key Results

10. Both the Project Development Objective (PDO) and overall project design will remain unchanged from the Original Project. However, the PDO indicators have been revised as follows:
 - (a) Number of habitations benefited with all-weather roads (2000)
 - (b) Improved condition of core rural road network (68%)
 - (c) Improved effectiveness of public expenditure – length of roads designed using climate-resilient and environmentally optimized road designs and cost-effective technology (2000 km)
 - (d) Improved asset management – 30 districts using performance / community based maintenance contracts

D. Project Description

Key Changes Proposed as part of the Additional Financing:

11. The Additional Financing entails the following changes to the Original Project: (i) an increase in the Bank funding for civil works by US\$485 million and for institutional development by US\$15 million; (ii) extension of the closing date until April 30, 2021; (iii) reduction in the proportion of Bank financing for the additional civil works from 100 percent to 50 percent; (iv) inclusion of the state of Tripura as a participating state under the Project; (v) use of the Bank's new procurement framework of July 1, 2016; (vi) corresponding changes in the results framework and Disbursement Linked Indicators (DLIs) (refer section VII and Annex-1).

12. **Total Project Cost:** The total project cost with the Additional Financing will increase from US\$1,400 million to US\$2,400 million (Table 1).

13. **Proportion of Bank Financing.** The proportion of Bank financing will be 50 percent in accordance with the current policy of Government of India, Department of Economic Affairs, for projects of the Central Ministries.

Table 1: Summary of Project Cost (US\$ million)



| Project Component | Original Project | | Proposed Additional Financing | | Total | |
|-------------------------|------------------|---------------------|-------------------------------|---------------------|--------------|---------------------|
| | Bank | Government of India | Bank | Government of India | Bank | Government of India |
| PMGSY Program Financing | 1,375 | - | 485 | 485 | 1,860 | 485 |
| Technical Assistance | 25 | - | 15 | 15 | 40 | 15 |
| Total | 1,400 | - | 500 | 500 | 1,900 | 500 |

14. The scope of the two project components of the Original Project will be revised to reflect the Additional Financing as follows:

(a) Component A: PMGSY Program Financing (US\$970 million).

(i) **Sub-Component A1: Green and Climate Resilient Rural Roads:** This sub-component will include civil works to support construction and/or rehabilitation/ improvement of about 6,000 km of priority rural roads and standalone bridges under the PMGSY district rural road plans¹³ in the nine participating states¹⁴ (Bihar, Jharkhand, Meghalaya, Uttar Pradesh, Himachal Pradesh, Punjab, Uttarakhand, Rajasthan, and Tripura) incorporating adequate climate-resilience and road safety engineering features. This will also include use of environmentally-optimized, low-carbon and climate-resilient designs and new technologies for about 2,000 km roads. The provision of five-year maintenance will continue to be in-built in each civil works contract.

(ii) **Sub-Component A2: Pilot Projects to Introduce New Technologies:** Pilot projects to demonstrate the use of environmentally optimized, low-carbon, climate-resilient road designs, innovative bridges, new technologies (such as low-cost surfacing’s and pavements) and retrofitting road safety and climate-resilient measures in pilot sections of about 1,500 km of existing “Through Routes¹⁵” in the PMGSY District Rural Road Plans (about 150-200 km per state; in addition to the above participating states, other states will be allowed to participate in this sub-component¹⁶).

(iii) **Sub-Component A3: Rural Roads under the Original Project:** This sub-component will support balance civil works on about 6,000 km rural roads and bridges in the eight participating states under the Original Project. The Bank will finance US\$150 million, partially meeting the cost-overruns under the Original Project¹⁷.

(b) Component B: Technical Assistance (US\$30 million)

15. This component will support technical assistance (mostly services, goods, and operating expenses) in the entire PMGSY Program (in addition to the above participating states) to support asset

¹³ Prepared under PMGSY for each district showing the rural road network.

¹⁴ Other states could join this sub-component during implementation.

¹⁵ Through routes are the ones which collect traffic from several link roads or a long chain of habitations and lead it to a market centre or a higher category road, i.e. the District Roads or the State or National Highways.

¹⁶ If they agree to use of fiduciary and safeguard procedures and implementation arrangement defined for the additional financing.

¹⁷ These works would cost around US\$ 600 million, the remaining expenditure will be met by MORD using its own funds.



management, institutional, investment and development effectiveness to complement achievement of the DLI matrix. This component will comprise the following main sub-components:

(i) **Sub-Component B1: Asset management:** (a) Support to development and implementation of state-level asset management plans (AMPs). This will include setting up simple asset management systems to prepare prioritized plans for capitals works and maintenance including a road and bridge inventory and condition database in the GIS platform including videography; (b) refinements in the rural road core network/ district rural road plans through provision of missing links and inclusion of unlinked habitations and improving overall network efficiency by integrated planning of the various categories of roads; (c) implementation of innovative maintenance contracts for rural road core network, including those involving local communities/micro-enterprise contractors; (d) piloting of surface dressing and other technologies for maintenance; and (e) further refinement and implementation of state-level maintenance policies.

(ii) **Sub-Component B2: Green and climate-resilient rural roads:** Developing a green and climate-resilient rural roads strategy for PMGSY that integrates environmentally-optimized, low-carbon, and climate resilient concepts and support its implementation by developing similar strategies at state-level, including: (a) network level vulnerability assessments; (b) revision of existing design and construction standards for roads and bridges to integrate climate resilience and green growth; and (c) detailed engineering designs to retrofit climate resilience in existing rural roads and bridges.

(iii) **Sub-Component B3: Skills development and gender-targeted opportunities:** Further refinement of the Human Resources Professional Development Strategy and training framework for rural road agencies and construction industry including training materials, international and local training, study tours, workshops, counterpart training. It will also include pilot projects to create employment opportunities for the youth and micro-enterprise contractors, including women entrepreneurs and groups who could participate in contracting, maintenance and transport services activities. Capacity building is also required for local governments authorities, particularly in effective utilization of the 14th Finance Commission resources.

(iv) **Sub-Component B4: Road safety management:** Establishing state-level Rural Road Safety Action Plans and supporting implementation by preparation of road safety engineering designs for retrofitting road safety measures to the existing rural roads network, technical documentation, district level road safety plans, capacity building of rural road and other related agencies, awareness programs for local governments, communities and work zone safety, integration of road safety in the asset management system and road safety audits of priority rural roads.

(v) **Sub-Component B5: Program Management Strengthening:** Supporting system-wide improvements for the PMGSY program based on international best practice by development of improved program documentation of PMGSY including related publications of Indian Roads Congress (IRC); further refinements and expansion of OMMAS as a monitoring tool including for sub-national rural road programs; refinements of the e-procurement system and procurement and contract management manual; development of rural roads vision 2030; implementation of the recommendations of the PMGSY Assessment Report and Road Sector Modernization Plan; and studies related to further evolution of PMGSY and management of the rural road sector.

(vi) **Sub-Component B6: Research and development:** Support¹⁸ to establish centres of excellence and facilitate active participation of PMGSY's technical agencies in further research on new and

¹⁸ Including modernization and strengthening of the required infrastructure for research and training



cost-effective designs using local materials through an accelerated testing facility and other modern equipment; pilot projects to demonstrate climate-resilient and environmentally optimized designs and new technologies; low cost bituminous surfacing; innovative bridges, and other new maintenance technologies; performance evaluation of new technologies and socio-economic impact studies.

(vii) **Sub-Component B7: Outcome monitoring:** Support impact studies of rural roads including contribution of rural roads towards poverty reduction, employment, income, health, education, and achieving SDGs with attention given to differential impacts and realizable benefits by gender.

(viii) **Sub-Component B8: Rural transport services and agriculture supply chain:** Studies to improve rural transport services using the PMGSY road network by cost-effective, reliable and safe passenger and goods transport services. The studies will address the specific travel needs of women and poorer people who generally have low vehicle ownership and for whom the critical issue is that new roads should facilitate improved transport services. This sub-component will, therefore, also seek to strengthen the rural transport services institutional and policy framework, encourage the participation of local transport operators including women's transport groups, and promote the use of clean fuel including electric vehicles. Studies related to improved trade and logistics in rural areas will identify the complementary interventions to be taken to maximize the positive impact of rural roads on agricultural supply chains.

(ix) **Sub-Component B9: Engineering design, project management and implementation:** This sub-component will include: (a) cost-effective climate-resilient engineering designs and related surveys and investigations; (b) engineering supervision of civil works and independent quality monitoring; (c) project management support both at NRRDA and state-level for civil works and technical assistance; and (d) project performance audit services.

(x) **Sub-Component B10: Equipment:** Equipment and office may include: video-conferencing facilities between NRRDA, states and field offices; modern surveys and investigation equipment and design tools for planning and design; quality assurance systems; and use of modern IT tools and software.

E. Implementation Arrangements

16. The implementation arrangements will remain the same as for the Original Project which are in use for the last 18 years and are being refined from time to time based on the implementation experiences. These arrangements are well documented in the PMGSY's Operations Manual.

17. MORD would continue to have the overall responsibility to oversee project implementation and provide policy guidance. Its technical agency, NRRDA will have the overall responsibility to provide technical expertise and implement the project through the respective SRRDAs, designated nodal departments and implementing agencies for PMGSY in each participating state. NRRDA has deputed a Project Director who will be responsible for the overall coordination and implementation of the project. The Project Director will be supported by designed teams of officers for new technology initiatives and design innovations, asset management and maintenance, core network and GIS data-base, procurement and contract management, quality assurance, social and environment aspects, training, and OMMAS. Considering the big technical assistance program, additional project management support is provided at both NRRDA and SRRDA levels. NRRDA will provide technical assistance and support to the states which are only implementing technical assistance activities under Component B in order to ensure compliance to the Bank's fiduciary and safeguard procedures..

**F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)**

India is a country with about 72 percent people residing in rural areas. The PMGSY is a national rural roads program operating in all states and Union Territories (UTs). Out of these, nine states have been identified for inclusion under this project (Additional Financing). These include Himachal Pradesh, Jharkhand, Meghalaya, Punjab, Rajasthan, Uttarakhand, Uttar Pradesh, Bihar and Tripura. The project will cover all districts in the said states. States like Himachal Pradesh, Meghalaya and Uttarakhand (and to some extent even Tripura) are hilly, characterized by steep slopes, high landslides and erosion problems, high percentage of geographical area under forest cover, as well as abundant rivers and rivulets. People are largely dependent on agriculture and in some states like Himachal Pradesh, Meghalaya and Uttarakhand, forest and horticulture activity assumes significance in local economies. In general, the land holding size in the project states is small. When the Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched in 2000, it was estimated that 330,000 habitations out of a total of 825,000 habitations remained without any all-weather road access.

G. Environmental and Social Safeguards Specialists on the Team

Gopalaswamy Srihari, Social Safeguards Specialist

Venkata Rao Bayana, Social Safeguards Specialist

Neha Pravash Kumar Mishra, Environmental Safeguards Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

| Safeguard Policies | Triggered? | Explanation (Optional) |
|--|------------|------------------------|
| Environmental Assessment OP/BP 4.01 | Yes | |
| Natural Habitats OP/BP 4.04 | Yes | |
| Forests OP/BP 4.36 | Yes | |
| Pest Management OP 4.09 | No | |
| Physical Cultural Resources OP/BP 4.11 | Yes | |
| Indigenous Peoples OP/BP 4.10 | Yes | |
| Involuntary Resettlement OP/BP 4.12 | Yes | |
| Safety of Dams OP/BP 4.37 | No | |
| Projects on International Waterways OP/BP 7.50 | No | |
| Projects in Disputed Areas OP/BP 7.60 | No | |



KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

Key Environmental Issues

The provision and maintenance of all-season access to rural communities undoubtedly creates an easier access to economic opportunities and social services. However, the cumulative direct, indirect and induced adverse impacts resulting from the development of rural roads through a program of the scale of PMGSY can cause considerable damage to environment, if not addressed appropriately.

Deficiencies in planning and design of sub-projects can lead to insufficient arrangements to conserve natural drainage pattern. Inadequate provisions for slope stabilization and/or improper disposal of construction wastes (including cut earth) in hilly terrain can cause landslips/slides on one hand and accentuate soil erosion and siltation of water bodies on the other. The stability of cut slopes for new and/or widened roads and the disposal of debris/spoils are key concerns in hilly states like Himachal Pradesh, Uttarakhand, Meghalaya and Tripura. Provision of new connectivity in remote locations also has a potential to affect critical natural habitats such as protected areas, wildlife corridors, wetlands and forests. States like Himachal Pradesh, Jharkhand, Meghalaya, Uttarakhand and Tripura have a significant percentage of their geographical area under forest cover and therefore need more robust planning and design of sub-projects to avoid, minimize and manage adverse environmental impacts on forests and natural habitats.

In addition, the uptake of land, particularly fertile farmland for road construction/widening; felling of trees; impact on local water bodies; improper management of materials and their sources (such as aggregates, sand, earth and water), including use of a large quantum of virgin natural resources; increased traffic (in case of upgrading and through-routes) causing safety concerns for both road-users and road-side residents; occupational health related risks faced by construction workers and construction-stage nuisances such as dust and noise require attention. Potential long-term impacts could include changes in land use pattern (from agriculture to real estate or other non-farming purposes) and occupations of the people.

On the positive side, strengthening of human capital from enhanced habitation connectivity, increased access to employment, education and other social services are some of the benefits anticipated from the program/project. It may also contribute towards reducing outward migration from the rural areas, as has been noted during implementation of RRP I and on-going PMGSY – Rural Roads Project II.

Social Issues and Impacts

The rural roads under PMGSY are mostly constructed using the existing tracks which are in use by the rural traffic. Construction is generally carried out or restricted to the width as available in the Revenue Records, whereby land uptake is minimized. However, there are instances where available width is too small, warranting additional land requirement for constructing the road. For few such roads, small quantities of additional land is required to improve the geometry at isolated locations and/or for road widening purposes in sections where the width is less than the required cross-section. In such cases, while the most common occurrence is the loss of small strips of agriculture land, in a few cases there could be loss of entire/substantial part of land holding and/or structure/s as well. Assessments conducted on sample basis for roads built under the main project show very limited adverse impacts on people and their assets - these are largely restricted to a modest loss of land from the widening of existing tracks. Less than one percent of vulnerable households reported loss of more than 10% of land holding in states of Uttar Pradesh and



Rajasthan. There is no objection to donate the small strip of land and no physical relocation was required in any of the roads assessed.

Land acquisition is not financed under the central government/PMGSY program but provided by the states mostly through voluntary donation. While seven project states (9 in all, including eight in the original project and one new project state, Tripura)

follow 'land donation' approach, two participating project states, namely Punjab and Uttarakhand, have instituted purchase over donation of land. The land donation experience in the on-going Rural Roads Project (RRP II) has shown that the agreed procedures are not always entirely followed or completely documented.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

The strengthening of social capital from enhanced habitation connectivity, increased access to employment, education and other social services, and possible raise in land values are some of the long-term gains anticipated from the project. Based on experience from previous Bank funded operations such as Rural Roads Project I and the on-going PMGSY - RRP II, the project may also contribute towards reducing outward migration from the rural areas.

However, villages close to urban centers may attract new commercial and public activities, which may increase pressure on the local resources. Potential long-term impacts could include changes in land use pattern (from agriculture to real estate or other non-farming purposes) and occupations of the people. The impact of road accidents and its impact on a household level is an associated impact resulting from the program.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

In general, the proposed sub-project roads follow established/existing tracks, especially in case of plain areas. However, this is usually not the case in hilly areas, where the availability of land, minimization of cut-and-fill as well as maximum permissible gradient norm requires creation of a new alignment. Therefore, sub-project preparation, particularly in case of roads in hilly terrain or for roads traversing or passing close to critical natural habitats, will include an analysis of alternatives prior to the final selection of the alignment. Alternatives will also be explored in cases where alignment adjustments are required in plain areas to avoid and/or minimize impact on structures, water bodies, cultural/religious properties or other such features that are locally considered important.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Environment Management and Safeguards

An Environmental and Social Management Framework (ESMF) has been developed for avoiding, minimizing, mitigating and managing the identified environmental issues, which are likely to arise during the planning/design and implementation of sub-project level activities. Based on the experience gained from the Bank funded Rural Roads Project (RRP I) (now closed), on-going PMGSY – RRP II project and other similar projects (in Rajasthan, Bihar and Madhya Pradesh) and following the recommendations from the diagnostic review/gap analysis carried out during the preparation stage (2008-09) of the on-going PMGSY project by the Bank's task team, the ESMF and ECoPs prepared for the original project have been revised/updated for use for works to be funded under this Additional Financing project. It comprises of two volumes: (i) an ESMF, the main volume that provides an over-view on the approach and institutional arrangements for managing environment and social issues in the project; and (ii) an Environmental Codes of Practice (ECoPs), containing 20 codes, each covering a guidance note on a specific environmental aspect.

The ESMF for the original project (PMGSY – RRP II) was prepared using the following steps: (i) review of environmental and social conditions and issues in the participating states in context of the project/program interventions; (ii)



consultations with stakeholders; and (iii) field/practical experience gained from implementation of then on-going Bank financed Rural Roads Project I. Combining the findings from the said steps and using recommendations from the diagnostic review (gap analysis) for environmental and social aspects conducted by the Bank's task team as part of the project preparation, the ESMF document of RRP I was modified/updated for use in the on-going PMGSY – RRP II. This document has been further revised/modified for the Additional Financing project keeping in mind the experience gained post-2010 (when the original document was finalized/disclosed) , issues and context of new participating state, such as Tripura and changes/revisions in norms and regulatory requirements.

The primary objectives behind preparation of the two instruments is to avoid, minimize, mitigate and manage the identified environmental issues, which are likely to arise during the planning/design, implementation and operation of sub-projects. The ESMF serves as a comprehensive and a systematic guide covering policies, procedures and provisions, which are being/will be integrated with the over-all project cycle to ensure that the environmental aspects are systematically identified and addressed at the sub project level. The use and integration of ESMF/ECOPs into the project's operational cycle will help in avoiding and mitigating adverse environmental impacts. It will also help in enhancing positive impacts and facilitate in achieving compliance with the Bank's Safeguard Policies and regulatory requirements of GoI/States. The approach ensures effective environmental management in a scenario where multiple sub-projects are located in different parts across the seven participating states and minimizes the need for carrying out a sub-project level environmental assessment (EA) and preparation of Environmental Management Plan (EMP). The ESMF/ECOPs seek to standardize the environment management approach across a large number but similar kind of small scale rural road development works spread across a wide geographical area.

Appropriate guidance has been developed to enhance positive impacts and to avoid, minimize and mitigate adverse impacts through 'environmental codes of practice'. These activity-specific codes address planning/design, construction and operation-stage issues associated with: (a) site preparation; (b) construction camps and plant sites; (c) borrow and quarry areas; (d) water management; (e) slope stability and erosion control (including introduction of bio-engineering practices); (f) waste management; (g) drainage; (h) public and worker's health and safety; (i) cultural properties (including handling of 'chance-finds'); and (j) tree plantation. In addition, specific codes have been developed to provide guidance on environmental audit (covering pre-construction, construction and operation stages) and public consultation.

In general, the proposed sub-project roads follow established/existing tracks, especially in case of plain areas. However, this is usually not the case in hilly areas, where the availability of land, minimization of cut-and-fill as well as maximum permissible gradient norm requires creation of a new alignment. Therefore, sub-project preparation, particularly in case of roads in hilly terrain or for roads traversing or passing close to critical natural habitats, will include an analysis of alternatives prior to the final selection of the alignment. Alternatives will also be explored in cases where alignment adjustments are required in plain areas to avoid and/or minimize impact on structures, water bodies, cultural/religious properties or other such features that are locally considered important. More so, to incorporate and address possible impacts on the environment into project design, mechanisms like the transect walk (capturing various natural, physical and social environment elements on a strip plan) and local level consultation will serve as a vital input for preparation of Detailed Project Reports (DPRs). This improves DPR quality by requiring a more rigorous and technical solution approach to resolve environmental issues as part of the sub-project design itself.

However, critical environmental issues such as adverse impacts on ecologically sensitive areas, which may result due to improper selection, planning/design and construction activities, will be avoided and/or appropriately mitigated (as the case may be) by using results from the Environment Screening Exercise. Screening will be done to determine the likelihood of any possible direct impact/s on natural habitats in the context of possible selection/design/construction of a sub-project in such area/s. The screening methodology provided as part of the ESMF/ECOPs will help in determining the magnitude/sensitivity of environmental issues at the sub-project level, particularly in relation to the presence of ecologically sensitive habitats. Such cases are likely to be very few (about 1 percent or so) but specific



guidance on selection, design, mitigation and/or management measures (as applicable in the context of a sub-project) will be provided under the project. So far, the program/project (PMGSY – RRP II) hasn't supported or financed any sub-projects that could lead to significant conversion of critical natural habitats. Under the Additional Financing the same approach of carrying out Environmental screening will continue - the results of such screening exercise will be reviewed by the Bank.

Implementation experience of the ESMF/ECOPs has been largely positive as all participating states now use DPR formats that include environment management provisions. A note capturing experience from application and implementation of safeguard instruments in the original project is being appended as an annexure to the final version of ESMF. Key experiences include a) Participatory process has been incorporated in planning road alignment, mainly through transect walk and consultations with key stakeholders; b) several initiatives related to new techniques/alternative materials now stand mainstreamed in the program; c) Taking a leap ahead, for tree plantation Ministry has issued a detailed advisory in January 2014 on preparation of action plan with an increased focus on convergence between PMGSY & MGNREGS. Ministry in consultation with Indian Roads Congress (IRC) has also issued a detailed guidelines for road side plantation on PMGSY roads. Provision in OMMAS is also being made for data capturing on Tree plantation on PMGSY roads. Moreover, this afforestation drive will involve community as well as PRI bodies.

d) Since 2014, the states have constructed nearly 5000 km using various technologies (Waste Plastic, Use of fly ash in cement for concrete structures, Quarry Waste Materials, Slope Stabilization, Bamboo Piling, etc.) e) further, Operational Manual and IRC specifications on rural roads have been revised and stand better infused with EHS requirements.

Mainstreaming Environment Dimensions for Green/-er Rural Roads: To mainstream and enhance the environmental management dimensions in PMGSY, a few specific recommendations were made in the diagnostic study. These recommendations aimed at improving program delivery in terms of time, cost and quality by introducing/strengthening environment sustainability elements in the PMGSY program per se.

The environmental issues at the program level has been addressed by undertaking appropriate revisions in concerned PMGSY documents, particularly Operational Manual, Standard Bidding Document, Technical Design Document/Specifications (Red Book). The template for DPR, (a key document used for sub-project preparation) now better reflects environmental and social features/ issues as well as other key planning and engineering/design requirements. Technical assistance (TA) and training on the management of key environmental issues in the rural roads development program, such as planning, design and/or construction of roads in ecologically sensitive areas; drainage design and management; slopes and debris management in hilly terrain and materials management, has been provided to the engineers and contractors.

From a cumulative perspective, a program with a size like PMGSY requires huge quantity of natural resources and to deal with this, the program/project is aggressively promoting initiatives, research/pilots and demonstrations on resource efficiency. This is already a mainstream activity in the original project and 40 different/new (non-conventional) techniques and techniques have been promoted till date. The program/project is also pushing the envelope on "asset management/maintenance" to bring down the natural resource requirements of the sector apart from creating economic, climatic and social co-benefits. These efforts will be further supported through the proposed project.

Further to the efforts made under PMGSY – RRP II, including on strengthening technical specifications, pilots and norms for resource efficiency/environmentally optimized designs and capacity building of a huge cadre of engineers, some more initiatives will be undertaken and supported under the Additional Financing project. These include: (a) further strengthening of DPR Template to mainstream environmental features/issues as part of the planning and engineering/design process (to include new techniques/methodologies); (b) building capacity to implement the



environmental dimensions included in the Book of Technical Specifications for Rural Roads under the original project, a first of its kind effort in the sector; (c) refining and updating environment, health and safety requirements in the Model Bidding Document to strengthen compliance during the construction stage and; (d) TA and training support for mainstreaming environmentally-optimized and climate resilient designs in rural roads. The primary objective is to further mainstream and enhance the environmental management dimensions in PMGSY, with an aim to improve program delivery in terms of time, cost, quality, resilience and natural resource efficiency.

Institutional Arrangements for EMF/ECOPs Implementation. Implementation of the ESMF/ECOPs/SMF/VF will be the responsibility of officers of the executing agencies (Project Implementation Units) in each state under the overall coordination and monitoring of the National Rural Roads Development Agency (NRRDA) at the central level and the State Rural Roads Development Agencies (SRRDAs) at state level.

NRRDA as nodal organization has a greater role in providing oversight, guidance, capacity building for the Project states and the participating states have to supervise the day-to-day operation of the ESMF/ECOPs implementation, ensuring adoption of the required process during sub project preparation, collation of information at the state level and providing timely reports to the NRRDA and the World Bank. The PIUs will be responsible for supervision and monitoring of the environmental management measures in the field. In addition, the Project Management Consultant (PMC) (where ever engaged by the SRRDA) will have an Environment Safeguard Specialist responsible for reviewing actual implementation of the ESMF/ECOPs provisions. The ESMF/ECOPs provide comprehensive checklists to 'supervise/audit' the management of relevant environmental issues during the various phases of the project: (i) DPR preparation, (ii) pre-construction, (iii) construction, and (iv) post-construction, which will be used for site supervision and reporting. The Nodal Environment and Social Officer at NRRDA will provide a more strategic oversight on environment management aspects for the project as a whole. An environmental supervision protocol has been prepared and included in the ESMF/ECOPs to particularly guide the field engineers in monitoring and reporting on the environment, health and safety aspects.

Nodal Environmental Officers at NRRDA and participating SRRDAs were available – either as independent experts whose services were directly hired from the market and/or through Project Management Consultants. Turnover issues were noted in two states (Uttar Pradesh and Jharkhand) in the original project, posing challenges of maintaining continuity and consistency in efforts. Also, the current staffing structure at NRRDA and SRRDAs, only allows a limited level of oversight and supervision given the size/scale of the program and in the light of scaling-up activities related to resource efficiency, climate resilience and training. Based on the lessons and implementation experience of RRP-I and PMGSY – RRP II, measures for strong institutional oversight is a dire need to carry forward the achievements and initiatives made under the program. This should be supplemented by strengthening sub-project design/DPR preparation, timely/regular supervision on ECoPs application and implementation and periodic thematic reviews - which will be taken forward more rigorously through support under Additional Financing.

Capacity Building and Training: The proposed project will support capacity building for Environmental officers/specialists and rural road engineers at national, state, and PIU level, including SRRDAs, STAs, TEs, and contractors. The training plan is meant to have a rolling schedule. Given the large program size, transitions in staff placement and new learnings that emerge from implementation, the training programs will be offered at certain regular periodicity and specific courses will be rolled out based on demand or needs of the targeted audience. The budgetary provisions for training and capacity building programs is budgeted under the Technical Assistance component. This initiative also seeks to help NRDDA and its associated training agencies in developing appropriate and user-friendly training material for use both during and after the project duration. The Technical Assistance and training sub-component under the project will be utilized for developing systematic curriculum, training materials and for imparting core and specialized training modules to the engineers and contractors. The TA and training sub-component will also be extended to other states that are not a part of this project.



Social Management and Safeguards

To improve the over-all social safeguard management and ensure compliance with OP 4.12 and OP 4.10, exclusive documents, namely Social Management Framework (SMF) and Vulnerability Framework (VF), were instituted under the original project with a supplementing summary document - Environment and Social Management Framework (ESMF), which binds the various safeguards instruments of the project, covering both environment and social management perspectives. The social concerns and outcomes have been assessed to be the same for the proposed sub-projects under Additional Financing including for the new participating state of Tripura, as they were for the original project. Therefore, the same approach, process and instruments will be followed as those original developed for PMGSY - RRP II and Rural Roads Project I, but with provisions for more robust institutional systems that service effective implementation of 'updated Social Management and Vulnerability Frameworks'.

The ESMF, SMF and VF have been modified/updated for use in Additional Financing works, reflecting the latest legal and policy developments relating to land and R&R in the country, besides incorporating provisions relating to labor influx. Further the up-dation is also based on implementation experience of safeguard instruments and document review and consultations. A standalone document is prepared capturing the experience of safeguard instruments in the original project and appended to ESMF. Key experiences included: i) NRRDA and SRRDAs have now mainstreamed the Bank's safeguard provisions in PMGSY through its Operations Manual, templates used to prepare detailed engineering designs and all DPRS include details of transect walks and community consultations, land take, citizen monitoring, and grievance redress mechanisms; ii) land take has been largely avoided or minimized using SMF provisions such as re-routing of alignments or minimizing through design; iii) though some times procedures were not always followed, periodic checks and monitoring ensured that subsequent DPRs included all requisite details; iv) thematic assessment undertaken in the states of Rajasthan and Uttar Pradesh found limited adverse impacts on people, largely restricted to the modest loss of land from the widening of existing tracks ; v) VF has benefitted tribal and scheduled caste population in terms of selection of roads in their habitations as well as through provision of road side infrastructure and amenities such as handpumps, platform for handpumps, approach paths to educational, health and community facilities; vi) in addition, improved roads have facilitated construction/improvements to community infrastructure; vii) experience of successfully piloting provision of maintenance works to women SHGs has enabled scaling up under this AF.

The SMF endorses participatory approach with information sharing, consultation and collaboration with stakeholders during various stages of the sub-project cycle. Apart from stating the entitlement mechanisms for Project Affected People whose assets are impacted, the two frameworks together lay the ground rules to enhance inclusive connectivity of habitations and people sensitive road construction/maintenance procedures. The principles or four pillars of SMF – (a) information dissemination; (b) consultations; (c) documentation and; (d) collaboration – guide the community involvement process and land transfer by donation or purchase, in the case where involuntary resettlement is required, to avoid harm to the project affected people (PAPs). Accordingly, the SMF comprises provisions for community participation in design, implementation and monitoring, grievance redressal, and entitlement remedies for project affected persons and village communities. It also clarifies the gaps relating to land donation and states guidelines for land transfer by purchase or donation without causing any irreversible harm to the project affected people. For the implementation phase, it encourages road score cards for participatory monitoring and community contracts for road maintenance.

The VF, developed as part of PMGSY - RRP II aims to address vulnerability issues resulting from social identity, notably gender, scheduled caste and scheduled tribe and helps in promoting equitable distribution of project benefits among the Scheduled Tribes and Scheduled Caste population. Some of the participating states have indigenous people referred to as the 'Scheduled Tribes' in the Constitution of India. The guiding principles enshrined in the Constitution of India, and also in various plans and policies, safeguard the interests of tribal population. These principles and policies stipulates the state governments to pass suitable legislation, wherever possible, to create legal and



administrative arrangements that assist the tribals in various situations. The VF developed for this project addresses vulnerability issues and ensures application of all Central and State government provisions to the advantage of the tribal populations.

The project involves small quantities of land uptake (usually 1 to 1.5 meters in width and 10 to 50 meters in length), made available mostly through voluntary donations. The land donation information is documented through formats and MoUs/Affidavits and collated in the Detailed Project Reports (DPRs). In states such as Uttarakhand and Punjab, land is made available for the purpose of the project through direct purchase using Land Acquisition Act, 1894. In Uttarakhand, the purchase is through willing buyer- willing seller method and in Punjab through LA Act by paying compensation.

Given the small length of individual sub-projects, the social and land related details are presented in the DPRs as part of the social section through specific formats instead of stand-alone Resettlement Action Plans. The ESMF also has specific entitlements for vulnerable PAPs donating lands – to be assisted through Government programs and through support from Gram Panchayats. As the lands they donate are less than 10 percent in area, the chances for livelihood losses are almost negligible.

Arrangements for implementation of ESMF/SMF/VF: The implementation of the ESMF/ECOPs/SMF/VF will be the responsibility of SRRDAs at state level and NRRDA at Central level. The SRRDAs through field PIUs will implement the ESMF/VF. NRRDA as overarching organization has principal responsibility in providing oversight, guidance, capacity building for the Project states; and the Project states/SRRDAs has to supervise the day-to-day operation of the SMF implementation, ensuring documentation of social process at sub project level and consolidation at state level, providing timely reports to the NRRDA and the World Bank. World Bank will assist the borrowing states with: i) another round of training on the SMF provisions with special focus on the new state – Tripura, to be followed by periodic refresher trainings in initial two years, as elaborated in the ESMF; and ii) undertake both desk and site based review of sample DPRs particularly in roads where land take occurs to ensure these are of good quality and that they provide sufficient details on amount/type of land take, any compensation measures as well as identify vulnerable people.

A Nodal Environment and Social Officer at the NRRDA will coordinate and over-see various aspects related to social and environment management as envisaged under the project. At the SRRDA level, separate environment and social officers will be appointed in the participating states to ensure the implementation of environmental and social aspects and assist the Project Director on the said issues. Each Project Implementation Unit will also have a designated engineer to oversee environment and social inputs during preparation and implementation.

The current staffing at NRRDA and SRRDA, however, only allows limited level of oversight and supervision. Based on the lessons from implementation experience of RRP-I and RRP-II, measures like strong institutional oversight through inducting subject experts at NRRDA and SRRDA, capacity building through trainings and orientations in preparation of quality DPRs with SMF provisions and their implementation, periodic thematic reviews with possible TA support will be undertaken under the AF. Inducting dedicated experts will be completed earliest but within first quarter from the date of Project commencement.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The documents for the original project (PMGSY - RRP II) were prepared with wide range of consultations with key stakeholders. The consultation process included a range of formal and informal discussions, interviews and meetings and targeted stakeholders such as local residents; farmers, road-side communities; local bodies like village Panchayats; local NGOs; and selected government departments such as SRRDAs, Public Works Departments, Rural Engineering Department and Forests. The public consultation for the project has been designed in a way that: (i)



affected people are included in the decision-making process; (ii) public awareness and information sharing on project alternatives and benefits are promoted; and (iii) views on designs and solutions from the communities are solicited. These documents have now been updated to reflect recent legal and policy developments and issues pertaining to labour influx.

The Environment and Social Management Framework (including the ECoPs and SMF/RPF) of the PMGSY - RRP II project, was in fact a version that was first developed and used for Rural Roads Project I (now closed). Feedback and inputs were obtained from a range of stakeholders both through formal and informal means on various occasions and levels since the effectiveness of RRP I in 2005 that covered four participating states, namely Himachal Pradesh, Jharkhand, Rajasthan and Uttar Pradesh. The present project also benefits from the substantial and meaningful consultation that was carried out in: (1) Uttarakhand, during 2006 to 2008 for the preparation of Rural Roads Project II (now dropped); (2) Bihar for PMGSY - RRP II, Bihar Rural Roads Project and Bihar Kosi Flood Recovery Project; (3) Rajasthan for Rajasthan Roads Sector Modernization Project and; (4) Madhya Pradesh for MP Rural Connectivity Project .

In addition to state level consultations (including those in Punjab and Meghalaya), national level workshop was also organized by NRRDA. The revision/modification of ESMF has been based on inputs and feedback received during various workshops/ interactions in the participating states, involving various government departments, NGOs and representatives of local government who participated on some occasions. The documents for the original project have been disclosed at the NRRDA website since 2010 and are available at SRRDA and PIU level in the participating states. For this project (Additional Financing), the updated/revised versions will be disclosed publicly before March 31, 2018.

Further, safeguard documents (ESMF/ECoPs/SMF/VF) provide specific guidance on public consultation and disclosure requirements that will continue through the project’s operational cycle as part of preparation, design and implementation of each individual sub-project. Stakeholder consultation mechanisms are central to the design and implementation of sub-projects and provide for information sharing, consultation and collaboration measures. It provides procedures for dissemination of information and consultation with communities and the affected people in particular through various stages of the sub-project cycle. While design stage involvement requires stakeholder participation in planning road alignment and providing for local level interventions (such as those related to cultural/religious properties, provision of cattle ramps and drainage), implementation phase requirements encourage community contracts for maintenance and road score-cards for a more participatory monitoring.

While the safeguard instruments for the program were disclosed initially in 2010 during preparation of the original project and continue to be applicable for the sub-projects for which retro-active financing (USD 150 million) would be applied, the revised/updated versions for use for the remaining investments has been re-disclosed on March 28, 2018 through NRRDA's website (<http://pmgsy.nic.in/NRRDA> link). The same will be disclosed through Bank's portal once this ISDS is approved and the portal allows the uploading of the revised/updated documents.

B. Disclosure Requirements (N.B. The sections below appear only if corresponding safeguard policy is triggered)

Environmental Assessment/Audit/Management Plan/Other

| | | |
|-----------------------------|-----------------------------------|--|
| Date of receipt by the Bank | Date of submission for disclosure | For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors |
|-----------------------------|-----------------------------------|--|

"In country" Disclosure



Resettlement Action Plan/Framework/Policy Process

Date of receipt by the Bank

Date of submission for disclosure

"In country" Disclosure

Indigenous Peoples Development Plan/Framework

Date of receipt by the Bank

Date of submission for disclosure

"In country" Disclosure

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting) (N.B. The sections below appear only if corresponding safeguard policy is triggered)



CONTACT POINT

World Bank

Ashok Kumar
Sr Highway Engineer

Reenu Aneja
Transport Specialist

Borrower/Client/Recipient

The Republic of India
Shakil Alam
Director (MI)
alam.shakil@nic.in

National Rural Roads Development Agency, Ministry of Rural Development

Implementing Agencies

National Rural Road Development Agency
I. K. Pateriya
Project Director
ik.pateriya@nic.in

FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>



APPROVAL

| | |
|----------------------|----------------------------|
| Task Team Leader(s): | Ashok Kumar Reenu Aneja |
|----------------------|----------------------------|

Approved By

| | | |
|---------------------------|-------------------------|-------------|
| Safeguards Advisor: | Takeaki Sato | 07-Apr-2018 |
| Practice Manager/Manager: | Karla Gonzalez Carvajal | 11-Apr-2018 |
| Country Director: | Hisham A. Abdo Kahin | 23-Apr-2018 |