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

Appraisal Stage | Date Prepared/Updated: 29-Nov-2016 | Report No: PIDISDSA20085
BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>P155522</td>
<td>Bihar Rural Roads Project</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
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<tr>
<td>SOUTH ASIA</td>
<td>27-Oct-2016</td>
<td>19-Dec-2016</td>
<td>Transport &amp; ICT</td>
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<table>
<thead>
<tr>
<th>Lending Instrument</th>
<th>Borrower(s)</th>
<th>Implementing Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Project Financing</td>
<td>Republic of India</td>
<td>Rural Works Department, Bihar</td>
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<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Borrower</td>
<td>100.00</td>
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<tr>
<td>International Development Association (IDA)</td>
<td>235.00</td>
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<tr>
<td><strong>Total Project Cost</strong></td>
<td><strong>335.00</strong></td>
</tr>
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Environmental Assessment Category

B - Partial Assessment

Decision

The review did authorize the preparation to continue

Other Decision (as needed)

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B. Introduction and Context

Country Context

1. Bihar is one of the faster growing low income states of India with 34 percent of its population living below the poverty line and per capita income of INR 13,482 is one-third of the national average (INR 42,647). About 90 percent of its 104 million population is rural (as opposed to 69 percent all-India). Notwithstanding recent improvements, it also ranks lowest in terms of key socio-economic parameters - the Human Development Index is 0.367 in comparison to the national average of 0.467. The state faces several challenges including low human capacity and livelihood opportunities, low productivity in agriculture, low level of industrialization, deeply entrenched poverty and vulnerability to frequent floods. The state has taken initiatives towards increased investment in infrastructure, particularly in strengthening the road transport network, social sector,
and a focus on good governance. The state government has made ‘road connectivity to each habitation’ among its top seven priorities. The other six are rural electrification, clean drinking water, toilets in every home, youth empowerment and skill development, access to higher education, and women empowerment. In addition, it has established a mobility goal of bringing all parts of the state within five hours of travel time from the state capital, Patna.

**Sectoral and Institutional Context**

2. **Bihar road network**: Excluding 4,594 km of National Highways (NH), Bihar has a road network of 147,204 km, of which 14,887 km (about 10 percent) is under the Road Construction Department (RCD) and is classified as State Highways (SH) and Major District Roads (MDRs), while 127,723 km (about 90 percent) is under the Rural Works Department (RWD).

3. **Bihar has constructed about 60,000 km of rural roads in the last decade but still has a big task ahead.** As part of the state government’s priority of “road connectivity for all habitations”, Bihar has already provided road access to 51 percent of its habitation, leaving a balance of 49 percent. About 60 percent of the existing rural road network is unpaved and is in poor condition. The network has developed mainly through improvements of existing tracks in bits and pieces and has several deficiencies such as missing linkages, dilapidated bridges or absence of bridges, inadequate geometry, poor drainage, weak pavements, and missing road safety measures. The network has also suffered severe damage due to floods, lack of maintenance, inadequate quality of initial construction, and overloading in some parts of the state. Inefficient sector management has not helped the situation.

4. **The Government of Bihar (GoB) has established three key priorities for its rural roads program**: (i) to provide all-weather road connectivity to the remaining 42 percent unserved rural habitations; (ii) to preserve the existing road assets and upgrade them to acceptable standards; and (iii) to improve institutional effectiveness of RWD.

5. **Priority One: All-Weather Road Access to the Remaining 42 percent Habitations**: In 2000, the Ministry of Rural Development (MORD), Government of India (GoI) launched a flagship program the Prime Minister’s Rural Roads Program (PMGSY) to provide all-weather road access to all habitations above 500 population in the country to systematically address the issue of road access as part of its poverty reduction strategy. RWD has constructed 39,938 km of rural roads under PMGSY. In that process, the systems and procedures of PMSGY have been institutionalized in RWD. In addition, GoB launched MMGSY in 2013 to provide road connectivity to 32,199 habitations with population between 250 and 499 which are not covered under PMGSY. MMGSY involves construction and improvement of 37,908 km roads including standalone bridges with an estimated expenditure of US$5 billion. Thus far, 4,719 km of rural roads connecting 3,821 habitations have been constructed under MMGSY, involving an expenditure of US$504 million. MMGSY has comprehensive Guidelines similar to PMGSY with regard to project selection, engineering designs, management of social and environment issues, procurement, financial management (FM), quality assurance, monitoring, and governance structure. GoB has planned to seek external funding support to complement its own resources for MMGSY.

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1 A Habitation is a group of houses – a village may have many habitations. There population is generally less than 1,000.

2 With little attention to long term systemic planning except for the PMGSY and MMGSY programs.

3 Chief Minister Rural Connectivity Program
6. **Priority Two: Preserving Existing Road Assets and Upgrading Them to Acceptable Standards**: RWD has US$80 billion\(^4\) worth of rural road assets and these would undergo losses of about US$3 billion\(^5\) annually in the asset value and an equal amount in higher operating costs, if not maintained. In addition, it would also affect the poverty reduction and growth process\(^6\). RWD has adopted a maintenance policy that has seen introduction of performance based maintenance contracts on about 4,600 km roads and the maintenance funding has increased from US$30 million in FY06 to US$160 million in FY16. The maintenance contracts are now to be scaled up to cover the remaining network. In addition, the 14\(^{th}\) Finance Commission has provided grants to local bodies for 11 activities including maintenance of rural roads. The priority is to assist the local governments to effectively use these grants. The Bank has supported RWD to prepare an Asset Management Plan (AMP) to introduce a new Road Asset Management Approach by moving away from construction focus to deliver customer based priorities like a satisfactory level of riding quality and safety to the road users at least cost over the long run.

7. **Priority Three: Improved Institutional Effectiveness**: RWD needs to improve both the pace and the quality of delivery of its road programs by improving the quality of engineering designs and asset management, value for money, procurement performance, and by minimizing time and cost overruns. RWD has adopted a Road Sector Modernization Plan (RSMP) and is in the process of improving its engineering design, procurement procedures, quality assurance and road maintenance practices as well as related staff capacities under the PMGSY RR. In addition to the above asset management plan, some key elements of the RSMP adopted by RWD include: strengthening of road sector policy framework; building human resources capacity and knowledge base in both the public and private sector; streamlining and modernizing of key business processes; climate resilient and cost-effective engineering designs; focus on rural road safety; rural transport services also need improvement; and employment opportunities.

C. Proposed Development Objective(s)

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\(^4\) Being Verified
\(^5\) Being Verified
\(^6\) Which is a long process and require the roads to be in usable condition throughout that process.
Development Objective(s) (From PAD)
The PDO is to improve rural road connectivity in project districts, and enhance management of rural roads in Bihar.

Key Results

8. The achievement of the PDO will be monitored by the following PDO level Indicators: (a) Improved road connectivity to habitations; (b) Improved condition of core rural road network [core]; (c) Improved effectiveness of public effectiveness – project roads designed using cost-effective designs; and (d) Improved asset management – No. of Districts that have developed and are using improved asset management system.

D. Project Description

9. The project combines both investment and knowledge support: investment will improve about 2,500 km of rural roads that will help to enhance the quality of delivery of MMGSY by introducing cost-effective designs, road safety engineering measures, improved quality of existing infrastructure, and better contract management practices to avoid time and cost-over runs; knowledge support will gradually transform RWD into a modern and high performing road agency capable of building and maintaining its road assets based on a sound technical and financial footing, while keeping its knowledge base updated with the latest developments and innovations in the sector.

Box 4: Some Innovative Aspects of the Project

**Climate resilience and green growth:** (i) conducting a detailed climate vulnerability assessment of the rural road network with a focus on floods, the major climate-induced event facing the state; (ii) introducing climate resilient and environmentally optimized road and bridge designs using alternative materials such as local sand deposits accumulated due to floods, fly-ash, and waster plastics instead of hard stones, brining both environmental and economic benefits, and improved drainage measures in flood prone areas; (iii) tree plantation along the rural roads, use of bio-engineering measures for erosion control that provides for green cover and also serves as carbon sinks; (iv) use of Environmental Codes of Practice (ECoP) that include special provisions for designing roads in Flood Prone Areas and environmental benefits during construction operations; and (v) improved asset management using lifecycle approach avoiding pre-mature failure of both the roads and the vehicles - leading to big savings in consumption of fuel and scarce natural resources.

**E-tools** for lifecycle monitoring for rural road projects including e-payments, use of mobile based applications for citizen feedback and road inspections, and computerizing key business processes of RWD.

**Efficient delivery of road maintenance:** Using innovative maintenance contracting approaches and developing small and micro-enterprise contractors.

**Road Sector Modernization Plan** to gradually transform RWD into a modern, high performing, and outcome focused road agency using best practices for strategic planning, project delivery, asset management, sector governance, and building its capacity and knowledge base.

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7 RSMP is a mechanism to capture the opportunities for modernizing RWD on regular basis. It is a dynamic plan to be updated on regular basis and its implementation will continue even after the closure of the project. The activities to be completed within the project duration are shown in the results framework.
Improved Capacity and Knowledge base of RWD, construction and consulting industry including gender-based skill enhancement.

Safe Rural Roads through improved road safety management and infrastructure enhancements including retro-fitting road safety measures in existing network and implementation of Rural Road Safety Action Plan.

10. The Project has two components:

11. **Component 1 – Rural Roads Improvement:**
   a. **Civil Works for Rural Roads:** Constructing and/or improving/upgrading approximately 2,500 km of state Rural Road core network and standalone bridges, in Project Districts under the MMGSY, including demonstration of new technologies to promote cost effective, modern, climate resilient, and environment friendly road construction;
   
   b. **Design, implementation and management Support and Technical Assistance:** (i) preparing cost-effective climate-resilient engineering designs and related surveys and investigations; (ii) carrying out engineering supervision of civil works; (iii) providing/hiring management services for the Project; (iv) implementing independent monitoring of quality of design and works, and contract compliance; (v) carrying out independent monitoring/assessments of safeguards compliance and the achievement of Project outcomes.
   
   c. **Pilots on innovative bridges and Retrofitting Road Safety and Climate Resilient Measures:** (i) retrofitting road safety engineering measures and climate resilient measures on small parts of state core network roads; and (ii) construction and improvement of bridges using innovative designs and climate resilient measures.

12. **Component 2: Asset Management and Institutional Effectiveness:** This component will support implementation of RSMP to build on and carry forward the ongoing initiatives in the following areas.

   a. **Asset Management:** (a) Implementing RWD’s Asset Management Plan by setting up a simple asset management system and preparing prioritized plans for capitals works and maintenances, and revision of the core rural road network using remote sensing imageries; (b) supporting implementation of innovative maintenance contracts for at least twenty percent (20%) of the core Rural Roads network to establish an effective road maintenance delivery system (the contracts are to be funded by GoB from its maintenance funds for rural roads); and (c) developing climate-resilient, cost-effective, and environmental optimized road designs using local materials.
   
   b. **Institutional Effectiveness:** (a) Implementing RWD’s Human Resources Professional Development Strategy to acquaint RWD’s staff with the latest industry practices, providing training to contractors, and piloting projects for creating employment opportunities for the youth; (b) providing infrastructure and equipment support to RWD’s laboratories, offices and training facilities, survey and investigation teams; (c) carrying out studies to improve institutional effectiveness of RWD, as well as RWD’s contractors and consultants; (d) streamlining and computerizing RWD key business processes; (e) modernizing policies, engineering practices and business procedures within RWD through, inter alia, the development of a long term Rural Roads
vision and strategy and technical guidelines and manual; and (f) carrying out studies for the improvement of rural transport services and designing incentives for private sector and women self-help groups involvement in the sector.

c. Road Safety Management: Updating/improving Bihar’s Road Safety Action Plan to include Rural Roads and support its implementation through the preparation of schemes for retro-fitting road safety measures in the existing Rural Roads network, including capacity building of RWD staff and other related agencies, awareness programs for local governments, communities and work zone safety, and road safety audits of priority Rural Roads.

Component Name:
Rural Roads Improvement

Comments (optional)
To finance civil works for construction and improvement of rural roads

Component Name:
Asset Management and Institutional Effectiveness

Comments (optional)
Technical assistance for implementation of Road Sector Modernization Plan to gradually transform RWD into a modern and high performing road agency.

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

The project will be implemented in Bihar, a state situated in eastern part of India. The proposed project investments roughly span across 10 districts, namely, Araria, Banka, Buxar, Saran, East Champaran, Gopalganj, Katihar, Patna, Purnea and Vaishali (other district/s could be added at a later stage).

Bihar is a vast stretch of fertile plain. It is drained by the Ganges river, including its northern tributaries Gandak and Kosi, originating in the Nepal Himalayas that regularly flood parts of the Bihar plain. The Ganges divides Bihar into two unequal halves and flows through the middle from west to east. Other tributaries of Ganga are Son, Budhi Gandak, Chandan, Orhani and Phalgu. Though the Himalayas begin at the foothills, a short distance inside Nepal and to the north of Bihar, the mountains influence Bihar’s landforms, climate, hydrology and culture. The central parts of Bihar have some small hills (Rajgir Hills). To the south is the Chota Nagpur plateau, which was part of Bihar until 2000 but now is part of a separate state (Jharkhand).

Bihar has notified forest area of 6,764.14 sq.km (2,612 sq mi), which is 7.2 percent of its geographical area. The sub-Himalayan foothill of Someshwar and the Dun ranges in the Champaran district are a belt of moist deciduous forests. These also consist of scrub, grass and reeds. Here the rainfall is above 1,600 millimetres (63 in) and thus promotes luxuriant Sal forests in the area. Valmiki National Park in West Champaran district, covering about 800 km2 (309 sq mi) of forest, is the 18th Tiger Reserve of India and is ranked fourth in terms of density of tiger population.
Close to 85 percent of the population lives in villages. Hindi is the official language of the state. Other languages/dialects of the state are Bhojpuri, Maithili, Magahi, Bajjika and Angika, of which only Maithili is recognized by the Government of India.

The rural road network has developed from usage of several years, mainly through improvements of existing tracks in bits and pieces and has several deficiencies - missing links, dilapidated bridges, inadequate geometry, poor drainage, weak pavements and deficient road safety measures/features. The network has also undergone severe damages due to floods, poor quality of initial construction, lack of maintenance and overloading in some parts. Notwithstanding recent accomplishments, about 46,022 out of a total 1,08,591 habitations (or 42 percent) still lack all-weather road access.

F. Environmental and Social Safeguards Specialists on the Team

Sangeeta Kumari, Neha Pravash Kumar Mishra

IMPLEMENTATION

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SAFEGUARD POLICIES THAT MIGHT APPLY

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
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</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>Planning, construction and operation of rural roads would require mitigation measures to manage adverse environmental impacts. Impacts resulting from poor sub-project location and/or design; drainage/flooding; worksite safety issues; huge demand for construction materials; impact on public water supply sources, sensitive receptors and other common property resources need attention. A diagnostic assessment has established the need to modify current processes for MMGSY, particularly in terms of strengthening implementation. To support integration of environment, health and safety aspects into the decision-making process and to improve the sustainability of investments proposed under the project by addressing the identified issues, OP/BP 4.01 has been triggered.</td>
</tr>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>No</td>
<td>OP 4.04 is not being triggered for this project as no interventions are envisaged in natural habitats, including those defined as 'critical' under the policy.</td>
</tr>
</tbody>
</table>
While no civil works will be financed on roads passing through designated project areas/wilderness areas, the larger institutional development plan for the rural road sector in Bihar would need to address the issues of environmental sustainability and biodiversity management. Appropriate strategies and mechanisms will have to be built into the institutional systems to ensure that the overall network planning/development and road construction takes into account such principles. Such efforts may help in gradually (systematically in the long term) minimizing and/or mitigating some adverse impacts resulting from works that are located close to rivers/wetlands.

<table>
<thead>
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<th>Component</th>
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<tbody>
<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
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<tr>
<td>As per the screening results available so far (1,051 kms of roads out of targeted total of 2500 kms), the proposed civil works under the rural improvement component would be accommodated largely within the existing Right of Way (land already in possession of the RWD). Due to such works, no significant impact on health and quality of forest is likely to occur. Such works are also not likely to impact the rights and welfare of people and their level of dependence upon the forests. These works are not expected to bring about any change in the management, protection or utilization of natural forests or plantations. Since no significant conversion/degradation of forest resources is envisaged, OP 4.36 has not been triggered for this project.</td>
<td></td>
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<tr>
<td>Pest Management OP 4.09</td>
<td>No</td>
</tr>
<tr>
<td>OP 4.09 has not been triggered for this project as substantive biological/environmental control methods or reliance on synthetic chemical pesticides is not envisaged.</td>
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<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>Yes</td>
</tr>
<tr>
<td>Implementation of sub projects may affect some religious structures of local significance. Also, since civil works are involved, 'chance finds' at work sites is a likely impact that will have to be managed by incorporating appropriate provisions in the bidding/contract documents.</td>
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<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>Yes</td>
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<tr>
<td>The Vulnerability Framework (VF), shall address vulnerability resulting from social identity, notably gender, Scheduled Caste and Scheduled Tribe. VF is prepared to support compliance with OP 4.10 and help promote equitable distribution of project benefits among the Scheduled Tribes and Scheduled Caste populations, given that some of the proposed</td>
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project district like Banka, Purnia and Katihar have pockets of Scheduled Tribe population. Where Scheduled Tribes represent over 10% of the participating village, the VF will require holding a free, prior and informed consultation with Scheduled Tribes to seek their broad support for the project as required by OP 4.10. The first 1,051 kms for which DPRs are ready do not include habitations with more than 10% tribal population and therefore no separate tribal plan has been prepared.

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<tr>
<th>Involuntary Resettlement OP/BP 4.12</th>
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<tr>
<td>Provision has been made to screen potential impacts during transect walk and avoid any land take through design modifications. The project does not anticipate significant land take or physical displacement. If the required land width is not available at specific locations, then the land shall be taken either on lease/on acquisition/on donation as per the provisions laid down in State/National rules/policies/acts.</td>
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<td>Any losses to assets and livelihood shall be compensated as per Resettlement Policy Framework (RPF) for the project laid out in the Social Management Framework (SMF). The SMF provides the necessary formats and guidelines for the identification of impacts as part of a DPR. RPF also provides guidelines for compensation and mitigation of impacts identified during construction stage. Social impact statement prepared for first phase of works (1,051 kms) did not identify any need for land acquisition or loss of assets or livelihood.</td>
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<tr>
<th>Safety of Dams OP/BP 4.37</th>
<th>No</th>
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<tbody>
<tr>
<td>OP 4.37 has not been triggered for this project as there is no construction of new dams or activities that are concerned with safe functioning of existing dams.</td>
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<tr>
<th>Projects on International Waterways OP/BP 7.50</th>
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<tbody>
<tr>
<td>OP 7.50 has not been triggered for this project as there are no interventions planned/ proposed over or around an international waterway that could cause a potential conflict. There are also no activities that may affect the use or pollute such a waterway.</td>
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<tr>
<th>Projects in Disputed Areas OP/BP 7.60</th>
<th>No</th>
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<tbody>
<tr>
<td>OP 7.60 has not been triggered as the project is not proposed in any disputed area.</td>
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**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:

   **Environmental Issues**

   Project activities, particularly those under Component 1, if not properly planned, managed and mitigated, could have some adverse environmental impacts. While the adverse impacts are likely to be fairly limited in the local context, the exact nature and magnitude of impacts will vary in accordance to location and type of engineering intervention.

   Deficiencies in planning and design of sub-projects can lead to insufficient arrangements to conserve natural drainage pattern leading to impairment or worsening of the local/regional drainage. On the whole, the typical likely impacts from the proposed operation include: (i) felling of some limited number of roadside trees; (ii) adverse impacts on water resources, including from silt flow during execution of works; (iii) soil erosion; (iv) construction phase impacts, including those related to camp site operation, dust generation; pollution from plants, machinery, and vehicles; and improper disposal of debris/other construction wastes; (v) inappropriate management of materials (such as aggregates, sand, water, earth); (vi) safety concerns during construction works and due to increased traffic speeds during operation for both road-users and road-side residents and; (vii) the potential for poorly planned or managed development induced by the improved roads.

   While no civil works will be financed under the project on roads passing through designated protected areas or critical habitats, the larger institutional development plan for the road sector in Bihar would need to address the issues of environmental sustainability. Appropriate strategies and mechanisms will have to be built into the institutional systems for this purpose. Accordingly, the Bank’s OP 4.01 on Environmental Assessment and OP 4.11 on Physical Cultural Resources has been triggered, and the project is designated as Category B.

   **Social Impacts/Issues**

   No large scale land acquisition or R&R is expected under the project. The first 1,051 kms of roads for which DPRs are ready do not require any land acquisition or entail loss of assets or livelihoods. All the project roads shall be subjected to screening for impacts. A summary impact statement and few sample DPRs shall be shared with World Bank for necessary review and clearance. The loss of assets and any damage to roadside properties identified during construction phase shall be compensated/restored as per RPF.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
The project interventions, particularly through the Rural Improvement Component, will help in catalyzing the benefits of investments in PMGSY and other road development programs/schemes implemented in the state of Bihar. The project seeks to improve connectivity to about 1,750 villages with a population of 250 to 500 by providing about 2500 km of roads, including construction of missing bridges. The inhabitants in the area of influence of the rural roads, local businesses, as well as users of the facility will be the direct beneficiaries of the project. This project will increase their accessibility to educational institutions and health centers.

The enhanced habitation connectivity is also likely to increase access to employment, markets for agriculture and other services, and possible raise in land values, which are some of the long-term gains anticipated from the project. It is also expected that the improved road conditions will specifically reduce dust pollution that is currently arising due to non-existent/poor pavement conditions and insufficient road width.

While it is expected that better connectivity and improved road surface quality will contribute either directly or indirectly to the over-all development in the project influence area, increased road use could also spur growth of commercial activities along the road. Potential long-term impacts may include changes in land use pattern (from agriculture to real estate or other non-farming purposes) and occupation of the people. This may also expose the road side communities to adversities linked to inadequate levels of safety, an associated adverse impact that may result from the program/project.

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

All civil works to be financed under this project would follow existing alignments and would largely be confined to the available Right of Way. Since the operation does not involve construction of new roads or major realignments, alternative measures to manage adverse impacts focus on reducing the impact on road-side features. Alternatives were explored in cases where alignment adjustments were required to avoid and/or minimize impact on water bodies, cultural/religious properties or other such features that are locally considered important.

For this, as part of the project preparation process, an environmental screening was conducted. This screening allowed for identification of key environmental issues early-on. The project’s environment screening mechanism was designed to identify and avoid impacts on critical/ecologically significant natural habitats. This has ensured that no such road traversing through a designated protected area/critical habitat is financed by the project.

Further, engineering design for rural roads incorporates feedback from the consultations with concerned local community, state departments (including officials from Environment, Forests and Rural Works Department) and other key stakeholders. As part of activities under Component 2, the project would support the RWD in improving project preparation, management practices/procedures, design and construction guidelines/standards and adoption of new technologies, specifically for promoting climate resilient environmentally optimized designs for low volume roads – some of these activities will consider ‘alternatives’ from the view-point of reducing costs and for minimizing the over-all environmental footprint in comparison to conventional practices such as use of local materials and industrial by-products.

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.
Safeguard policy issues have been assessed by applying OP 4.01, OP 4.11, OP 4.12 and OP 4.10 and this has resulted in distinct instruments. The safeguard tools/documents thus prepared for the project include: (a) Environment Management Framework (EMF) for the over-all project; (b) the Environmental Codes of Practice (ECoPs) specifically to guide the preparation and construction of rural road improvement works and; (c) the Social Management Framework (SMF), including the Vulnerability Framework (VF). These have been integrated into the project in the form of various avoidance, minimization and enhancement measures.

Management of Environmental and Social Issues/Risks

The EMF has been prepared to guide the over-all sub-project preparation and implementation process and covers aspects such as screening methodology; environmental codes of practice; institutional arrangements; supervision, monitoring and reporting requirements to facilitate compliance with the requirements specified in the Bank's Operational Policies and those required under GoI/State Govt. norms. To comply with the country and state legislations and meet the requirement of Bank’s Operational policies, a Social Management Framework (SMF) and Vulnerability Framework (VF) has been prepared by BRRDA.

Assessment of Borrower Capacity and Implementation Arrangements

As required under PMGSY, GoB has established BRRDA as a registered society mainly consisting of RWD officers to manage and implement the PMGSY together with RWD field offices. Planning and monitoring is mainly done by BRRDA and actual field execution is done by RWD. BRRDA has also been designated as the implementing agency for MMGSY (this project) and other state schemes. While both RWD and BRRDA are familiar with safeguard procedures of the Bank, having been a part of the PMGSY – Rural Roads Project and the Bihar Kosi Flood Recovery Project (BKFRP), the team dealing with MMGSY/BRRP requires strengthening and capacity building support on account of staff turn-over, the proposed scale of operation and the changing needs/challenges faced by the sector. To apply and implement the safeguard instruments, institutional capacity is being developed through creation of an Environment and Social Management Cell within the RWD (as part of the Chief Engineer’s office). The agreed implementation arrangements for the over all project, including safeguards management have been provided in Annex 2 of the PAD.

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

Stakeholders

The primary stakeholders in BRRP include: (i) community residing along/close to the road, including farmers; (ii) road-side shop owners/businessmen; (iii) road users; (iv) project affected persons; and (v) trusts/committees of the religious properties and local market associations. The secondary stakeholders include local bodies like panchayats, officials from Rural Works Department, Water Resources, Environment, Forest, Utility Departments, Agriculture, Animal Husbandry, Horticulture, Revenue, Social Welfare, and representatives from CBOs and NGOs.

Consultations

Stakeholder consultation mechanisms are central to the design of BRRP. These provide procedures for dissemination of information, consultation with communities through various stages of sub-project cycle and measures for collaboration. A consultation framework has been laid out in the EMF (including ECoPs) and SMF (including VF) to ensure proper consultation with key stakeholders. Over-all, the consultation strategy/process is designed to enhance positive and
manage negative impacts likely to arise on account of the project.

The EMF (including the ECoPs) and the SMF (including the VF), are in fact modified/revised versions of instruments, which are currently in-use for the on-going Bank funded PMGSY - Rural Roads Project. Feedback has been obtained from a range of stakeholders both through formal and informal means since the inclusion of the state under the said project in 2012 - this has been used to develop safeguard instruments for the current operation.

In accordance with applicable Bank policies, consultations at local level are being carried out through transect walk and village meetings as part of the DPR preparation. Outputs from this process have been/will be integrated into engineering design to the extent possible. Three district level consultations and a state level consultation were organized to obtain feedback on the safeguard instruments. The process so far has indicated that people strongly support the proposed project.

Disclosure

All draft safeguard documents had been disclosed on the Govt. of Bihar website (http://www.rwdbihnic.org/) on September 22, 2016 followed by a notification in newspapers seeking additional comments.

The final safeguard documents have also been disclosed in the GoB website and Bank’s Infoshop on October 24, 2016. All documents will be placed in locations accessible to public along with executive summary in vernacular.

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

**Environmental Assessment/Audit/Management Plan/Other**

<table>
<thead>
<tr>
<th>Date of receipt by the Bank</th>
<th>Date of submission to InfoShop</th>
<th>For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors</th>
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<tbody>
<tr>
<td>21-Oct-2016</td>
<td>24-Oct-2016</td>
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"In country" Disclosure

India

24-Oct-2016

Comments

**Resettlement Action Plan/Framework/Policy Process**

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<tr>
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"In country" Disclosure

India

24-Oct-2016

Comments
The Resettlement Policy Framework in SMF outlines the process of sub project screening, assessment of impacts, entitlement framework for management of R&R etc. However, as per the draft social impact statement of the first 1,051 kms of roads, the construction shall be carried out on available land and will not lead to R&R. Hence, no RAP has been prepared. Minor impacts on structure and need for land take may be identified once the contractor starts preparing the site for construction. Contractor shall intimate such cases to the PIU and a joint inspection shall be carried out by PIU representative, contractor, Gram Panchayat representative and likely affected person/s to assess the extent of impact/s. In case of minor impacts on structure only, the PIU will restore the structure as part of civil works.

Indigenous Peoples Development Plan/Framework

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"In country" Disclosure

India
24-Oct-2016

Comments

The vulnerability framework has been prepared and disclosed at GoB website and Bank's Infoshop to comply with OP 4.10.

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)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?
Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?
No

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?
Yes

OP/BP 4.11 - Physical Cultural Resources

Does the EA include adequate measures related to cultural property?
Yes

Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?
Yes

OP/BP 4.10 - Indigenous Peoples
Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?
Yes
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
No
If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Practice Manager?
NA

OP/BP 4.12 - Involuntary Resettlement
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?
Yes
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
No

The World Bank Policy on Disclosure of Information
Have relevant safeguard policies documents been sent to the World Bank’s Infoshop?
No
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes

All Safeguard Policies
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes
Have costs related to safeguard policy measures been included in the project cost?
Yes
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

CONTACT POINT

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**APPROVAL**

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<tr>
<th>Task Team Leader(s):</th>
<th>Ashok Kumar</th>
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**Approved By**

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<th>Safeguards Advisor:</th>
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<tr>
<th>Practice Manager/Manager:</th>
<th>Karla Gonzalez Carvajal</th>
<th>29-Nov-2016</th>
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| Country Director: | Hisham A. Abdo Kahin | 30-Nov-2016 |