Project Information Document/
Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 28-Jun-2016 | Report No: PIDISDSC18103
BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Parent Project ID (if any)</th>
<th>Project Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>P157054</td>
<td></td>
<td>Madhya Pradesh Rural Connectivity project (P157054)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Estimated Appraisal Date</th>
<th>Estimated Board Date</th>
<th>Practice Area (Lead)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTH ASIA</td>
<td>Sep 19, 2016</td>
<td>Dec 29, 2016</td>
<td>Transport &amp; ICT</td>
</tr>
</tbody>
</table>

<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>Ministry of Finance</td>
<td>Madhya Pradesh Panchayat and Rural Development Department</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financing (in USD Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing Source</td>
</tr>
<tr>
<td>Borrower</td>
</tr>
<tr>
<td>International Bank for Reconstruction and Development</td>
</tr>
<tr>
<td><strong>Total Project Cost</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental Assessment Category</th>
<th>Concept Review Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-Partial Assessment</td>
<td>Track I-The review did authorize the preparation to continue</td>
</tr>
</tbody>
</table>

Other Decision (as needed)

Type here to enter text

B. Introduction and Context

Country Context

Madhya Pradesh (MP) located at the center of India, is one of the largest and the most populous Indian states. Over 32 percent of MP’s population lives below the poverty line compared to the national average of 22 percent. The per capita income of the state is approximately US$362 compared to the national average of US$665. 1Poverty rates in the urban areas are lower than in rural areas for all social groups. The proportion of rural poverty in the state has declined2, but at a slower pace in relation to other states. Despite progress made in recent years, the impact of growth on poverty in MP has been one of the lowest among Indian states and inequality is increasing. MP grew at an annual rate of 3.5 percent between 1999 and 2008, compared to 8 and 12 percent during 2010-11 and 2011-12 respectively, which was
accompanied with a significant 12 percentage point decrease in poverty. In terms of human development indicators, while significant progress has been made on the literacy front in the last decade, the overall relative position continues to bracket the state in the group of heartland states with relatively poorer social and economic indicators. MP is behind most other states in terms of provision of essential infrastructures. The infrastructure index\(^3\) of the state is amongst the poorest in the country, well below that of even other less developed major states like Bihar, Odisha and compares only with north-eastern states. The two critical sectors where the state falls behind are roads and power. It is evident that low levels of infrastructure endowments have been one of the factors hampering the state to accelerate economic growth. Poor infrastructure would impact on the efforts to expand social opportunities as well as avenues for increasing incomes in productivity.

MP has a significant agricultural base and is endowed with vast natural resources and suitable agro climatic conditions. Agriculture provides nearly 72% of all jobs, although it only contributes 33% to the state domestic product. However, with poor transport and storage infrastructure, there is a very high level of wastage in the agricultural sector. MP’s industrial base is still predominantly agricultural; manufacturing and service sectors lag behind. In many ways, MP is characterized by the typical set of institutional and development problems faced by the poorest regions of India. As a result of surplus labor, MP has a large subsistent agricultural sector that co-exists with a small modern industrial sector that is localized in specific cities, namely Indore, Gwalior and Jabalpur. The organized industry employs only 6% of the total workforce.

### Sectoral and Institutional Context

**There is a substantial deficit in the road network and a substantial size of the existing network is in a dilapidated condition.** In a land locked state like MP, roads play a critical role in economic growth and development. Madhya Pradesh, with abundant mineral resources, growth potential in agricultural and industrial production, needs a well-developed road network. The rate of road network growth did not keep up pace with the economic growth in general and the traffic in particular. The compounded rate of road network growth of Madhya Pradesh during 2003-08 was 0.11 percent against national annual growth rate of 4.06 percent. The current road density of the state is 22.14 Km/100,000 km\(^2\) which far less than the national average -37. Only 7 percent of India’s 70,548 Km of National Highway is in MP. Because of the central location of the state and surrounded by five states, traffic from all the neighboring states passes through the state’s road network.

Rural roads are 77.5% of total roads in MP.\(^4\) The scanty railway network and the low density of population scattered across small habitations makes the cost of roads per beneficiary much more expensive than in states with dense rural population. This problem is compounded by the poor maintenance of roads. MP’s road sector has long suffered from a chronic shortage of funds and neglect in maintenance which led to premature deterioration of the road network. Many parts of state roads and major district roads have deteriorated and reached unmaintainable state. There is an urgent need for improving the existing road infrastructure of the state, as its bad condition is hampering the economic and social progress of the state.

**Equitable provision of rural access is critical for sustainable growth and social cohesion.** While rural connectivity is a key component of rural development and poverty alleviation in India, the focus of the national rural connectivity...
The World Bank
Madhya Pradesh Rural Connectivity project (P157054)

program PMGSY\(^5\) (which MP is implementing) is connecting population of more than 1000 people. However in the context of MP, with a huge number of smaller villages, a sizable rural population would remain unconnected under the PMGSY. To fill in this gap villages less than 500 population, MP launched the Chief Minister Gram Sadak Yojna (CMGSY) in 2010, to improve socio economic development by universal single all weather connectivity of villages by a gravel road. Under this program, the works of connecting 9109 unconnected village has been taken up, however due to the fast deterioration of gravel roads and rising dust pollution and safety hazards a decision has been taken to upgrade these to BT standards. The state has also decided to redefine the scope of the core network to account for certain left out villages under the PMGSY scheme and to provide more than one road link to larger villages having the status of market center/local growth center to unlock more potential for economic growth and social integration.

**Lack of appropriate road maintenance policy and adequate maintenance funding** is a challenge for sustainability. The responsibility for construction and maintenance of roads in MP rests with both the Public Works Department (PWD) and Rural Engineering Service (RES), an organization under Panchayat and Rural Roads Department (PRRD). RES is the construction wing of MPRRD and carries out construction of works related to the development of rural infrastructure in the State. The organization has competent and qualified staff with a program of annual training for engineers at all levels. Notwithstanding the need for their further capacity building, the performance of RES has significantly improved in recent years and constructs approximately 4000 km rural road annually. Key rural road sector issues and challenges include (i) inadequate maintenance budget and policy: In less than 5 years around 90,000 km of rural roads will be added to the existing network under xyz programs and presenting a formidable challenge to the state in allocation maintenance budget At present, resource allocation favors investments over maintenance; it is critically important to keep the roads at the acceptable level of service throughout the design life in order to achieve their full impact on poverty reduction and economic development. However, adequate policies, procedures, funding and institutional structure are not yet in place to make this happen. (ii) Despite the staff overall good technical capacity, RES still lacks on some specific areas including outdated business procedures, weak safeguard management and in-house design capacity leading to high unit costs for road construction for relatively low-traffic, and overall low-service life.

**Road Safety has not been given the attention it deserves.** MP is placed among the top ten worst performers in road safety with 12.8 persons killed per 100,000 population\(^6\). The State recorded a total of 53472 crashes in 2014 in which 8569 persons were killed and 55335 sustained severe injuries. The road-wise distribution of crashes, such as: Urban Roads - 32%, NH – 26% (mostly passes through rural areas), SH – 28% (mostly passes through rural areas) and Rural Roads 14%, indicate that a great number of accidents occur in rural areas. The fatality rate of two-wheelers (including bicycles) – 38% and pedestrians 20% indicate the vulnerability of these road user groups. Road crashes are not scientifically investigated and investigation process is solely conducted by the police and the evidences are based on the statements of the victims or witnesses or road side communities. Some of the major causes such as: speeding, impaired driving or driving under influence, visibility issues, vehicle defects, defects of road engineering, etc. need to be investigated using proper scientific methods.

**Recent efforts and initiatives** where private sector has already been partnered in about a dozen major roads in the state for construction and maintenance, the efforts in rural connectivity through the Pradhan Mantri Gram Sadak Yojana (PMGSY) and state government’s own efforts from the mandi cess levied for better rural transport should help the rural road connectivity in the state. Road connectivity has very direct benefits such as marketability of agricultural and local horticulture production as well as developing the rural tourism sectors. CMGSY plays a critical role in connecting the exclude, remote and poor section of the rural population to opportunities thereby enhancing sustainable economic growth and social and economic integration.
Relationship to CPF

The proposed operation fits with the WBG’s India Country Program Strategy (Report No. 76176-IN; April 11, 2013) for FY2013-2017. The Country Program Strategy’s overarching objective is to support poverty reduction and shared prosperity in India, by contributing to three main engagement areas: integration, transformation, and inclusion. As noted above a large part of MP villages are scattered and isolated, hence by improving and sustaining all weather connectivity of these villages, the project will integrate them with the rest of the state/country and markets hence foster their economic development. These same villages are also inhabited by tribal and poor population which when connected will spur opportunities to be included in the social and economic fabric of the rest of the state.

C. Proposed Development Objective(s)

To improve the sustainability of rural connectivity of the smallest selected villages of Madhya Pradesh and enhance RES’s capacity to manage MP’s rural roads more efficiently.

Key Results (From PCN)

Project Specific Indicators
1. Improved road condition
2. Reduced annual maintenance cost per km

D. Concept Description

The Chief Minister Rural Roads Program popularly referred to as CMGSY provided all weather, gravel surfaced single connectivity to smaller villages otherwise ineligible to be connected under the centrally sponsored PMGSY scheme. These road links although achieved their purpose for short term, proven to deteriorate fast and loose their riding quality, generate dust which becomes a health and road safety hazard. The Madhya Pradesh Rural Connectivity Project (MPRCP) would support enhancing the sustainability of the investment made in CMGSY by paving the gravel roads with pre-mix bituminous concrete and other low cost durable surfacing options. The project financing would also extend to supporting the institutional capacity to deliver a timely and quality services to the beneficiaries. The operation would be implemented through two components:

Component A: Road Improvement and Mobility Enhancement (approx. $482 mil) This component supports (i) the improvement of the existing 10,000 km gravel surface roads to bituminous surfacing (ii) provision of additional links about 1000 km to larger villages of high economic potential. The proposed improvement will largely maintain the existing geometry and the formation width, with leveling course applied on the wearing course as needed to prepare it for the asphalt pre-mix overlay. Other low cost sealing options will also be explored and piloted. The surface sealing which is the main scope of this component will enhance the riding quality, durability of the pavement, arrest dust noise and the resulting environmental degradation, reduce contamination of crops, lower road safety risks caused by poor visibility due to dust cloud and minimize maintenance cost. Improvements of drainage systems and road safety
features is also part of the scope under this component. The paving operation involves the use of bituminous mix as specified in IRC specifications and modified for use under PMGSY projects. Under this project, alternatives will be explored to reduce the amount of asphalt in the mix by adding waste plastic, a technology being increasingly used in MP PMGSY and elsewhere, which contributes to the savings in asphalt hence reduction of carbon foot print.

Component B: Institutional Strengthening (approx. $10 mil). Under this RES seeks to further ramp up its institutional capacity for efficient service delivery of the project and similar programs in the future. In addition it will leverage the resources and opportunities under this project to address key sector issues such as road safety and asset management. Institutional capacity building includes the introduction of e-works management, improving crash data management system, enhancing MIS capacity through web site development and computerization, training for skill development, and study on impact of the proposed project.

SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Madhya Pradesh (MP) located at the center of India, is one of the largest and the most populous Indian states. Though endowed with abundant natural resources specifically minerals, the state is still struggling to improve its low income status and the low economic and social indicators. Most of the proposed roads are likely to be located in flat low laying areas surrounded by a host of agricultural activities which are expected to boost triggered by the improved roads. Potential flooding of these low areas, and pollution of crops by dust generated from the traffic plying on unpaved road, effect of the road on the trans road irrigation system are a few issues that needs to be included in the project design.

The project roads are located in all the fifty one (51) districts of the state. But the final list of roads is yet to be established. According to the Census 2011 census, Scheduled Tribals (ST) constitute 21.1% of the state population. Some of the notified Scheduled Tribe districts include Jhabua, Mandla, Surguja and Bastar districts. There are 46 recognized Scheduled Tribes in Madhya Pradesh, India, three of which have been identified as 'Particularly Vulnerable Tribal Groups' (PTGs). Some of these tribes are Agariya, Andh, Baiga, Bhaina, Bhtaria, Bhumia, Bhuinhar, Bhuimya, Bhtaria, Pando, Bhumiya, Bhatta, Bhtil, Bhilala, Barela, Patelia. As project intervention would be covering officially notified Scheduled Tribal areas and twenty one (21) districts in the state are recognized tribal districts, OP 4.10 on Indigenous Peoples is applicable. The Scheduled Tribe population in the State is overwhelmingly rural, with 93.6 per cent residing in rural areas.

The environmental and social safeguards risk is low as the project is upgrading the existing road alignments with literally no additional land required, hence does not cause resettlement or displacement of people. Hence in order to assess risk, all the road stretches including the 3000 km of additional link roads will undergo the screening process for its selection, and that voluntary land donation will follow all the requirements including among others, a) documentation of the voluntary nature of donation, b) small amount of individual donations, c) will not lead to poverty/landlessness, d) will not impact on the livelihood of vulnerable groups on the land and if so, locally prepared mitigation is acceptable to the affected groups, e) will have a locally accepted Grievance Redressal Mechanism.

B. Borrower’s Institutional Capacity for Safeguard Policies
Though the implementing agency did not implement World Bank financed projects but has a successful experience implementing PMGSY program financed by ADB. The project has designated a Superintending Engineer from within the department as the 'Dedicated' Focal Point on Safeguards besides Road Safety, at the HQ in Bhopal. The person would be supported by a three member team of Assistant and Sub-Engineers.

C. Environmental and Social Safeguards Specialists on the Team

Neha Pravash Kumar Mishra

D. Policies that might apply

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>Adverse environment impacts are likely to occur due to bituminous surfacing of existing gravel roads and additional links, if proposed improvement works are not properly planned, designed or constructed. Anticipated environmental issues can become significant if not addressed appropriately at various stages, which include inadequate provisions of longitudinal drains, cross natural drainage structures, rehabilitation of leftover borrow pit, disposal of construction debris and embankment/slope stability, HSE measures at plants/camps and work sites, road safety signages, construction management of quarry operations for aggregate, etc. The anticipated adverse environmental issues in the project components will need to be mitigated and managed through an Environmental Management Framework (EMF) and Environmental Code of Practices (ECOPs).</td>
</tr>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>TBD</td>
<td>The additional new links may have possibility to intervene in ecologically sensitive areas if located within protected habitat areas or its eco sensitive zones. In such cases, roads will be designed and constructed as per required norms and standards in accordance with existing management plans of such protected natural habitats. In addition, the ESMF and ECOPs will provide a clear guidance on specific mitigation and management measures to be integrated in to project design and implementation. These measures will also be applicable for any unprotected natural habitat and/or areas important from bio-diversity protection perspective identified during sub-project preparation stage.</td>
</tr>
</tbody>
</table>
Additional new link roads may be within or adjacent to forest areas. It is possible that some of the roads may be passing through or adjacent to forests areas. Such roads will be subject to applicable regulatory clearance. Moreover, as necessary, a gravel road level screening will determine the extent of impact on the quality and health of forests in the context of construction of the road and integrate any mitigation and management measures required to ensure protection of forests as well as to ensure forests are not exploited.

Since some civil works are involved, ‘chance finds’ at work sites is a likely impact that would have to be managed. Adverse impacts on locally important cultural property would be examined, if any, for appropriate mitigation during planning and implementation stages. The ESMF will provide the required guidance on this count, including on the screening process to identify such an issue.

Project activities - improvements of existing roads or additional links would be taken across all district of the state including the twenty one (21) tribal districts in the state.

OP 4.12 on Involuntary Resettlement is not triggered as the project would only involve improvements of existing roads within existing land or in case of additional links construction of road on land voluntarily donated by the communities.

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Sep 15, 2016

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

The key instrument for the environmental and social management is the Environmental and Social Management
Framework (ESMF). MPRRDA prepared the draft ESMF, which the Bank team reviewed and provided feedback. The finalized version of the document is expected to be submitted by mid July 2016. Sub project specific Environmental Management Plan (EMPs) will be prepared as per the ESMF, as part of the detailed project preparation processes, which is ongoing. Appraisal stage ISDS will be prepared in mid September 2016.

CONTACT POINT

World Bank
Mesfin Wodajo Jijo, Rakhi Basu
Sr Transport. Spec.

Borrower/Client/Recipient
Ministry of Finance

Implementing Agencies
Madhya Pradesh Panchayat and Rural Development Department
Aniruddh Kapaley
Engineer in Chief
ad.kapaley@pmgsy.nic.in

FOR MORE INFORMATION CONTACT

The InfoShop
The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 458-4500
Fax: (202) 522-1500
Web: http://www.worldbank.org/infoshop

APPROVAL

Task Team Leader(s): Mesfin Wodajo Jijo, Rakhi Basu
### Approved By

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safeguards Advisor:</td>
<td>Maged Mahmoud Hamed</td>
<td>07-Jul-2016</td>
</tr>
<tr>
<td>Practice Manager/Manager:</td>
<td>Karla Gonzalez Carvajal</td>
<td>07-Jul-2016</td>
</tr>
<tr>
<td>Country Director:</td>
<td></td>
<td>08-Jul-2016</td>
</tr>
</tbody>
</table>