Mukhya Mantri Gram Sampark Yojana
Executive Summary

Bihar Rural Roads Development Agency (BRRDA, RWD Govt. of Bihar)
Executive Summary

1. Background

The Government of Bihar (GOB) is committed to an all round Social and Economic development of the State. Recognizing the role played by an efficient and high quality road network to the rural community. Towards this end, an elaborate programme of rural road development was felt. Keeping this in mind Rural works Department, Government of Bihar launched the Mukhya Mantri Gram SamparkYojana in year 2013 to connect with all weather roads to all rural habitations with population more than 250 in 27 Non-IAP districts involving construction and improvement of 37,908 km roads with an estimated expenditure of INR 32,230 Crore ($5372 million approx. @ Rs. 60 per US$). The programme is presently funded by the govt. of Bihar through its own resources.

Objective of the Scheme

The objective of the scheme is to fulfill the dream of state government to reach the capital city within 5 hours from any corner of the state by providing all weather roads through single connectivity to 250 and more unconnected Tolas/habitations with a population of 250 and more in phased manner.

2. Project Description

The World Bank through its Country Assistance Strategy Commits to Support MMGSY in Bihar. The total project cost will be about INR 20 billion with Bank trading of INR 14 billion (about US $ 235 million). Araria, Banka, Buxar, Chhapra, East Champaran, Gopalganj, Katihar, Patna, Purnea and Vaishali are the ten districts identified for the first phase. This will cover about 2500 km roads. The Department of Economic Affairs (DEA) has recommended that the project preparation be done for the entire 5000 km. Additional funding will be considered at later stage based on the implementation performance of the 2500 km. World Bank Supported MMGSY Rural Roads Project aims to increase the efficiency of the MMGSY, through systematic and appropriate capacity enhancement in the State to provide and maintain all season access to beneficiary communities for enhanced access to economic opportunities and social services. The PDO for the project is to improve road connectivity in rural areas and improve management of rural roads in Bihar.

The proposed MMGSY Rural Roads has two components:-

**Component I** (Civil Works): Civil Works relating to construction and/or up gradation of selected roads to provide all weather connectivity in Non-IAP Districts.
Component II (Technical Assistance): This comprises 5 components:

- Preparation of DPR
- Independent Verification
- Project Institutional Support
- Equipment
- Training for Skills Development

The component will support institutional strengthening, organizational effectiveness and individual skills development to complement achievement of the program outcomes.

However in the first phase ten districts i.e Araria, Banka, Buxar, Saran, East Champaran, Gopalganj, Katihar, Patna, Purnea and Vaishali have been selected under this project which will cover about 2500 kms of roads.

Towards enhancing the assessment and management of environmental and social issues in MMGSY planning and implementation, an Environmental Management Framework (EMF), Social Management Framework (SMF) and Vulnerability Framework (VF) has been prepared.

2. Benefits of Rural connectivity

Government expenditure on roads has been found to have the largest impact on poverty reduction (163 persons lifted out of poverty with INR1 million investment) as well as a significant impact on productivity growth. Road investments have contributed importantly to growth in total factor productivity in agriculture, which has helped to keep the consumer prices of food grains in check thus benefiting the poor. Non-agricultural employment opportunities have increased because of the stimulus to non-farm commercial activities, leading to higher wages. Of the total productivity effect on poverty, 75 percent arises from the direct impact of roads in increasing incomes while 15 percent arises from lower agricultural prices and 10 percent from increased wages. Other impacts observed are doubling of farmers’ incomes; reduction in freight charges by more than 60 percent; increase in literacy rate by 8 percent; increase in land prices by 80 percent; about 12 percent higher prices for agricultural produce; and timely help during medical emergencies, particularly for pregnant women.

3. Social Management Framework (SMF)

SMF guides the government how it will identify, mitigate and compensate any adverse impacts on the assets and livelihoods of the people directly affected by possible expropriations while safeguarding the interests of the population impacted by the project, especially of the poor, women, and vulnerable groups in the project.
**Salient features**

- Relevance of SMF is to ensure compliance with State/National legal policies and regulations relating to land acquisition and resettlement as well as the World Bank Operational Policies 4.12, 4.10& 4.11.
- SMF ensures that the project complies with the principle that involuntary loss of assets or relocation of economic activities or residence is minimised and fully compensated.

**Objectives and core provisions of the SMF**

- To ensure that throughout its duration, the project fully complies with the principle that involuntary loss of assets or relocation of economic activities or residence, is minimised and compensated.
- To guarantee that adequate procedures exist for prior consultation of all affected persons,
- Assessment of losses and entitlements, handling complaints and disputes, and monitoring of the outcomes; and
- To lay down the process of land transfer.
- To ensure broad community support for the project based on consultation in habitations of Scheduled Tribe and Scheduled Caste population.

**Legislations and Policies Applicable**

**National Policy:**

- Equal Remuneration Act, 1979
- Child Labour (Prohibition and Regulation) Act, 1986

**State Policies:**

- Bihar Lease Land Policy 2014
- Land donation
- Minimum Wages Act, Bihar

**World Bank Policies:**

- Involuntary Resettlement – Operational Policy 4.12
- Indigenous People- Operational Policy 4.10
- Cultural Properties-Operational Policy 4.11
Impacts and Entitlement Framework

Most of the project roads will be improved to single lane using the existing alignments currently in the form of either earth tracks or brick pavements, by providing adequate geometry, pavement, drainage, bridges, and road safety engineering measures, including special treatment in build-up area. The rural roads will generally have a carriageway of 3 m and total formation width of 5-7 m depending on the site conditions.

All the roads and bridges will be designed using the standards and guidelines prescribed by the Indian Roads Congress (IRC) for rural roads and already included in PMGSY and MMGSY. However, the design will be suitably customized by making optimal use of the available right-of-way to serve the basic purpose of providing basic accessibility, carefully avoiding demolition of houses and other structures, cutting of old trees, and minimizing additional land requirements. Suitable passing places will be provided in such situations ensuring smooth flow of traffic in narrow sections. These modifications would suffice to meet the needs of most of the project roads as they carry low traffic, with high percentage of medium and small vehicles and two wheelers.

Thus the extent of social impacts is minimal as the requirement for land width accretion will not be significant and there will be no or negligible impact on structures or loss of livelihood. Any extra land taken in the project for the proposed improvements will be through a process of land lease/land acquisition/Donation.

Social Impact Statement: The DPRs for first batch of 1052 kms of roads have been prepared and Bids have been called. The DPRs have utilized the checklists and formats provided in the RPF to assess the need for land acquisition and adverse impact on assets. Social impact statement shall be prepared for all the batches of DPR for bidding. This is to ensure that all land take process is completed and entitlements are disbursed before initiating any civil works.

For the purpose of this project, following definition will apply:

Project affected area: To corridor/area required for the construction of the project road.

Project affected persons: All persons losing their assets or source of income/livelihood in the project affected area because of land take under the project.

Cut-off date: Project affected persons with formal claims to the land on the date of notification under Bihar land lease Policy/BLARR Act. Date of transect walk will be the cut off date in case of those having no formal or recognizable claim to land but have structure/other assets over the land.

Eligible affected persons: Project affected persons occupying the land prior to cut off date.

The RPF framework addresses the following categories of impacts caused by the project.
### IMPACT CATEGORY

#### THOSE WHO HAVE FORMAL/RECOGNISABLE LEGAL RIGHTS TO THE LAND

- In the event of non availability of land to provide basic access to the habitation, the project will aim at obtaining land on lease or through acquisition or, through donation. Compensation for land and structures will be paid to the PAP’s /PAF’s according to the provisions laid in Bihar Raiyati Land Lease Policy 2014/.BLARR Rules 2014/LARR act 2013.
- In Case of loss of livelihood the PAP’s/PAF’s will get financial assistance according to provisions laid in BLARR Rules 2014/LARR act 2013.

#### THOSE HAVING NO RECOGNISABLE OR FORMAL CLAIM TO LAND

- Eligible only if they occupy the project area prior to a cut-off date
- No compensation for land
- Project will not cause any physical displacement
- In the event of partial loss/damage of shelter/structure/ any other assets that do not involve physical relocation of the PAPs/PAFs, the affected structure will be restored as part of civil contracts.

#### COMMON PROPERTY

- Relocation/construction of common property by contractor shall take place after taking technical inputs from PIU. If the CPR has to be shifted or constructed then cost will be borne through the civil contracts. Cost will be determined by market value.

### Impacts identified during construction:

Minor impacts on structures 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 persons to assess the extent of impacts. It affected structures shall be restored as part of civil contracts.

### Temporary Impacts during Construction:

The temporary impacts during construction to the normal traffic, increased noise levels, dust generation, and damage to adjacent parcel of land due to movement of heavy machineries. The contractor shall be responsible for regulating time of usage of heavy equipment, dust suppression, schedule of construction work to allow normal traffic during morning and evenings and signage for sensitive areas where safety is a concern. The contractor shall bear the costs of any impact on roadside structure or land due to movement of machinery during construction. All temporary use of lands outside the proposed RoW shall be through written consent / approval of the landowner. The contractor shall locate construction...
camps in consultation with the local Panchayat to avoid any resentment or confrontation with the local or host community. Consultations with the community shall be undertaken by the contractor to sensitise the community on the construction works and its probable impacts through pamphlets / brochures.

**Community Planning and Participation**

Effective participatory mechanism for community level local government in decision-making at implementation and post implementation stage of the project has been evolved. The project envisages involvement of the local community, PAPs/PAFs & PIU during project implementation and monitoring stages. The PIU will be responsible for ensuring participation of the local community at the sub project levels. The involvement of the community is not only restricted to the interactions with the villagers but also disclosing the relevant information pertaining to the project and tasks encompassed in the project.

**4. Vulnerability Framework**

In rural India apart from poverty vulnerability is characterized by social isolation and marginalization resulting from gender bias or belonging to certain groups such as scheduled caste and tribes. While these two elements are critical in ensuring social outcomes of the project, they may not be captured while computing rural access index, if cultural context is not considered in the process. Thus, given that in rural India, birth identity and gender are key determinants of social inclusion within the dominant society, the project sanctions the below framework to achieve equity in distribution of project benefits.

**Objective of the Framework**

The objective of the framework is to ensure that the development process generated by the MMGSY fully addresses the needs of the vulnerable population and enables measures to promote equity and participation. The framework endorses information sharing, consultation and collaboration as participatory techniques to develop the abilities and reinforce the capacities of the vulnerable while preserving their historical identity.

While all population below poverty line are vulnerable, for the purpose of the project, framework also endorses the below as “vulnerable” given their birth identity and gender, which exhilarates the already existing poverty related vulnerability. The three categories of vulnerable are identified as:

- Women Headed Households;
- Scheduled caste population; and
- Scheduled tribes.
- Divyang
- Below poverty Line
The framework warrants inclusion of these groups of population in design, implementation and monitoring, thus empowering them from beneficiary to a primary stakeholder in the process. In particular, the guidelines stated in the framework will ensure that the above populations do not suffer any negative effects during the project that they receive gender sensitive benefits compatible with their traditions and they participate as stakeholders in planning, implementing and evaluating the Project. Project will avoid impact on land/structure/other assets under the project from vulnerable people but in case if required then it will be through the process of lease or through acquisition against compensation.

5. Environment Management Framework

Environmental Management Framework (EMF) for the project offers the required flexibility in guiding the process of dealing with the unwarranted impacts and would help in augmenting the positive benefits for both situations – for sub-project/s where engineering interventions are known and those roads/sections where engineering design is yet to be initiated.

The framework describes the principles, objectives and approach to be followed in avoiding, minimizing and mitigating the adverse environmental impacts that are likely to arise as a result of the implementation of the various reconstruction activities under the MMGSY.

Purpose and Objectives of EMF

- Establish clear procedures and methodologies for environmental planning, review, approval and implementation of sub-projects to be financed under the Project.
- To provide practical guidance for planning, designing and implementing the environmental management measures.
- Specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and related social concerns of the sub-projects and;
- Determine the institutional arrangements, including those related to training, capacity building and technical assistance (if required) needed to successfully implement the provisions of the EMF.

Key Issues of Major Concern in Road Infrastructure

- Air Pollution
- Cultural Heritage
- Land Use Management
- Resource Consumption
- Soil Contamination
- Soil Erosion & Sediment Management
- Drainage & Storm Water Management
- Vegetation control & Management
- Vehicle & Traffic Noise
- Water Pollution
Legislations and policies applicable in MMGSY

- Environmental Clearance as per EIA Notification 2006 and subsequent amendments
- Forest Clearance under The Forest (Conservation) Act 1980
- Wildlife Clearance under The Wildlife (Protection) Act, 1972
- Eco-sensitive Zone as per The Environmental (Protection) Act, 1986

Environmental Impacts (likely) in MMGSY

- Felling of some limited number of roadside trees;
- Adverse impacts on water resources, including from silt flow during construction of works;
- Induced environmental impacts due to improper borrowing of earth;
- Flooding/rain water accumulation in habitation areas Impairment to or worsening of the local/regional drainage;


The ECoPs have been developed to guide the planning, design, construction and maintenance stages of MMGSY in terms of avoidance or mitigation of the adverse environmental impacts that may result from the projects. The codes define methods and procedures to be followed by the executing agencies, contractors and other agencies involved

Scope of Environmental Code of Practice:

- To form a field guide manual to the planners, Field engineers and contractors
- Identify project activities that can have potential environmental impacts and to provide mitigation measures
- Demonstrate road design and construction practices that are cost effective and address environmental impacts
- Illustrate recommended practices to address the environmental concerns during project planning implementation and operation
- Define role of involvement of the rural communities at different stages of the project
- Achieve MMGSY objectives of rural connectivity through roads planned and constructed to blend with the natural surroundings
<table>
<thead>
<tr>
<th>ECoPs</th>
<th>Title</th>
<th>Key Issues Addressed</th>
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</table>
| ECoP 1.0 | Project Planning & Design          | • Incorporation of environmental concerns in project preparation to avoid impacts in construction and operation stages  
• Avoidance of roads through sensitive areas as reserved forests/sanctuaries/wetlands etc  
• Compliance with legal requirements  
• Devising enhancement measures into project design |
| ECoP 1A | Roads in Flood Prone Areas         | • Key provisions to be included in project preparation and design in Flood Prone areas |
| ECoP 2.0 | Site Preparation                   | • Relocation of utilities, common property resources and cultural properties  
• Avoidance of affect on roadside vegetation. |
| ECoP 3.0 | Construction Camps                 | • Avoidance of sensitive areas for location of construction camps  
• Infrastructure arrangements for workers and construction equipment |
| ECoP 4.0 | Alternate Materials for Construction | • Use of fly ash as per MoEF&CC Notification  
• Minimizing earth requirement |
| ECoP 5.0 | Borrow Areas                       | • Avoidance of agriculture lands  
• Redevelopment of borrow areas |
| ECoP 6.0 | Topsoil Salvage, Storage & Replacement | • Topsoil removal from areas temporarily/permanently used for construction  
• Storage of topsoil in stockpiles and protection from erosion  
• Reuse of topsoil at areas to be revegetated and in agriculture lands |
| ECoP 7.0 | Quarry Management                  | • Redevelopment of quarries in case new quarries are setup for the project |
| ECoP 8.0 | Water for Construction             | • Extraction of water in water scarce areas with consent of community  
• Scheduling construction activities as per water availability |
| ECoP 9.0 | Slope Stability and Erosion control | • Adequacy of drainage for erosion control. |
| ECoP 10.0 | Waste Management                  | • Reuse of cut material in hill roads  
• Safe disposal of wastes |
| ECoP 11.0 | Water Bodies                      | • Avoidance from cutting due to alignment  
• Protection of embankment slopes in case of alignment on embankments  
• Rehabilitation of water body |
| ECoP 12.0 | Drainage | • Conduct of hydrological investigations during project preparation  
• Provision of longitudinal and cross drainage as per requirements  
• Proper location of drainage outfall |
| --- | --- | --- |
| ECoP 13.0 | Construction Plants & Equipment Management | • Compliance of construction plants and equipment with emission standards of Central Pollution Control Board  
• Maintenance of machinery and equipment to avoid pollution |
| ECoP 14.0 | Public and Worker's Health & Safety | • Provision of Personal Protective Equipment to workers  
• Provision of basic necessities to workers  
• Public safety while travel along construction sites  
• Public safety during operation of the road |
| ECoP 15.0 | Cultural Properties | • Avoidance of impacts due to project  
• Protection of precincts from impacts due to construction  
• Relocation in case impacts are unavoidable |
| ECoP 16.0 | Tree Plantation | • Avoidance of impact on trees  
• Plantation of trees on roadside |
| ECoP 17.0 | Managing Induced Development | • Restricting ribbon development at junctions and bus stops. |
| ECoP 18.0 | Environmental Audit | • Monitoring of environmental and social parameters during project planning, construction and implementation |
| ECoP 20.0 | Consultation Framework | • Aspects for consultation  
• Stage wise consultations  
• Consultation schedule and responsibilities |
| ECoP 21.0 | Maintenance | • Aspects maintenance under various climatic conditions. |

### 9. Institutional Arrangements

Mukhyamantri Gram SamparkYojana (MMGSY) is a state program implemented by Rural Works Department, Govt. of Bihar through Bihar Rural Road Development Agency (BRRDA). The key involving institutions are: (1) Bihar Rural Road Development Agency (BRRDA) at State level (2) Project Implementation Units (PIU) at District level.
<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Supported by</th>
<th>Tasks</th>
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| EE/AE/JE PIU, E&S Nodal officer (PIU), DPR Consultants | • Local Community  
• E&S Nodal officer BRRDA / SE (Concerned Work Circle)  
• Project Manager (MMGSY, BRRDA)  
• Principal Quality Monitor’s (PQM’s) | DPR Preparation |
| E&S Nodal Officer (PIU), EE/AE/JE (PIU) | • Local Community  
• | Dissemination/Community Sensitization |
| EE/AE/JE (PIU), E&S Nodal officer (PIU), DPR Consultants | • Local Community  
• District LRD  
• E&S Nodal officer BRRDA | Transect Walk/Finalisation of Alignment |
| EE/AE/JE (PIU), E&S Nodal officer (PIU), DPR Consultants | • Local Community  
• LRD | Census (Profiling) of PAPs/PAFs  
Identification of vulnerable PAPs/PAFs  
Preparation of Mitigatory Measures (Env. & Social) |
| LOCAL COMMUNITY EE/AE/JE (PIU) E&S Nodal officer (PIU) | • LRD  
• Local Community | Necessary Environment clearances at State/District level |
| E&S Nodal officer (BRRDA), E&S Nodal officer (PIU), EE(PIU) | • Project Manager (MMGSY, BRRDA)  
• SE (Concerned Work Circle) | Follow up action on Mitigation Measures (Env. & Social) Legal Process on Transfer of Land Disbursal of Compensation Relocation of land and other structures Registration of... |
<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibilities</th>
</tr>
</thead>
</table>
| E&S Nodal officer (PIU), EE/AE/JE (PIU) | - Local Community  
- EE/AE/JE (PIU)  
- LRD  
- E&S Nodal officer BRRDA  
- Public Grievance Redressal Officer (RWD)  
- PMC  
- Independent Safeguard Consultants |
| Project Manager (MMGSY,BRRDA), EE (PIU), E&S Nodal officer BRRDA & PIU, EE/AE/JE (PIU) | - The World Bank  
- PMC |
| Project Manager (MMGSY,BRRDA), E&S Nodal officer BRRDA & PIU, EE/AE/JE (PIU) | - Local Community  
- PMC  
- Principal Quality Monitor’s (PQM’S)  
- Independent Safeguard Consultants |
| EE (PIU), E&S Nodal officer (PIU) | - Local Community  
- LRD  
- PMC  
- Independent Safeguard Consultants |
10. Grievance Redressal Mechanism

Grievances in MMGSY will be dealt at PIU level on initial stage. Any person who has any grievance he/she can directly contact with Executive Engineer of the respective division. On receipt of the complaint, EE will direct it to the Nodal officer of Environment and Social, BRRDA who will try to address the Complain locally with the help of local community. Nodal officer can also seek the help of Public Grievance Redressal Officer. If complain is not resolved locally then it will addressed according to the procedures of Bihar grievance Redressal Act 2015.

Rural Works Department, Government of Bihar has a full fledge Grievance Redressal cell. Department has a toll free number 18003456179. After receiving the grievances on toll free number at BRRDA it is registered and updated on online system. After updation it is transferred to Grievance Redressal cell which is based at headquarter (RWD, Bihar)

People can directly register their Grievances in written to the Grievance Redressal cell/ Vigilance Officer. Even People can directly present their written grievances to CM at JantaDarbar.