

# Environmental Assessment and Review Framework

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July 2014

## IND: Madhya Pradesh District Connectivity Sector Project

Prepared by Government of Madhya Pradesh (Madhya Pradesh Roads Development Corporation) for the Asian Development Bank

## **CURRENCY EQUIVALENTS**

(As of May 13, 2014)

Currency unit – Indian Rupee (Rs)

INR 1.00 = \$ 0.01676

\$ 1.00 = 59.5426

## **ABBREVIATIONS**

|        |   |   |
|--------|---|---|
| ADB    | – | Asian Development Bank                              |
| MPRDC  | – | Madhya Pradesh Roads Development Corporation        |
| DPR    | – | Detailed project report                             |
| E&S    | – | Environment and Social                              |
| EA     | – | Executing Agency                                    |
| EAC    | – | Expert Appraisal Committee                          |
| EARF   | – | Environmental assessment and review framework       |
| EIA    | – | Environmental impact assessment                     |
| EMP    | – | Environmental management plan                       |
| GRM    | – | Grievance redress mechanism                         |
| MOEF   | – | Ministry of Environment and Forests                 |
| PD     | – | Project Director                                    |
| PIU    | – | Project Implementation Unit                         |
| ROW    | – | Right of way  |
| SPS    | – | Safeguard Policy Statement, 2009                    |
| GoMP   | – | Government of Madhya Pradesh                        |
| MPDCSP | – | Madhya Pradesh District Connectivity Sector Program |

## **WEIGHTS AND MEASURES**

|    |   |           |
|----|---|-----------|
| km | – | kilometre |
| m  | – | meter     |

## **NOTE**

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

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## I. INTRODUCTION

1. The Madhya Pradesh District Connectivity Sector Project will improve transport connectivity in the state by rehabilitating and upgrading major district roads (MDRs). The Project constitutes (i) rehabilitating and upgrading of about 1,600 km of MDRs; (ii) improving road maintenance and asset management; and (iii) developing an efficient accident response system. MPRDC specifically, targeting MDRs to form key linkage between rural, semi urban and urban areas and complete state road connectivity.

2. The Government of Madhya Pradesh (GoMP) has been using a combination of budgetary, PPP, and ADB financing, to improve state highways. Rural roads are being improved by the Madhya Pradesh Rural Roads Development Agency (MPRRDA) under the Pradhan Mantri Gram Sadak Yojana (PMGSY) which is a nationwide rural roads development program. ADB's funds have also been made available to the rural roads in the state, through past loans to the central line ministry. However, the intermediate tier of roads MDRs has not been specifically targeted for improvement. MDRs form the key linkage between rural, semi urban and urban areas, and have to be essentially developed to complete state road connectivity. In this background, GoMP has now proposed to improve the MDRs through the plan indicated in Table 1.

**Table 1: Proposed Improvement Plan for MDRs**

|  |   |                    |
|--|---|--------------------|
| <b>Total MDRs in Madhya Pradesh</b>  | - | <b>(Km) 19,574</b> |
| Under construction by MPPWD under the Central Road Fund Scheme                                   | - | 5,398              |
| Under Major District Roads Scheme  | - | 1,134              |
| Under Construction by MPRDC under build operate transfer (BOT) (Toll + Annuity & Annuity Scheme) | - | 1,992              |
| Total under construction   | - | 8,524              |
| Balance to be constructed  | - | 11,050             |
| <b>Proposed under the Project</b>  | - | <b>1,600</b>       |

Source: MPRDC

3. Four sample roads totalling 188 km have been selected under the sector project for project preparation as given in table 2. The construction period for all roads under the project including both sample and non-sample subproject will include a 12 – 24 month construction period and a 5 year performance based maintenance period.

**Table 2: Proposed Sample Roads**

| <b>Roads</b>             | <b>Length(Km)</b> |
|--------------------------|-------------------|
| 1. Chitrangi- Kasar Road | 39.9              |
| 2. Mahua- Chuwahi        | 49.2              |
| 3. Dabra- Bhitwar-Harsi  | 62.4              |
| 4. Ujjain-Maksi          | 36.5              |
| <b>Total</b>             | <b>188</b>        |

4. The remaining non sample roads totalling about 1,412 km are at various stages of planning and designing and the technical details are still being firmed up. Therefore there maybe changes in the scope (selection of roads, road length etc.) depending on the findings for the feasibility study and detailed project report (DPR). Therefore, this environmental assessment and review framework (EARF) has been prepared to guide the final selection of non-sample subprojects, preparation of IEE reports and implementation of all environment safeguards requirements in accordance with relevant policies and regulations of the

Government of India, state government of Madhya Pradesh and the ADB Safeguard Policy Statement, 2009 (SPS).

## II. ASSESSMENT OF LEGAL FRAMEWORK AND INSTITUTIONAL CAPACITY

### A. GOI Legal Framework on Environment Safeguards

5. The Government of India's Environmental Legal Framework comprises a set of comprehensive acts and regulations aimed at conserving various components of the biological and physical environment including environmental assessment procedures and requirements for public consultation. The policies and requirements which are most relevant in the context of this project are provided in table 3 below.

**Table 3: Summary of Relevant Environmental Legislation**

| Act  | Objective   | Responsible Institution       |
|--|---|-------------------------------|
| 1. Environment (Protection) Act (1986) and Rules (1986)  | To protect and improve the overall environment  | MoEF                          |
| 2. Environmental Impact Assessment (EIA) Notification under Environmental Protection Rules (2006, 2009, 2011) and relevant Office Memorandums (OM) | To provide guidance on environmental clearance requirements and clarification on related specific technical issues                                  | MoEF                          |
| 3. Wildlife Protection Act (1972 and amended in 1993)  | To protect wild animals and birds through the creation of National Parks and Sanctuaries  | MoEF                          |
| 4. The Water (Prevention and Control of Pollution) Act 1972 (Amended 1988) and Rules 1974  | To provide for the prevention and control of water pollution and the maintaining or restoring of wholesomeness of water.                            | CPCB                          |
| 5. The Air (Prevention and Control of Pollution) Act, 1981 (Amended 1987) and Rules 1982   | To provide for the prevention, control and abatement of air pollution, and for the establishment of Boards to carry out these purposes.             | CPCB and Road Authorities     |
| 6. Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules 2008 (Amended 2009),   | To protection the general public against improper handling, storage and disposal of hazardous wastes  | State Pollution Control Board |
| 7. The Forest (Conservation) Act 1980 (Amended 1988) and Rules 1981 (Amended 2003)   | To protect and manage forests   | MoEF                          |
| 8. Central Motor Vehicle Act (1988) and Rules (1988)   | To control vehicular air and noise pollution. To regulate development of the transport sector, check and control vehicular air and noise pollution. | State Transport Department    |
| 9. Ancient Monuments and Archaeological Sites and Remains Act (1958)   | Conservation of Cultural and historical remains found in India.   | Archaeological Dept. GOI      |
| 10. Building and Other   | To regulate the employment and  | Ministry of                   |

| Act  | Objective  | Responsible Institution           |
|--|--|-----------------------------------|
| construction workers (Regulation and the Employment and conditions of service) Act, 1996 | conditions of service of building and other construction workers and to provide for their safety, health and welfare measures                  | Labour and Employment             |
| 11. Child labour (Prohibition and Regulation) Act, 1986                                  | To regulate the employment of children including age limits, type of employment, timing of work, information disclosure and health and safety. | Ministry of Labour and Employment |

6. These Acts and Regulations require the following clearances, No Objection certificates and permissions which are applicable to the project<sup>1</sup>:

- (i) Forest Clearance from Department of Forests is required for diversion of forest land to non-forest purpose. Prior permission is required from the Department of Forests to carry out any work within the forest areas and felling of road side trees. Cutting of trees need to be compensated by compensatory afforestation as required by the Forest Department.
- (ii) Placement of hot-mix plants, quarrying and crushers, batch mixing plants, discharge of sewage from construction camps requires No Objection Certificate (Consent to Establish and Consent to Operate) from State Pollution Control Board prior to establishment.
- (iii) Permission from Central Ground Water Authority is required for extracting ground water for construction purposes, from areas declared as critical or semi critical for ground water.

7. While the list of national acts and regulations in table 3 and the clearances in para 6 are adequate to regulate most environmental issues that require mitigation and management as given in the ADB SPS there is a gap on the requirement for environmental assessment and disclosure of related reports. Major district roads are not required to comply with the Environmental Protection Act and Rules 1986 and the EIA notification (2006, 2009, 2011) and relevant amendments. Hence, the roads under this sector project are not required to obtain environmental clearances and prepare environmental assessment reports under national laws. To fill this gap and to comply with the ADB SPS, IEE reports will be prepared for all subprojects under MPDCSP and disclosed on the ADB website.

## **B. International Agreements**

8. India has been playing an active role in environmental conservation since the first United Nations (UN) conference on Human Environment in Stockholm in 1972 and recognizes that protection of environment is closely linked to combating poverty. Key international agreements that India is signatory to and relevant for the project are provided below:

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<sup>1</sup> The roads under the project will not be subject to the EIA notification mentioned in item 2, table 3, as the project roads are major district roads and not state highways.

- a. Convention Relative to the conservation of Flora and Fauna in their Natural State (1933)
- b. International Plan Protection Convention (1951)
- c. Convention on Wetlands of International Importance, Especially as Waterfowl Habitat (Ramsar, 1971)
- d. Convention concerning the Protection of the World Cultural and Natural Heritage (Paris, 1972)
- e. Convention in International Trade in Endangered Species of Wild Fauna and Flora (Washington, 1973)
- f. Convention on Migratory Species of Wild Animals (Bonn, 1979)
- g. Convention on the Prior Informed Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC or Rotterdam, 1990)
- h. United Nations Framework Convention on Climate Change (Rio De Janeiro, 1992)
- i. Convention on Biological Diversity (Rio De Janeiro, 1992)
- j. Protocol to the United Nations Convention on Climate Change (Kyoto, 1997)

9. The above list of international conventions have links to environmental issues anticipated under the project. However it is not anticipated that specific additional measures will be required under the project as the significance and scale of environmental impacts are very low.

### **C. ADB Safeguard Policy Statement, 2009**

10. ADB's safeguard policy framework consists of three operational policies on the Environment, Indigenous People and Involuntary Resettlement. All three safeguard policies involve a structured process of impact assessment, planning, and mitigation to address the adverse effects of projects throughout the project cycle. There are 11 policy principles which are required to be followed on environment safeguards involving the process of identifying and assessing environmental impacts, conducting meaningful consultations, disclosing the environmental assessment, implementation and monitoring of the environmental management plan (EMP). The principles also include assessing and managing issues related to biodiversity conservation and sustainable natural resources management including impacts on modified, natural or critical habitat; pollution prevention and abatement and occupational health and safety to maintain standards in accordance with the World Bank Environment, Health and Safety Guidelines<sup>2</sup>; and physical cultural resources.

11. Proposed projects (for project loans), subprojects (for sector loans) or tranches (for MFF's) are required to be screened according to type, location, scale, and sensitivity and the magnitude of their potential environmental impacts, including direct, indirect, induced, and cumulative impacts. Projects are classified into category A, B or C depending on the significance of the impacts, wherein category A involves most sensitive impacts and category A involves least sensitive impacts.

12. MPRDC has implemented three ADB projects over the past decade, hence the agency is well versed with meeting ADB safeguard requirements. However, currently the Environment and Social Cell (ESC) within MPRDC has only one dedicated officer to manage

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<sup>2</sup> The World Bank Environmental Health and Safety (WB EHS) guidelines are to be referred to in the absence of national standards on air, noise, health and safety. If there are national standards on these environmental parameters they must be compared with the WB EHS guidelines and the more stringent one is required to be followed.

both environment and social safeguards. Hence, the ESC will be enhanced with the appointment of one environment safeguards officer and two social safeguards officers, bringing the total number of staff to four. At the site level the respective divisional office of MPRDC will be the PIU. There will be a total of ten PIUs for all subprojects including both sample and non-sample roads under the project. Each PIU will have one focal person for managing environment and social safeguards at the site level.

13. The ESC at MPRDC level and safeguards focal person at the PIU level will be supported by an environmental specialist under the CSC for regular monitoring and reporting on EMP implementation. An initial coordination cum training workshop will be carried out by ADB and the CSC environmental specialist during the pre-construction stage for MPRDC staff, other CSC staff and the contractors. Further training will be conducted during construction stages as necessary.

### **III. ANTICIPATED ENVIRONMENTAL IMPACTS**

14. The project activities will involve widening of existing major district roads for which the right-of-way (ROW) is available in most cases. The road widening activities will primarily include raising of embankment at certain locations, stabilization of the road including construction of retaining walls where necessary especially near water bodies, overlay on the existing carriageway, junction improvement, and construction of major and minor bridges, culverts, and RCC drain in built-up section. These design measures will also include mitigation of climate change related risks and vulnerabilities.

15. Since the candidate subprojects will mainly include rehabilitation of existing roads the project impacts will be site specific and unlikely to cause any significant adverse environmental impacts that will be irreversible, diverse or unprecedented. Potential issues during pre-construction stage are delays in obtaining required clearances and permits for establishment and operation of facilities such as hot mix plants and stone crushing plants and diversion of forest land if any and/or cutting trees. Anticipated impacts during construction which are typical of road construction projects include generation of dust from earthworks; noise and exhaust from operation of equipment/machinery/vehicles; generation of construction waste as well as wastes from construction and worker camps; water contamination and water supply issues; occupational health and safety issues with the workers and local communities; issues of erosion and siltation; removal of trees and disruption and alteration of terrestrial and aquatic habitat. Key benefits of the project will be better connectivity through enhanced road quality and safety. While most impacts experienced during the construction stage can also be expected during the operation stage, key additional impacts expected during the operation stage are pedestrian and traffic safety including emergency incidents from the operational road, impacts on water quality from road runoff, and increased emissions and noise due to the increased traffic. However, the scale of increase is insignificant given that the numbers of projected traffic are fairly small. An assessment on CO<sub>2</sub> emissions that was carried out using the Transport Emissions Evaluation Models for Projects (TEEMP) tool shows that the gross CO<sub>2</sub> emissions at the mid-point of the road design life is in the range of 500 to about 3800 tons per annum for the sample subprojects which is far below the 100,000 tons per annum threshold of the SPS.

16. Mitigation measures that are proposed to address anticipated impacts during pre-construction and construction stage will include but not be limited to: initiating process of applying for clearances/permits in timely manner; wet spraying to control dust; limiting working hours to minimize disturbance; regular maintenance of vehicles and securing of Pollution under control (PUC) certificates; construction of noise barriers near sensitive

receptors where necessary; reuse or proper disposal of construction debris; maintenance of proper hygiene and safety standards and facilities in the camps and working areas; development and implementation of an erosion control and silt management measures; and compensatory plantation. Mitigation measures proposed to address impacts during operation stage are maintenance of road safety features in the project, implementation of emergency response system (established under earlier projects in the state), maintenance of trees planted under the project and construction of noise barriers where found necessary.

17. These anticipated impacts will be addressed through mitigation measures provided in the Environmental Management Plan (EMP) which will be made mandatory for the contractor to implement. The effectiveness of the EMP will be monitored through an Environmental Monitoring Plan (EMOP). Further institutional mechanisms will be established between the Executing Agency, Construction Supervision Consultants, contractors and other concerned agencies to ensure all unanticipated environmental impacts are appropriately addressed.

#### **IV. ENVIRONMENTAL ASSESSMENT FOR SUBPROJECTS**

##### **A. Screening**

18. Any subproject not meeting the criteria listed below will not be put forward for consideration or inclusion under the project. The environmental assessment of the subprojects will be conducted by MPRDC in line with the requirements of this EARF and Safeguard Requirement 1 of the ADB SPS. A final check on conformity with the selection criteria will be made at the submission of IEEs of additional subprojects for ADB's clearance.

##### **B. Classification**

19. The MPRDC will propose and the ADB will confirm the environmental categorization of succeeding non-sample subprojects using the ADB Rapid Environmental Assessment checklist for roads and highways (Appendix 1) in compliance with the SPS, 2009.

##### **C. Environmental Selection Criteria**

20. The following Criteria shall be applied for selection of subproject roads:

- (i) The subprojects selected will be part of network implemented by MPRDC.
- (ii) No project roads that will cause significant environmental impacts that would trigger classification as environment 'Category A' in accordance with the ADB's SPS (2009) will be included.
- (iii) No project roads that fall inside a legally protected area or critical habitat area<sup>3</sup> or have direct impacts on cultural heritage sites of national and international significance will be included.

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<sup>3</sup> Critical habitat according to the SPS is an area with high biodiversity value, including habitat required for the survival of critically endangered or endangered species; areas having special significance for restricted range species; sites that are critical for the survival of migratory species; areas supporting globally significant concentrations or numbers individuals of congregatory species; areas with unique assemblages of species or that area associated with key evolutionary processes or provide ecosystem services; and areas having biodiversity of significant social, economic or cultural importance to local communities.

#### **D. Environmental Assessments and Environmental Management Plans**

21. Since there will be no category A roads under the project, only IEE reports will be required to be prepared. The preparation of the IEEs will be guided by the objective of ensuring the environmental soundness, sustainability and integration of environmental considerations into the project decision-making process. Screening will be done as early as possible to identify direct, indirect, cumulative, and induced impacts to the environment. Environmental impacts will be avoided, and where not possible, minimized, mitigated, offsite and positive impacts will be enhanced through implementation of the EMP.

22. The draft IEE report including EMP will be prepared in accordance with Safeguard Requirement 1 (SR 1) of the SPS and submitted to ADB for review and approval in a timely manner to allow disclosure of the draft final report on the ADB website before the approval of the respective subproject.

23. The IEE study should clearly identify and describe the area of impact, provide an assessment of potential impacts and mitigation measures and involve meaningful consultations with affected people and other relevant stakeholders. It should include a comprehensive and practical EMP and EMOP and clear institutional arrangements for implementing them.

24. In accordance with the requirements of ADB's SPS while following the outline provided in Appendix 2, the IEE report must investigate the following list of issues provided below (but not limited to these). The ADB Environment Safeguards Sourcebook may also be referred to for further detailed guidance on requirements of the ADB SPS:

- i) Potential impacts on biodiversity including modified, natural, critical habitat and protected areas and necessary measures to minimize, mitigate and offset impacts in accordance with SR 1 of the SPS.
- ii) Landslide, erosion, slope stability issues and necessary engineering and bioengineering measures to address them
- iii) Potential impacts on air, noise, water and occupational health and whether they comply with the World Bank Environment Health and Safety (EHS) guidelines or the national standards (whichever is more stringent). Quantitative analysis on these potential impacts may be carried out to the extent possible.
- iv) Calculations on greenhouse gas emissions from the project may be carried out using appropriate tools such as TEEMP or others as given in the ADB Environment Safeguards Sourcebook
- v) Potential waste issues including excavated spoil, hazardous materials and wastes and appropriate measures for their disposal, treatment and other forms of management in accordance with the World Bank EHS guidelines on occupational and community health and safety.
- vi) Climate change impacts and risks and recommendations for adaptation as well as mitigation
- vii) Occupational Health and Safety issues and measures for the construction workers as well as the local communities in and around the project site including road safety issues for the local communities in accordance with the

- World Bank EHS guidelines on occupational and community health and safety.
- viii) Cumulative and Induced Impacts of the project in light of existing environment, ongoing development projects and planned projects in the near future
  - ix) Potential impacts on physical and cultural resources and measures to avoid, minimize or mitigate impacts in accordance with SR 1 of the SPS.
  - x) Grievance Redressal Mechanism to address concerns and grievances of the affected people in the course of the project cycle.

#### **IV. CONSULTATION, INFORMATION DISCLOSURE AND GRIEVANCE REDRESS MECHANISM**

##### **A. Consultation**

25. Meaningful public consultations as defined in the SPS will be held early on and continuously throughout the project development stage to allow the incorporation of relevant views of the stakeholders in the final project road design, mitigation measures, implementation issues, and enhance the distribution of benefits. Stakeholders will include project beneficiaries, local affected people, government bodies, and non-governmental organizations where relevant. The consultations must encourage participation of women and vulnerable groups (handicapped people, senior citizens, school children) and engage as many stakeholders as possible.

26. Consultations will be carried out in an environment free of influences through focus group discussions and/or household level or key person interviews which will start with the description of the anticipated project road design and initial identification of potential impacts. These consultations must be completed before finalization of the respective subproject. The proceedings must be documented in the IEE report with clear information on: dates and location of consultation, type of consultation, numbers of men and women consulted, feedback and concerns raised during the consultations and actions taken to address the concerns in the project design.

##### **B. Information Disclosure**

27. As per requirements of the SPS in all subprojects for which an IEE report has been prepared, disclosing the report in an appropriate manner to the public will be the responsibility of the MPRDC. The MPRDC will be responsible for ensuring that all environmental safeguards related documents, including environmental monitoring reports, are properly and systematically kept as part of the subproject-specific records.

28. All environmental documents are subject to ADB's Public Communication Policy 2011. Therefore, these should be made available upon request. The IEE report will be disclosed to the public through the ADB website before the approval of the respective subproject for ADB financing. Information on the project scope and grievance redress mechanism will also be made available to relevant stakeholders as part of the consultation process. Semi-annual environmental monitoring reports will be disclosed to the public through the ADB website.

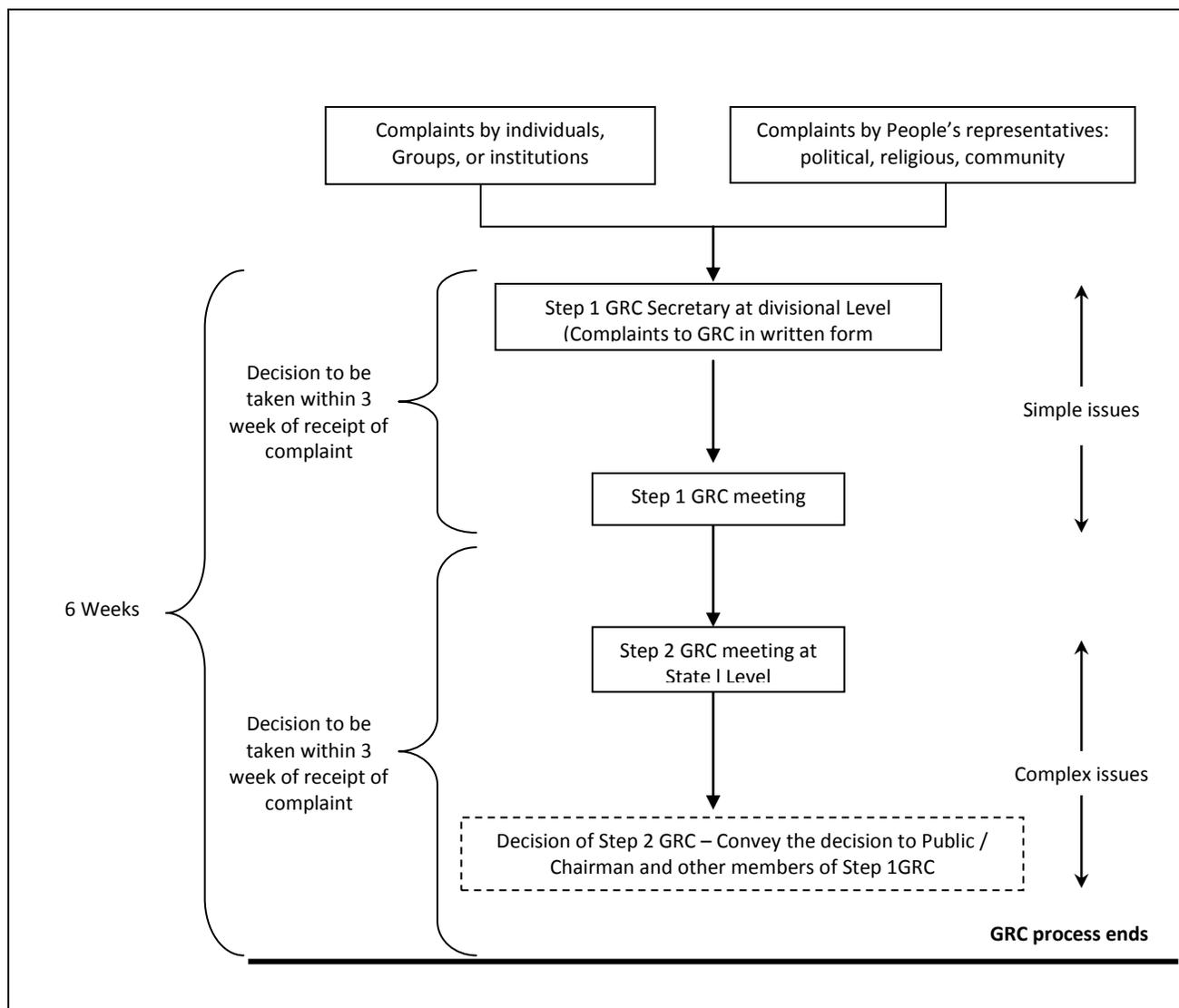
##### **C. Grievance Redress Mechanism (GRM)**

29. The grievance and outcome related to the implementation of the project, particularly

regarding the environmental management plan will be acknowledged, evaluated, and responded to the complainant with corrective action proposed. The outcome shall also form part of the semi-annual environmental monitoring report that will be submitted to ADB. Complaints may be lodged verbally directly to the contractor or CSC or PIU at the site level. To the extent possible efforts will be made by the contractor, CSC or PIU to address these complaints immediately on site. Only those complaints that cannot be addressed immediately at the site level will be submitted to the Grievance Redress Committee (GRC). Necessary assistance for completing the complaint form or lodging a written complaint will be made to illiterate complainants by the respective receiver of the complaint. A Grievance GRC will be established at the MPRDC state level and at the PIU level to assure accessibility for Affected Persons. The GRCs are expected to resolve grievances of the eligible persons within a stipulated time. The decision of the GRCs will be binding, unless vacated by the court of law.

30. The State level GRC will comprise of the:
  - i) General Manager, MPRDC, Bhopal
  - ii) Superintended Engineer, PWD, Bhopal
  - iii) DGM, MPRDC, Bhopal
  - iv) Manager (Environment & Social) , MPRDC, Bhopal
  
31. The PIU level GRC will comprise of the:
  - i) Divisional Manager from MPRDC
  - ii) Executive Engineer, local PWD office
  - ii) A representative from local NGOs or a local person of repute and standing in the society, elected representative from Zila Parisad /District Council.
  - iii) A representative for women from a relevant agency which could be from the government, or NGO or local community
  
32. One of the above members in the PIU level GRC will be a woman. The GRC will continue to function, for the benefit of the APs, during the entire life of the project including the five year maintenance period. Figure 1 defines the process of the GRM. An information sheet on GRM procedures including a sample form for submitting complaints in the local language is attached in Appendix 4.

**Figure 1: Grievance Redress Mechanism**



## VI. INSTITUTIONAL ARRANGEMENTS AND RESPONSIBILITIES

33. The Executing Agency for the project will be GoMP through MPRDC. MPRDC is wholly owned by GoMP and has been equipped with adequate capacity to implement the project. A Chief Engineer (CE) at MPRDC headquarter has been designated as person in charge for project implementation. The Environmental and Social cell (ESC) at MPRDC headquarters, reporting to the Chief Engineer, will be responsible for ensuring compliance with environmental and social safeguards of all roads under the project. This cell currently has only one officer to cover both social and environment safeguards. To support this officer, two more social safeguard officers and one environmental safeguard officer will be appointed or recruited. This will allow the ESC to have a total of four officers, 2 for social safeguards and 2 for environment safeguards.

34. MPRDC has ten division offices (Bhopal, Jabalpur, Sagar, Gwalior I, Gwalior II, Ujjain, Indore I, Indore II, Rewa I, and Rewa II) acting as Project Implementation Units

(PIUs). Each PIU is headed by a Divisional Manager (Tech.) who is responsible for project implementation at the field level. Each PIU will be responsible for one or more contracts depending on the location of the sub projects, and one project manager will be assigned for each contract package. The project manager will be delegated adequate technical and administrative authority for expeditious project implementation. In each PIU one of the Assistant Engineers or Managers under the Divisional Manager will be appointed as the social and environment safeguards focal person. MPRDC will engage Construction Supervision Consultants to act as the engineer for the construction contracts. An environmental specialist from the CSC will provide technical support to MPRDC and the PIU for implementation of environment safeguards under the project. The detailed responsibilities of MPRDC, PIUs, CSC, contractor and ADB are provided in the following sections.

#### **A. MPRDC's Responsibilities**

35. MPRDC will be responsible for the following:

- i. Ensure that Project complies with ADB's SPS and GOI's laws and regulations
- ii. Ensure that the project complies with all environment safeguard requirements as given in this EARF
- iii. Prepare IEE reports including EMP as may be required and hire an environmental consultant as required
- iv. Prepare the Rapid Environmental Assessment screening checklist (appendix 1) and forward this checklist to ADB for evaluation and confirmation of the project category;
- v. Based on the confirmation of the environmental categorization of the subprojects, prepare TORs to conduct IEE studies including preparation of EMP and Environmental Monitoring Plan in accordance with the environmental policy principles and safeguard requirements under the ADB SPS;
- vi. Ensure that the preparation of environmental studies will be completed with meaningful consultations with affected people and other concerned stakeholders, including civil society throughout the project preparation stages as required by the ADB SPS
- vii. Undertake initial review of the IEE and EMP reports to ensure its compliance with the Government's and ADB's requirement;
- viii. Review the budgetary needs for complying with the Government's and ADB's requirements on environment safeguards and ensure the proposed budget is in line with table 4.
- ix. Obtain necessary consents or permissions (e.g. environment permission, forest clearance) from relevant Government Agencies to minimize risks to the environment and mitigate environmental impacts associated. Also ensure that all necessary regulatory clearances will be obtained prior to commencing any civil work of the subproject;
- x. Submit to ADB the final IEE including EMP reports with consent letter for disclosure of the report on the ADB website
- xi. Ensure that the EMP which includes required mitigation measures and monitoring requirements forms part of bidding document after seeking concurrence from ADB. EMP items may be included in the Bill of Quantities (BOQ) as necessary. For example if a subproject is required to construct

- noise barriers, the costs will need to be included in the BOQ;
- xii. Ensure that contractors have access to the IEE report including EMP of the subprojects;
- xiii. Organize training and awareness programs on implementation of environment safeguards for relevant staff of MPRDC, PIU, CSC and contractors
- xiv. Ensure that contractors understand their responsibilities to mitigate environmental problems associated with their construction activities
- xv. Ensure and Monitor that the EMP including Environmental Monitoring Plan will be properly implemented;
- xvi. In case of unanticipated environmental impacts during project implementation stage arrange to prepare and implement an updated EMP to account for such impacts after seeking concurrence from ADB. The updating shall be carried out after due consultation with the stake holders;
- xvii. In case during project implementation a subproject needs to be realigned, review the environmental classification and revise accordingly, and identify whether supplementary IEE study is required. If it is required, prepare the TOR for undertaking supplementary IEE and hire an environment consultant to carry out the study;
- xviii. Ensure that construction workers work under safe and healthy working environment in accordance with the World Bank EHS guidelines relating to occupational health and safety;
- xix. Ensure effective implementation of Grievance Redress Mechanism to address affected people's concerns and complaints, promptly, using understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people;
- xx. Submit semi-annual monitoring reports for all sub-projects on the implementation of EMPs to ADB for disclosure on the ADB website. The suggested outline of the monitoring report is provided in appendix 3;
- xxi. Ensure proper implementation of corrective action plan if identified in the monitoring report; and
- xxii. Disclose information as defined in this EARF.

## **B. PIU Responsibilities**

- 36. Each PIU will be responsible for the following activities:
  - i. Ensure that Project complies with ADB's SPS and GOI's laws and regulations
  - ii. Ensure that the project complies with all environment safeguard requirements as given in this EARF
  - iii. Obtain necessary consents or permissions (e.g. forest clearance, no objection certificate) from relevant Government Agencies. Also ensure that all necessary regulatory clearances will be obtained prior to commencing any civil work of the subproject;
  - iv. Ensure that contractors have access to the IEE report including EMP of the subprojects;
  - v. Ensure that contractors understand their responsibilities to mitigate environmental problems associated with their construction activities
  - vi. Participate in training and awareness programs on implementation of environment safeguards and organize further on the job or subject specific training for the contractor during project implementation as necessary with the support of the CSC environmental specialist
  - vii. Conduct regular on site monitoring to ensure proper implementation of the

- viii. EMP including Environmental Monitoring Plan;
- ix. Verify and approve monitoring checklists and/or reports that will be prepared and submitted by the CSC
- x. In case of unanticipated environmental impacts during project implementation stage, identify the need to prepare and implement an updated EMP to account for such impacts after seeking concurrence from ADB.
- xi. Ensure that construction workers work under safe and healthy working environment in accordance with the World Bank EHS guidelines relating to occupational health and safety;
- xii. Ensure effective implementation of Grievance Redress Mechanism in accordance with the steps given in figure 1 to address affected people's concerns and complaints, promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people;
- xiii. Ensure timely submission of semi-annual monitoring reports for all sub-projects on the implementation of EMPs to MPRDC for further submission to ADB for disclosure on the ADB website; and
- xiii. Ensure proper implementation of corrective action plan if identified in the monitoring report

### **C. CSC Responsibilities**

37. The CSC will be responsible for the following activities:
- i. Ensure that Project complies with ADB's SPS and GOI's laws and regulations
  - ii. Ensure that the project complies with all environment safeguard requirements as given in this EARF
  - iii. Provide necessary technical advice and support to the PIU and/or contractor to obtain consents or permissions (e.g. forest clearance, no objection certificate) from relevant Government Agencies. Also ensure that all necessary regulatory clearances will be obtained prior to commencing any civil work of the subproject;
  - iv. Ensure that contractors have access to the IEE report including EMP of the subprojects;
  - v. Ensure that contractors understand their responsibilities to mitigate environmental problems associated with their construction activities
  - vi. Closely coordinate and communicate with the contractor to facilitate implementation of all mitigation measures identified in EMP
  - vii. Conduct training and awareness programs on implementation of environment safeguards for MPRDC, PIU and the contractors during the pre-construction stage and further organize on the job or subject specific training for the contractor during project implementation as necessary
  - viii. Conduct regular on site monitoring to ensure proper implementation of the EMP including Environmental Monitoring Plan;
  - ix. Prepare monitoring checklists and/or reports based on the site monitoring and submit them to the PIU for approval
  - x. In case of unanticipated environmental impacts during project implementation stage, upon the advice from the PIU and/or MPRDC prepare an updated EMP to account for such impacts after seeking concurrence from ADB.
  - xi. Ensure that construction workers work under safe and healthy working environment;
  - xii. Facilitate effective implementation of the Grievance Redress Mechanism in accordance with the steps given in figure 1 to address affected people's

- concerns and complaints, promptly, using an understandable and transparent process that is gender responsive, culturally appropriate, and readily accessible to all segments of the affected people;
- xiii. Prepare semi-annual monitoring reports for all sub-projects on the implementation of EMPs for submission to PIU and MPRDC and further submission to ADB for disclosure on the ADB website

#### **D. Contractor's Responsibilities**

38. The contractor will be responsible for the following activities:
- i. Ensure that adequate budget provisions are made for implementing all mitigation measures specified in the EMP
  - ii. Participate in training and awareness programs on implementation of environment safeguards
  - iii. Identify further needs for conduction of on the job or subject specific training during project implementation by the CSC or MPRDC or PIU
  - iv. Obtain necessary environmental permission etc. from relevant agencies as specified by EARF for project road works, quarries, hot-mix plant etc. prior to commencement of civil works contracts
  - v. Implement all mitigation measures as given in the EMP in the contract documents
  - vi. Ensure that all workers, site agents, including site supervisors and management participate in training sessions organized by the PIU, MPRDC or CSC.
  - vii. Ensure compliance with environmental statutory requirements and contractual obligations
  - viii. Respond promptly to grievances raised by the local community or any stakeholder and implement environmental corrective actions or additional environmental mitigation measures as necessary.
  - ix. Based on the results of EMP monitoring, cooperate with the PIU and CSC to implement environmental corrective actions and corrective action plans, as necessary.

#### **E. ADB's Responsibilities**

39. ADB is responsible for the following:
- i. Review REA checklist and endorse or modify the project classification proposed by the MPRDC;
  - ii. Review IEE reports, including this environmental assessment and review framework, and disclose draft and final reports through ADB's website as required;
  - iii. Issue subproject's approval based on the respective IEE reports;
  - iv. Monitor implementation of environment safeguard requirements under the project through due diligence missions;
  - v. Provide assistance to MPRDC, if required, in carrying out its responsibilities for implementing environment safeguards and for building capacity for safeguard compliance;
  - vi. Review and approve semi-annual environmental monitoring reports submitted by MPRDC and disclose them on the ADB website
  - vii. Monitor MPRDC's commitments under EARF

## F. Environment Management Costs

40. Budget requirements for implementing this EARF includes costs for i) screening and categorization and preparation of IEE reports and EMP for each sub-project, and (ii) institutional and capacity building activities. Table 4 serves as a guide on the allocation and planning of budget for implementing the requirements of this EARF. The budget amount provided are rough estimates and maybe adjusted based on the scope and needs of each subproject.

**Table 4: Budget Plan for each Subproject**

| No. | Activity  | Budget Source             | Approximate amount   | Budget purpose   |
|-----|---|---------------------------|--|--|
| 1.  | Screening, categorization, preparation of IEE and EMP   | MP State Government / ADB |  | Consultant Fees  |
| 2.  | Institutional and Capacity Building<br><br>Recruitment of 1 environment safeguards officer and 2 social safeguards officers in the ESC of MPRDC<br><br>Training/workshops | MPRDC<br><br>MPRDC/ADB    | Included in project management budget under government contribution<br><br>INR 50,000 per training program | Salary for safeguard officers<br><br>Logistical costs, fees for resource persons   |
| 3.  | Monitoring implementation of EMP and preparation of monitoring reports  | ADB loan                  |  | Covered under budget allocation for consultancy fees for CSC. In kind support for supervision and monitoring will be provided by ESC of MPRDC and PIUs |

## VII. MONITORING AND REPORTING

41. MPRDC has the responsibility for undertaking environmental due diligence and monitoring the implementation of environmental mitigation measures for all sub-projects. The monitoring reports on implementation of the environmental management plan needs to be documented systematically. ADB must be given access to undertake environmental due diligence for all sub-projects, if needed. The monitoring reports will document progress made in EMP implementation, with particular attention to compliance with each component of EMP. The MPRDC will submit semi-annual monitoring reports for all subprojects to the ADB.

42. Monitoring during construction and operation will be the responsibility of the MPRDC. Monitoring will relate to compliance with construction contracts, effectiveness of mitigation measures, and complaints (also known as "project performance monitoring"), and the state and health of nearby environmental resources (also known as "ambient environmental monitoring"). Ambient monitoring will follow the approach to selecting quantitative standards, as recommended in the ADB's SPS 2009. The monitoring reports must also include quantitative records on numbers of construction related accidents during construction and maintenance and traffic related accidents before start of construction, during construction and during operation.

## APPENDICES

### Appendix 1: ADB Rapid Environmental Assessment (REA) Checklist for Roads and Highways

**Instructions:**

- (i) The project team completes this checklist to support the environmental classification of a project. It is to be attached to the environmental categorization form and submitted to the Environment and Safeguards Division (RSES), for endorsement by Director, RSES and for approval by the Chief Compliance Officer.
- (ii) This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB's (a) checklists on involuntary resettlement and Indigenous Peoples; (b) poverty reduction handbook; (c) staff guide to consultation and participation; and (d) gender checklists.
- (iii) Answer the questions assuming the "without mitigation" case. The purpose is to identify potential impacts. Use the "remarks" section to discuss any anticipated mitigation measures.

**Country/Project Title:**

**Sector Division:**


| Screening Questions   | Yes | No | Remarks |
|---|-----|----|---------|
| <b>A. Project Siting</b><br>Is the project area adjacent to or within any of the following environmentally sensitive areas? |     |    |         |
| ▪ Cultural heritage site  |     |    |         |
| ▪ Protected Area  |     |    |         |
| ▪ Wetland   |     |    |         |
| ▪ Mangrove  |     |    |         |
| ▪ Estuarine   |     |    |         |
| ▪ Buffer zone of protected area   |     |    |         |
| ▪ Special area for protecting biodiversity  |     |    |         |
| <b>B. Potential Environmental Impacts</b><br>Will the Project cause...  |     |    |         |
| ▪ encroachment on historical/cultural areas; disfiguration of landscape by road embankments, cuts, fills, and quarries?     |     |    |         |

| Screening Questions  | Yes | No | Remarks |
|--|-----|----|---------|
| <ul style="list-style-type: none"> <li>▪ encroachment on precious ecology (e.g. sensitive or protected areas)?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ alteration of surface water hydrology of waterways crossed by roads, resulting in increased sediment in streams affected by increased soil erosion at construction site?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ increased local air pollution due to rock crushing, cutting and filling works, and chemicals from asphalt processing?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during project construction and operation during project construction and operation?</li> </ul> |     |    |         |
| <ul style="list-style-type: none"> <li>▪ noise and vibration due to blasting and other civil works?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ dislocation or involuntary resettlement of people?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ dislocation and compulsory resettlement of people living in right-of-way?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ disproportionate impacts on the poor, women and children, Indigenous Peoples or other vulnerable groups?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ other social concerns relating to inconveniences in living conditions in the project areas that may trigger cases of upper respiratory problems and stress?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ hazardous driving conditions where construction interferes with pre-existing roads?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ poor sanitation and solid waste disposal in construction camps and work sites, and possible transmission of communicable diseases (such as STI's and HIV/AIDS) from workers to local populations?</li> </ul>                        |     |    |         |
| <ul style="list-style-type: none"> <li>▪ creation of temporary breeding habitats for diseases such as those transmitted by mosquitoes and rodents?</li> </ul>  |     |    |         |

| Screening Questions  | Yes | No | Remarks |
|--|-----|----|---------|
| <ul style="list-style-type: none"> <li>▪ accident risks associated with increased vehicular traffic, leading to accidental spills of toxic materials?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ increased noise and air pollution resulting from traffic volume?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ increased risk of water pollution from oil, grease and fuel spills, and other materials from vehicles using the road?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ social conflicts if workers from other regions or countries are hired?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ large population influx during project construction and operation that causes increased burden on social infrastructure and services (such as water supply and sanitation systems)?</li> </ul>  |     |    |         |
| <ul style="list-style-type: none"> <li>▪ risks to community health and safety due to the transport, storage, and use and/or disposal of materials such as explosives, fuel and other chemicals during construction and operation?</li> </ul>   |     |    |         |
| <ul style="list-style-type: none"> <li>▪ community safety risks due to both accidental and natural causes, especially where the structural elements or components of the project are accessible to members of the affected community or where their failure could result in injury to the community throughout project construction, operation and decommissioning.</li> </ul> |     |    |         |

## A Checklist for Preliminary Climate Risk Screening

**Country/Project Title:**

**Sector :**

**Subsector:**

**Division/Department:**

| Screening Questions                   |  | Score | Remarks <sup>4</sup> |
|---------------------------------------|--|-------|----------------------|
| <b>Location and Design of project</b> | Is siting and/or routing of the project (or its components) likely to be affected by climate conditions including extreme weather related events such as floods, droughts, storms, landslides?   |       |                      |
|                                       | Would the project design (e.g. the clearance for bridges) need to consider any hydro-meteorological parameters (e.g., sea-level, peak river flow, reliable water level, peak wind speed etc)?  |       |                      |
| <b>Materials and Maintenance</b>      | Would weather, current and likely future climate conditions (e.g. prevailing humidity level, temperature contrast between hot summer days and cold winter days, exposure to wind and humidity hydro-meteorological parameters likely affect the selection of project inputs over the life of project outputs (e.g. construction material)? |       |                      |
|                                       | Would weather, current and likely future climate conditions, and related extreme events likely affect the maintenance (scheduling and cost) of project output(s) ?   |       |                      |
| <b>Performance of project outputs</b> | Would weather/climate conditions, and related extreme events likely affect the performance (e.g. annual power production) of project output(s) (e.g. hydro-power generation facilities) throughout their design life time?   |       |                      |

Options for answers and corresponding score are provided below:

| Response    | Score |
|-------------|-------|
| Not Likely  | 0     |
| Likely      | 1     |
| Very Likely | 2     |

Responses when added that provide a score of 0 will be considered low risk project. If adding all responses will result to a score of 1-4 and that no score of 2 was given to any single response, the project will be assigned a medium risk category. A total score of 5 or more (which include providing a score of 1 in all responses) or a 2 in any single response, will be categorized as high risk project.

**Result of Initial Screening (Low, Medium, High):** \_\_\_\_\_

**Other Comments:** \_\_\_\_\_

**Prepared by:** \_\_\_\_\_

<sup>4</sup> If possible, provide details on the sensitivity of project components to climate conditions, such as how climate parameters are considered in design standards for infrastructure components, how changes in key climate parameters and sea level might affect the siting/routing of project, the selection of construction material and/or scheduling, performances and/or the maintenance cost/scheduling of project outputs.

## **Appendix 2: Outline of an Initial Environmental Examination (IEE) Report**

1. An initial environmental examination (IEE) report is required for all environment category B projects. Its level of detail and comprehensiveness is commensurate with the significance of potential environmental impacts and risks.

2. A typical IEE report contains many of the same major elements as an EIA, but may have a narrower scope and depth of analysis. The substantive aspects of this outline will guide the preparation of IEE reports, although not necessarily in the order shown.

### **A. Executive Summary**

3. This section describes concisely the critical facts, significant findings, and recommended actions.

### **B. Introduction**

4. This section provides a brief background and context of the project.

### **C. Policy, Legal, and Administrative Framework**

5. This section summarizes the national and local legal and institutional framework within which the environmental assessment is carried out. It also identifies project-relevant international environmental agreements to which the country is a party.

### **A. Description of the Project**

6. This section describes the proposed project; its major components; and its geographic, ecological, social, and temporal context, including any associated facility required by and for the project (for example, access roads, power plants, water supply, quarries and borrow pits, and spoil disposal). It normally includes drawings and maps showing the project's layout and components, the project site, and the project's area of influence.

### **B. Description of the Environment (Baseline Data)**

7. This section describes relevant physical, biological, and socioeconomic conditions within the study area, and may be based largely on secondary data if relevant and accurate secondary data is available. It also looks at current and proposed development activities within the project's area of influence, including those not directly connected to the project. It indicates the accuracy, reliability, and sources of the data.

### **C. Anticipated Environmental Impacts and Mitigation Measures**

8. This section predicts and assesses the project's likely positive and negative direct and indirect impacts to physical, biological, socioeconomic (including occupational health and safety, community health and safety, vulnerable groups and gender issues, and impacts on livelihoods through environmental media, climate risks in the context of mitigation and adaptation, and physical cultural resources in the project's area of influence, in quantitative

terms to the extent possible; identifies mitigation measures and any residual negative impacts that cannot be mitigated; explores opportunities for enhancement; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions and specifies topics that do not require further attention; and examines global, transboundary, and cumulative impacts as appropriate.

#### **D. Information Disclosure, Consultation, and Participation**

9. This section:
- (i) describes the process undertaken during project design and preparation for engaging stakeholders, including information disclosure and consultation with affected people and other stakeholders;
  - (ii) summarizes comments and concerns received from affected people and other stakeholders and how these comments have been addressed in project design and mitigation measures, with special attention paid to the needs and concerns of vulnerable groups, including women, the poor, and Indigenous Peoples; and
  - (iii) describes the planned information disclosure measures (including the type of information to be disseminated and the method of dissemination) and the process for carrying out consultation with affected people and facilitating their participation during project implementation.

#### **E. Grievance Redress Mechanism**

10. This section describes the grievance redress framework (both informal and formal channels), setting out the time frame and mechanisms for resolving complaints about environmental performance.

#### **F. Environmental Management Plan**

11. This section deals with the set of mitigation and management measures to be taken during project implementation to avoid, reduce, mitigate, or compensate for adverse environmental impacts (in that order of priority). It may include multiple management plans and actions. It includes the following key components (with the level of detail commensurate with the project's impacts and risks):

- (i) Mitigation:
  - (a) identifies and summarizes anticipated significant adverse environmental impacts and risks;
  - (b) describes each mitigation measure with technical details, including the type of impact to which it relates and the conditions under which it is required (for instance, continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; and
  - (c) provides links to any other mitigation plans (for example, for involuntary resettlement, Indigenous Peoples, or emergency response) required for the project.
- (ii) Monitoring:
  - (a) describes monitoring measures with technical details, including parameters to be measured, methods to be used, sampling locations,

- frequency of measurements, detection limits and definition of thresholds that will signal the need for corrective actions; and
- (b) describes monitoring and reporting procedures to ensure early detection of conditions that necessitate particular mitigation measures and document the progress and results of mitigation.
- (iii) Implementation arrangements:
  - (a) specifies the implementation schedule showing phasing and coordination with overall project implementation;
  - (b) describes institutional or organizational arrangements, namely, who is responsible for carrying out the mitigation and monitoring measures, which may include one or more of the following additional topics to strengthen environmental management capability: technical assistance programs, training programs, procurement of equipment and supplies related to environmental management and monitoring, and organizational changes; and
  - (c) estimates capital and recurrent costs and describes sources of funds for implementing the environmental management plan.
- (iv) Performance indicators: describes the desired outcomes as measurable events to the extent possible, such as performance indicators, targets, or acceptance criteria that can be tracked over defined time periods.

## **G. Conclusion and Recommendations**

12. This section provides the conclusions drawn from the assessment and provides recommendations.

### Appendix 3: Outline of an Environmental Monitoring Report

#### A. Introduction

(Report Purpose, Brief project background including organizational set up, list of roads, planned project schedule etc., Details on Project Implementation Progress with details on current site works, location, earthworks, vegetation clearing, spoils disposal, establishment of construction camp and other construction related facilities (e.g., concrete mixing plant, asphalt batching plant, crushing plant, etc.), establishment and operation of quarry/borrow areas, etc., including locations, schedules, dates, etc., Schedule of construction activities for the subsequent months)

#### B. Compliance on Environment Safeguards Requirements

(Status of compliance with ADB loan covenants: provide a list of environmental loan covenants and specify level of compliance)

Status of compliance with government environmental requirements: provide a list of government environmental requirements (permits, etc.) for the project as well as construction-related facilities/ activities and specify level of compliance, indicate any required environmental permit/license/consent obtained to date and to be obtained (including schedule) for the project and construction related facilities/activities)

#### C. Changes in project scope

(Such as change in alignment or footprint in case of horizontal infrastructure, implementation of additional Project component/s, etc. (with reference to the Project scope identified in the ADB-cleared environmental assessment report , i.e., IEE or EIA) and corresponding safeguard measures undertaken, if applicable)

#### D. Implementation of Environmental Management Plan

(Indicate the manner by which EMP requirements are incorporated into contractual arrangements, such as with contractors or other parties.

Summary of Environmental Mitigations and Compensation Measures Implemented

Based on EMP; may include measures related to air quality, water quality, noise quality, pollution prevention, biodiversity and natural resources, health and safety, physical cultural resources, capacity building, and others. Provide a table/matrix showing a summary of each environmental mitigation measure specified in the EMP.

| EMP Requirement (list all mitigation measures specified in the EMP) | Compliance Attained (Yes, No, Partial) | Comment on Reasons for Partial or Non-Compliance | Issues for Further Action and Target Dates |
|---|--|--|--|
| 1.  |  |  |  |
| 2.  |  |  |  |
| 3.  |  |  |  |
| etc.  |  |  |  |

## E. Environmental Monitoring Activities

(Compliance Inspections, Summary of Inspection Activities, Mitigation Compliance<sup>5</sup> Mitigation Effectiveness 6. Findings of Environmental Monitoring Plan (EMOP) on quality of air, noise, water etc. and Results Assessment<sup>7</sup>)

## F. Key Environmental Issues

(Key Issues Identified (e.g., non-compliance to loan covenants, EMP and/or government environmental requirements, insufficient mitigation measures to address Project impacts, incidents, accidents, etc.) Actions Taken and Corrective Action Plan (specify actions taken and corrective action plans to be implemented to address non-compliance and other identified issues. Such action plan should provide details of specific actions to be undertaken to resolve identified issues, responsible persons who will carry out such actions and timeframe/target date to carry out and complete required actions. The action plan could be presented in a tabular/matrix form (see below). Timeframe and responsibilities for reporting to ADB on the progress of implementation of corrective action plan should also be specified under this section.)

---

<sup>5</sup> Overall compliance with mitigation implementation requirements could be described in qualitative terms or be evaluated based on a ranking system, such as the following:

1. Very Good (all required mitigations implemented)
2. Good (the majority of required mitigations implemented)
3. Fair (some mitigations implemented)
4. Poor (few mitigations implemented)
5. Very Poor (very few or no mitigations implemented)

Additional explanatory comments should be provided as necessary.

<sup>6</sup> Effectiveness of mitigation implementation could be described in qualitative terms or be evaluated based on a ranking system, such as the following:

1. Very Good (mitigations are fully effective)
2. Good (mitigations are generally effective)
3. Fair (mitigations are partially effective)
4. Poor (mitigations are generally ineffective)
5. Very Poor (mitigations are completely ineffective)

Additional explanatory comments should be provided as necessary.

<sup>7</sup> Discharge levels should be compared to the relevant discharge standards and/or performance indicators noted in the EMP. Any exceedences should be highlighted for attention and follow-up. In addition, discharge levels could be compared to baseline conditions (if baseline data is available) and described in qualitative terms or be evaluated based on a ranking system, such as the following:

1. Very Good (overall conditions are generally improved)
2. Good (conditions are maintained or slightly improved)
3. Fair (conditions are unchanged)
4. Poor (conditions are moderately degraded)
5. Very Poor (conditions are significantly degraded)

Additional explanatory comments should be provided as necessary.

| Issue                            | Cause | Required Action | Responsibility | Timing (Target Dates) | Description of Resolution and Timing (Actual) |
|----------------------------------|-------|-----------------|----------------|-----------------------|---|
| Old Issues from Previous Reports |       |                 |                |                       |   |
| 1.                               |       |                 |                |                       |   |
| 2.                               |       |                 |                |                       |   |
| New Issues from this Report      |       |                 |                |                       |   |
| 1.                               |       |                 |                |                       |   |
| 2.                               |       |                 |                |                       |   |

Complaints: Details of Complaint/s (Provide details of any complaints that have been raised by the local population and other stakeholders regarding environmental performance and environmental impacts (complainant, nature of complaint, date complaint was filed, which office received the complaint, etc.)

Action Taken (Document how the complaints were addressed or will be addressed by indicating the following:

- i. names and designation of specific staff or officials within the Grievance Redress Committee, executing agency, project management unit, local government, contractor and/or supervision consultant involved in receiving, documenting, and resolving the complaint (s).
- ii. specific actions taken to be taken to resolve the complaint and corresponding timeframe

## G. Conclusion and Recommendation

Overall Progress of Implementation of Environmental Management Measures<sup>8</sup>

Problems Identified and Actions Recommended

Monitoring adjustment (recommended monitoring modifications based on monitoring experience/trends and stakeholders response)

## H. Appendices

Site Inspection / Monitoring Reports

Source and Ambient Monitoring Results (Laboratory Analysis)

Photographs

Location Map of Sampling Stations

Copies of Environmental Permits/Approvals

Other relevant information/documents

<sup>8</sup> Overall sector environmental management progress could be described in qualitative terms or be evaluated based on a ranking system, such as the following:

1. Very Good
2. Good
3. Fair
4. Poor
5. Very Poor

Additional explanatory comments should be provided as necessary.

## Appendix 4: GRM Information Sheet

### सहमति पत्र

(व्यक्तिगत रूप से हस्ताक्षर करने हेतु )

यह सहमति पत्र दिनांक .....2014 को श्री/श्रीमति .....  
निवासी .....(जिन्हे बाद में प्रथम पक्ष कहा जायेगा) एवं मध्य प्रदेश  
रोड डेवलपमेंट कारपोरेशन की तरफ से श्री.....(पद) .  
.....(जिन्हे बाद में द्वितीय पक्ष कहा जायेगा) के मध्य हस्ताक्षरित किया गया।

गवाहों/साक्षी की उपस्थिति में यह दस्तावेज निष्पादित किया गया है।

- 1- यह कि प्रथम पक्ष दुकान का स्वामी/किरायेदार/अतिक्रमणधारी /फेरी वाला है। तथा वह अपना .....व्यवसाय पिछले .....वर्षों से इस स्थान पर चला रहा है। दुकानदार इस दुकान का पददेदार है/नहीं है। प्रस्तावित सड़क के निर्माण के दौरान व्यवसाय का स्वामी/पददेदार का व्यवसाय तथा आमदनी सड़क निर्माण के दौरान बाधित होने की आशंका है। यह कालावधी 30 दिन से अधिक नहीं होगी।
- 2- यह कि प्रथम पक्ष ने मध्य प्रदेश जिला कनेक्टिविटी क्षेत्र परियोजना (MPDCSP) की आवश्यकताओं के तहत आयोजित सार्वजनिक लोक सहमति में भाग लिया है, रोड निर्माण से प्राप्त होने वाले लाभ को समझ लिया है एवं रोड निर्माण हेतु सहमति दे दी है।
- 3- यह कि प्रथम पक्ष द्वारा अपनी मर्जी से ग्राम.....तहसील .....में MPDCSP अंतर्गत रोड निर्माण विकास हेतु आपनी आजीविका में संभावित अस्थायी व्यवधान को देखते हुये भी सहमति प्रदान की है।
- 4- यह कि प्रथम पक्ष रोड निर्माण से होने वाले अस्थायी आजीविका व्यवधान के खिलाफ किसी भी प्रकार के मुआवजे का दावा नहीं करेगा।
- 5- यह कि द्वितीय पक्ष को अस्थायी आजीविका व्यवधान संबंधित सहमति स्वीकार है।

- 6- यह कि द्वितीय पक्ष निर्माण कार्य के दौरान रोड के समीप स्थित सभी व्यवसायिक इकाईयों को नुकसान से बचाने के लिये सभी संभव सावधनियां पूर्वक कार्य करेगा।
- 7- यह कि प्रथम पक्ष द्वारा द्वितीय पक्ष को यह आश्वासन दिया जाता है कि वह MPDCSP अंतर्गत रोड निर्माण को किसी प्रकार का नुकसान नहीं पहुँचायेगा, ना ही सार्वजनिक वाहनों के आवागमन में व्यवधान पैदा करेगा एवं ना ही ऐसे कार्यों में शामिल होगा।
- 8- यह कि दोनों पक्ष MPDCSP अंतर्गत प्रस्तावित इस रोड निर्माण हेतु सहमत है।
- 9- यह कि हस्ताक्षरित किये जाने की तारीख से यह सहमति पत्र प्रभावी होगा।

साक्षी/गवाहों की उपस्थिति में दोनों पक्षों ने उपर लिखित तारीख को इस पत्रक को हस्ताक्षरित किया है।

हस्ताक्षर प्रथम पक्ष

द्वितीय पक्ष की ओर से अधिकृत  
(मोहर सहित)

गवाह

गवाह

1- हस्ताक्षर.....

1- हस्ताक्षर.....

नाम -.....

नाम -.....

पूरा पता -.....

पूरा पता -.....

2-हस्ताक्षर.....

2. हस्ताक्षर.....

नाम -.....

नाम -.....

पूरा पता -.....

पूरा पता -.....

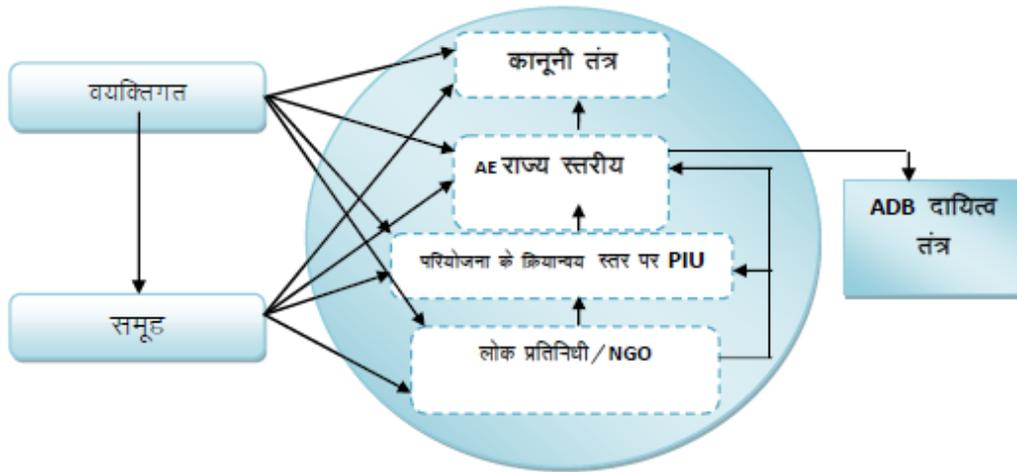
(गवाह/साक्षी में गांव के सरपंच, ग्राम पंचायत के सदस्य, डी.पी.आर. कंसलटेंट के प्रतिनिधि, गैर शासकीय संगठनों के प्रतिनिधि तथा ग्राम के बुजुर्ग/वरिष्ठ नागरिकों को शामिल किया जा सकता है)

### शिकायत निवारण तंत्र

- 5.1 सड़क निर्माण परियोजना से संबंधित विशेष शिकायत निवारण तंत्र (GRM) स्थापित किया जायेगा जिसके तहत विस्थापित व्यवसायिक इकाईयों, संबंधित शिकायतों, सामाजिक तथा पर्यावरण संबंधित शिकायतों का निराकरण करने की सुविधापरियोजना स्तर पर प्रदान की जायेगी, यह तंत्र सामाजिक तथा पर्यावरण संबंधी समस्या, शिकायत या शंकाओं के निवारण में सहायक सिद्ध होगा। यह परियोजना प्रभावित व्यक्तियों की शंकाओं तथा समस्या निराकरण करने के उद्देश्य से निर्मित किया गया है। GRM का उद्देश्य शासन की निवारण प्रक्रिया को नज़र अंदाज करना नहीं है बल्कि जन साधारण को निर्माण से होने वाले लाभ को बताना तथा पारदर्शिता के साथ समस्या तथा शंकाओं का निवारण करना है।
- 5.2 निवारण प्रक्रिया (RP) यह तंत्र प्रभावी तरीके से जन साधारण/लोक सामान्य को इस कार्य के लाभ बतलाते हुए सार्वजनिक सहमति प्राप्त करेगा शिकायत निवारण सहमति (GRC) एक समय सीमा में समस्या निवारण कार्य करेगी। कमेटी का निर्णय मा. न्यायालय के आदेश पूर्व बाह्यकारी होगा इस समिति को MPRDC के प्रबंध संचालक की अध्यक्षता में गठित किया जायेगा। PIU स्तर पर प्रबंधक (PM) पुर्नवास अधिकारी, NGO के प्रतिनिधि, समाज के प्रतिष्ठित व्यक्ति, जन प्रतिनिधि, जिला परिषद प्रतिनिधि, कमजोर तबके के व्यक्ति तथा 2 महिला प्रतिनिधि शामिल होंगे जो परियोजना कार्य पूर्ण होने तक पदस्थ रहेंगे।
- 5.3 शिकायत निवारण समिति द्वारा शिकायत के 3 सप्ताह के दौरान प्रतिक्रिया करेगी। निर्माण कार्य के पूर्व समस्त शिकायतों व शंकाओं का समाधान कर लिया जायेगा।

शिकायत निवारण समिति की बैठक 3 सप्ताह में कम से कम एक बार अवश्य होगी, माननीय न्यायालय के तहत स्वामित्व अधिकारी से संबंधित विवादों के अलावा यह समितित समस्त पुर्नवास स्थानान्तरण, मुआवजे के भुगतान तथा अन्य सहायता हेतु चरण बद्ध कार्य करेगी।

### शिकायत निवारण प्रक्रिया तंत्र





## अनुलग्न 1

**(B) शिकायत का प्रकार**

- घर की दीवार और छत को कंपन/विस्फोट/भारी वाहनों के कारण नुकसान
  - उपयोग में आ रही सड़क, पुलिया, नहरो को नुकसान
  - सड़क के उपयोग में आ रहे अवरोध
  - निजी संपत्ति को नुकसान
  - विस्फोट के कारण निजी या सार्वजनिक जल स्रोतों में जल स्तर की कमी या जल में प्रदूषण
  - व्यावसायिक इकाई को/ व्यावसायिक परिसर में नुकसान
  - दूषित जल का जमाव या बाढ़
  - घरों के समीप (सॉलिड) कचरे को फेंकना
  - मूर्तियां अथवा स्मारकों को नुकसान होने का भय
  - विस्थापना की स्थिति में वैकल्पिक भूमि या अधिग्रहित भूमि के मुआवजे के लिये अनुरोध पत्र
  - भूमि स्वामित्व के अधिकार संबंधित किसी प्रकार का विवाद
- 
- अधिग्रहित भूमि सीमा निर्धारण में अस्पष्टता (सीमा का निशान अस्पष्ट)
  - धूल, शोर और वायु संबंधित प्रदूषण
  - स्वयं आवागमन तथा पशुओं के आवागमन हेतु अतिरिक्त पुलिया की मांग।