Environmental Assessment and Review Framework

Project Number: 41444
July 2010

Viet Nam: Second Northern Greater Mekong Subregion Transport Network Improvement Project

Prepared by the Ministry of Transport for the Asian Development Bank

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### Abbreviations

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
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<tr>
<td>EARF</td>
<td>environmental assessment and review framework</td>
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<td>EIA</td>
<td>environmental impact assessment</td>
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<td>EMP</td>
<td>environmental management plan</td>
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<td>DONRE</td>
<td>Department of Natural Resources and Environment</td>
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<td>GOV</td>
<td>Government of Viet Nam</td>
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<td>GRM</td>
<td>grievance redress mechanism</td>
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<td>PPCTH</td>
<td>Provincial People's Committee Thanh Hoa</td>
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<td>IEE</td>
<td>initial environmental examination</td>
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<td>LEP</td>
<td>Law on Environmental Protection</td>
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<tr>
<td>PC</td>
<td>people's committee</td>
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<tr>
<td>PMU</td>
<td>project management unit</td>
</tr>
<tr>
<td>PMU 1</td>
<td>Project Management Unit number 1, MOT, Hanoi</td>
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<tr>
<td>PSC</td>
<td>project supervision consultant</td>
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<tr>
<td>PDOT</td>
<td>Provincial Department of Transport (Thanh Hoa)</td>
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<td>MONRE</td>
<td>Ministry of Natural Resources and Environment</td>
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<tr>
<td>MOT</td>
<td>Ministry of Transport</td>
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<tr>
<td>NGO</td>
<td>non-government organization</td>
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<td>REA</td>
<td>rapid environmental assessment</td>
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<td>SPS</td>
<td>ADB's Safeguard Policy Statement 2009</td>
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ENVIRONMENTAL ASSESSMENT AND REVIEW FRAMEWORK

A. Introduction

1. The Government of Viet Nam (GOV) has requested the Asian Development Bank (ADB) to provide financing to facilitate the upgrading of roads proposed in the technical assistance Preparing the Second Northern Greater Mekong Subregion Transport Network Improvement Project TA 6478 REG (2NGMSTNIP). The objective is to provide a comprehensive program to upgrade, rehabilitate and maintain the road QL217 in Viet Nam that links to Lao PDR and provide upgrading for some adjacent rural roads in the network. The scope is broadly as follows: (i) provide the detailed design to improve the road to the agreed standard of improvements for QL217; (ii) construct improvement over approximately 196 km of QL217 and create three new bypasses; (iii) improve operation and maintenance of QL217 and (iv) provide improvements to approximately 100 km of rural roads that link to QL217.

2. The executing agency for the improvement of QL217 is the Ministry of Transport (MOT) and the implementing agency will be Project Management Unit 1 (PMU1) in the MOT. For the improvement of the rural roads the executing agency (EA) is the Provincial Peoples Committee of Thanh Hoa Province (PPCTH) and the implementing agency will be the Provincial Department of Transport for Than Hoa Province (PDOT).

3. The improvement of QL217 will be approved as part of the loan processing but the rural roads will be selected after loan approval, possibly during implementation of QL217. Consistent with ADB's Safeguard Policy Statement 2009 (SPS 2009), this environmental assessment and review framework (EARF) has been developed for the rural roads components to be prepared after loan approval. The EARF shall guide the executing agency (PPCTH) and the implementing agency (PDOT) in terms of screening and categorization, environmental assessment, and preparation and implementation of safeguard plans (such as an environmental management plan or EMP) for rural roads.

4. The preparation of environmental assessment documents shall follow the procedures outlined in this EARF to ensure environmental impacts are appropriately addressed and mitigated to acceptable levels and provisions of SPS 2009 are complied with. This EARF has been agreed on by PPCTH and ADB.

5. The improvement of QL217 will entail alterations to the width in some places to improve road geometry and the existing road corridor (RoW of 25m either side) is ample for the proposed rehabilitation works. Improvement of QL217 has been categorized by ADB as environment category B. An initial environmental examination (IEE) following SPS 2009 has been prepared during loan processing.

6. The long list of candidate rural roads for improvement has been suggested by MOT based on a qualitative local needs assessment. The rural roads are all in Thanh Hoa Province. The roads have not been selected and improvements have not yet been designed in detail but the existing fair weather earth and gravel tracks will be improved at least to bring the selected roads up to an all weather gravel track standard and some may have a sprayed bitumen coating. The choice of rural roads for improvement and the necessary environmental assessments will be prepared by PPCTH and PDOT, with assistance from consultants, during the implementation of the improvement works for QL217 and prior to commencement of site works for rural roads.
B. Assessment of Legal Framework and Institutional Capacity

7. Viet Nam is party to several international environmental agreements. The Convention on biological diversity (1992) relates to preservation of habitats and the Convention on international trade in endangered species of wild fauna and flora (CITES) controls trade in wild animals and plants. These are of general relevance to the Project if the habitats, flora and fauna in areas to be accessed by the rural roads are located in or near areas protected by the conventions.

8. The environmental regulations of GOV and the rules, regulations, procedures and processes for environmental assessment of development activities are set out in the guidelines on Implementation of Law on Environmental Protection 2006 (LEP) that require an environmental impact assessment (EIA) for listed projects. Specifically, Decree 80/2006/ND-CP (dated 9 August 2006) and Decree 21-2008 (dated 28 February 2008 an amendment of and addition of articles of Decree 80-2006-ND-CP providing detailed regulations for implementation of the LEP) require EIA for projects such as construction of Level IV highways and upgrading of Level I, II and III highways. The Ministry of Natural Resources and Environment (MONRE) decides on the level of environmental assessment for projects not listed in the decrees. An IEE will be prepared for the rural roads for ADB and the IEE will be submitted to DONRE and ADB by PDOT. MONRE has generally delegated powers to the PPCTH Department of National Resources and Environment (DONRE) to approve environmental assessment required for some projects and MONRE will receive a copy of the environmental assessment of rural roads before construction commences. However, certain other activities commonly associated with construction of large infrastructure projects such as waste disposal, quarry operations, extraction of gravel or discharge of waste water, removal and replacement of trees etc., will also require permission from the relevant provincial level authorities in DONRE.

9. In Viet Nam, standards for pollution control and the protection of the environment are described in the QCVN/TCVN standards set under the Law on Environmental Protection. These standards will be referred to for air, noise and water quality monitoring during the environmental management of the project. There will also be project activities such as waste and spoil disposal, extraction of subsoil water and discharge of waste water which also require licenses that are issued at the provincial level by DONRE of the People’s Committee (PC) depending on the duration and scale of those activities. DONRE is the authority to decide on the permit requirements at the provincial level.

10. Prior to implementation of the Project, PDOT and PPCTH will need to comply with several environmental requirements of GOV. This includes disclosure of the Project to DONRE through submission of a report. PDOT has no environmental capability and environmental requirements are usually covered by external consultants. PDOT will require support from environmental consultants to comply with any further environmental studies required by DONRE and to prepare an environmental assessment consistent with this EARF and provisions of ADB's SPS 2009. To ensure proper implementation of EMP and regular reporting to ADB, the environmental assessment for Rural Roads shall include provisions, including budget estimates, for environmental management training/capacity building of PDOT staff and or retention of environmental consultants, if necessary. Environmental training will be undertaken by the selected project supervision consultant (PSC) through training workshops on ADB’s environmental safeguards requirements, international best practice on environmental management and monitoring, and health and safety issues. PDOT staff shall also undergo on-the-job training on monitoring of contractor's environmental performance and preparation of monitoring reports. The training will develop PDOT’s
environmental and safety capability for implementation of Rural Roads and other future components of the Than Hoa provincial road system.

C. Anticipated Environmental Impacts

11. Based on current information it is anticipated that the Rural Roads component will be environment category B. The minor environmental impacts will come from reconstructing and surfacing the Rural Roads. Environmental impacts will mainly arise during the construction phase and will require mitigation. Depending on the designs and construction methods, there will be typical construction impacts from the leveling and resurfacing of the roads. Dust and noise, waste disposal and water quality impacts arising during the construction and phases will have very manageable environmental impacts that will require mitigation. The residual impacts should be minor as the impacts will be mostly reversible. Health and safety hazards to workers and the public, elevated dust and noise levels, nuisance due to stockpiling of materials, and disruption of community services due to reprovisioning of drainage, sewerage and other utilities can be controlled through the implementation of an EMP to address predicted negative environmental impacts. The EMP will be provided in the environmental assessment for Rural Roads.

D. Environmental Assessments for Subprojects and/or Components

1. Environmental Criteria for Subproject Selection

12. The environmental assessment requirements to be followed for rural roads component as well as any additional components to be prepared after loan approval shall be consistent with ADB's SPS 2009. The environmental assessment report shall be prepared by PDOT and approved by ADB during the implementation of the improvements to QL217 and prior to commencement of any site works for rural roads.

13. The Pu Luong Nature reserve is found within 10 km of QL217. The component Rural Roads have not yet been selected. Rural roads running through the Pu Luong Nature Reserve and other similarly protected areas shall be excluded from the Project unless compliance with ADB's requirements on biodiversity conservation and sustainable resource management detailed in Appendix 1 (paragraphs 24 to 32) of ADB's SPS 2009 are complied with.

14. Subproject roads under the rural road component that are considered environment Category A as well as rural roads used for logging and/or mining shall be excluded from the Project.

2. Environmental Assessment

a. Screening

15. Environmental categorization for each rural road shall be determined by ADB. ADB's rapid environmental assessment (REA) checklist (Annex 1) shall be used for determining environmental categorization. Given that Category A rural roads shall be excluded, the subprojects to be identified and prepared after the loan approval may be assigned to one of the following categories:

(i) Category B. A proposed project is classified as category B and an IEE is required if its potential adverse environmental impacts are less adverse than those of category A projects. These impacts are site-specific, few if any of them are irreversible, and in most cases mitigation measures can be designed more readily than for category A projects.
(ii) **Category C.** A proposed project is classified as category C if it is likely to have minimal or no adverse environmental impacts. No environmental assessment is required although environmental implications need to be reviewed.

**b. Preparation of Environmental Assessment Report**

16. PDOT shall liaise with ADB's Regional Department to determine the specific requirements for environmental assessment of rural roads. The conduct of the environmental assessment shall be consistent with Appendix 1 (Safeguard Requirements 1: Environment) and Annex to Appendix 1 (Outline of an EIA Report) of ADB's SPS 2009. Appendix 1 outlines the requirements that borrowers/clients should meet when delivering environmental safeguards for projects supported by ADB. It discusses the objectives and scope of application, and underscores the requirements for undertaking the environmental assessment process. The document also includes particular environmental safeguard requirements pertaining to biodiversity conservation and sustainable management of natural resources, pollution prevention and abatement, occupational and community health and safety, and conservation of physical cultural resources. It also outlines specific environmental criteria to be used for subproject selection, for example, exclusion of subprojects which are included in the negative lists for procurement or those located in environmentally sensitive areas unless specific requirements in the SPS 2009 are met. The environmental assessment will follow the outline provided in **Annex 2**, which is specified in ADB’s SPS 2009.

17. The environmental assessment report shall include an EMP detailing the following: (i) mitigation measures for all identified adverse impacts during pre-construction, construction and operations stages of the Project, (ii) monitoring measures to assess environmental performance and impacts to ambient environment, (iii) implementation arrangements including responsibilities, schedule, capacity building program when necessary, estimated costs and source of funds.

18. During the construction works and commissioning of rural roads, if unexpected impacts arise, the environmental assessments will be reviewed and the EMP will be updated in response to any new assumptions on construction and operational issues or any unpredicted impacts.

**c. Consultation, Information Disclosure and Grievance Redress Mechanism**

(i) **Public Consultation**

19. As required under ADB's SPS 2009, public consultation is mandatory part of environmental assessment of Category A and Category B projects. The aim of the consultation is to gather environmental issues that stakeholders may have on the project and to ensure that valid concerns are addressed in the environmental assessment. PDOT shall undertake at least one public consultation for each rural road during IEE preparation. PDOT will carry out meaningful consultation with affected people and other concerned stakeholders, including civil society, during the conduct of environmental assessment for rural roads. PDOT will disclose in a timely manner, adequate information in a readily accessible form to the affected people. All the relevant views of affected people and other stakeholders arising from the consultation will be taken into account in project design, mitigation measures and the sharing of development benefits and opportunities. The environmental assessment for rural roads will document the results of public consultation by providing details of the environmental issues and concerns raised by stakeholders and by indicating how these will be addressed in the project design and mitigation measures. Proofs of consultations such as attendance sheets and minutes of meetings shall be included in the environmental assessment.
assessment. ADB shall determine if adequate public consultation has been made and may require additional consultations, as necessary.

(ii) Information Disclosure

20. Based on ADB requirements, the following safeguard documents to be prepared and submitted by PPCTH shall be posted on ADB website:

(i) final IEE, as approved by ADB, upon receipt from PPCTH;
(ii) new or updated environmental assessment reports if prepared to reflect significant changes in the project during design or implementation;
(iii) corrective action plan prepared during project implementation to address unanticipated environmental impacts and to rectify non-compliance to EMP provisions; and
(iv) semi-annual environmental monitoring reports submitted by PPCTH during project implementation upon receipt.

21. PDOT shall be responsible for ensuring that all environmental assessment documents and environmental monitoring reports are properly and systematically kept as part of the project records. PDOT shall prepare these documents in English for submission to ADB and make these documents available in a form, language and at a location in which they can be readily accessed by stakeholders.

(iii) Grievance Redress Mechanism

22. PDOT will establish a grievance redress mechanism (GRM) to facilitate resolution of complaints by affected people and grievances about the project’s environmental performance, in line with the requirement of ADB’s SPS 2009. The GRM will be coordinated by the designated PDOT officer with portfolio for environmental matters in liaison with the peoples committees at the district level. The public will be made aware of the relevant contact numbers and contact person in PDOT through media publicity and notice boards at the construction sites for the rural roads and local authority offices. The grievance mechanism will address affected people’s concerns and complaints promptly, using an understandable and transparent process. The GRM shall provide a framework for resolving complaints at the project level as well as beyond the project (that is, involving relevant government offices such as Commune People's Committee, District PC, DONRE, etc.), using the existing judicial or administrative remedies. Elements of the GRM such as procedures/steps, timeframe, responsibilities shall be described in detail in the GRM section of the IEE for rural roads.

F. Institutional Arrangements and Responsibilities

1. Responsibilities

23. The responsibilities for the preparation, submission, review and clearance of IEE for rural roads are presented below.

24. PPCTH. Being the executing agency, shall have the following responsibilities:

(i) Under the loan funds, engage qualified and experienced environmental consultant(s) to prepare the rural roads environmental assessment consistent with the EARF and ADB's SPS 2009. The consultants shall be recruited during detail design stage for implementation of QL217.
(ii) Ensure timely preparation of the environmental assessment for rural roads in manner satisfactory to ADB.

(iii) Submit draft environmental assessment for rural roads to ADB in a timely manner to permit the necessary review before approval of the rural roads.

(iv) Upon ADB's review of the draft environmental assessment, ensure that the document is revised based on ADB comments. Submit the final environmental assessment to ADB for disclosure on ADB website.

(v) Ensure that the EMP provisions are implemented for the rural roads regardless of financing source.

(vi) Submit to ADB semi-annual reports on implementation of the EMP.

(vii) In case there is a change in scope, inform ADB for determination of environmental category. Undertake required environmental assessment based on approved categorization and ADB's SPS 2009.

(viii) Ensure that necessary regulatory environmental permits and/or clearance required by the Government are obtained in a timely manner and copies are promptly submitted to ADB.

25. **PDOT/PMU** shall have the following responsibilities:

(i) Prepare the REA checklist (Annex 1) and submit to ADB for approval of environmental categorization.

(ii) Closely work with the environmental assessment consultants to be engaged by PPCTH in preparing the environmental assessment report based on the provisions of this EARF and ADB's SPS 2009.

(iii) As part of the environmental assessment preparation, ensure that adequate public consultation with affected groups and local stakeholders is undertaken and documented in accordance with ADB's SPS 2009.

(iv) Based on ADB's review of the draft environmental assessment, revise the report in a manner satisfactory to ADB in coordination with the environmental assessment consultants.

(v) Ensure that the EMP provisions are incorporated in the design as well as in the bid and contract documents for civil works.

(vi) Ensure that EMP provisions are implemented properly and in a timely manner.

(vii) Prepare and implement an updated EMP or a corrective action plan to address unpredicted environmental impacts and/or non-compliance to EMP during project implementation.

(viii) Ensure that ADB and DONRE are given access to undertake environmental due diligence or auditing for all project components. However, PDOT shall have the main responsibility for undertaking environmental due diligence and monitoring of the Project. Monitoring reports on EMP implementation will be made available to the public.

(ix) Monitor the environmental performance of contractors and prepare semi-annual environmental monitoring reports with assistance from the Project Supervision Consultant (PSC)
26. **ADB.** ADB will be responsible for review and timely approval of the environmental assessment for rural roads. Technical guidance will be provided by ADB to PPCTH and PDOT as needed. ADB will also be responsible for reviewing regular monitoring reports for the entire Project and officially disclosing the safeguard documents (environmental assessment and environmental monitoring reports) on the ADB website. During the implementation of the Project, ADB will:

i) Review the REA checklist prepared by PDOT and approve the environmental categorization of rural roads. Advise PPCTH and PDOT on the type and extent of environmental assessment report to be prepared based on the approved categorization and ADB's SPS 2009 requirements.

ii) Review and approve environmental assessment report prepared for rural roads and additional components, if any, to ensure compliance with the EARF and ADB’s SPS 2009.

iii) Disclose the final IEE and environmental monitoring reports on ADB website upon receipt from PPCTH.

iv) Undertake review of environmental monitoring reports submitted by PDOT and conduct regular review missions during implementation to monitor EMP implementation for the entire rural roads component.

v) Provide guidance to PPCTH, PDOT and PMU in carrying out responsibilities for environmental assessment and for building capacity for safeguard compliance.

### 2. Staffing and Budget

2. During QL217 implementation, PDOT shall engage environmental consultants to prepare the environmental assessment for rural roads consistent with this EARF and ADB’s SPS 2009. The estimated cost for undertaking environmental assessment of rural roads is provided below:

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Environment Specialist: Remuneration</td>
<td>Person-month</td>
<td>1</td>
<td>USD 20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Per diem and transportation</td>
<td>Lump sum</td>
<td>1</td>
<td>8,000</td>
<td>8,000</td>
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<tr>
<td>National Environment Specialist: Remuneration</td>
<td>Person-month</td>
<td>3</td>
<td>3,000</td>
<td>9,000</td>
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<tr>
<td>Per diem and transportation</td>
<td>Lump sum</td>
<td>1</td>
<td>4,000</td>
<td>4,000</td>
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<tr>
<td>Data collection, modeling, field surveys, field assistant, sample analysis</td>
<td>Lump sum</td>
<td>1</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Report reproduction, communication, consultations</td>
<td>Lump sum</td>
<td>1</td>
<td>2,000</td>
<td>2,000</td>
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**USD 53,000**

### G. Monitoring and Reporting

34. The EMP will be part of the overall project monitoring and supervision, and will be mainly implemented by the contractor with oversight from PDOT/PMU. The PSC shall provide
support to PDOT/PMU in implementation the EMP such as monitoring of the contractor's environmental performance and other provisions. PPCTH will submit reports on EMP implementation to ADB on a semi-annual basis.
Annex 1: Rapid Environmental Assessment (REA) Checklist

Instructions:

- This checklist is to be prepared to support the environmental classification of a project. It is to be attached to the environmental categorization form that is to be prepared and submitted to the Chief Compliance Officer of the Regional and Sustainable Development Department.

- This checklist is to be completed with the assistance of an Environment Specialist in a Regional Department.

- This checklist focuses on environmental issues and concerns. To ensure that social dimensions are adequately considered, refer also to ADB checklists and handbooks on (i) involuntary resettlement, (ii) indigenous peoples planning, (iii) poverty reduction, (iv) participation, and (v) gender and development.

- 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: 

<table>
<thead>
<tr>
<th>SCREENING QUESTIONS</th>
<th>Yes</th>
<th>No</th>
<th>REMARKS</th>
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<tbody>
<tr>
<td><strong>A. PROJECT SITING</strong></td>
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<td>Is the project area adjacent to or within any of the following environmentally sensitive areas?</td>
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<tr>
<td>▪ Cultural Heritage Site</td>
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<td>▪ Protected Area</td>
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<tr>
<td>▪ Wetland</td>
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<td></td>
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<tr>
<td>▪ Mangrove</td>
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<td></td>
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<tr>
<td>▪ Estuarine</td>
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<tr>
<td>▪ Buffer Zone of Protected Area</td>
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<tr>
<td>▪ Special Area for Protecting Biodiversity</td>
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<td><strong>B. POTENTIAL ENVIRONMENTAL IMPACTS</strong></td>
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<td>Will the project cause...</td>
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<tr>
<td>SCREENING QUESTIONS</td>
<td>Yes</td>
<td>No</td>
<td>REMARKS</td>
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<tr>
<td>▪ encroachment on historical/cultural areas; disfiguration of landscape by road embankments, cuts, fills, and quarries?</td>
<td>☐</td>
<td>☐</td>
<td></td>
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<td>▪ encroachment on precious ecology (e.g. sensitive or protected areas)?</td>
<td>☐</td>
<td>☐</td>
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<td>▪ degradation of cultural property, and loss of cultural heritage and tourism revenues?</td>
<td>☐</td>
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<td>▪ alteration of surface water hydrology of waterways crossed by the alignment, resulting in increased sediment in streams affected by increased soil erosion at construction site?</td>
<td>☐</td>
<td>☐</td>
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<td>▪ deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction?</td>
<td>☐</td>
<td>☐</td>
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<td>▪ water resource problems (e.g. depletion/deggradation of available water supply, deterioration for surface and ground water quality) and pollution of receiving waters?</td>
<td>☐</td>
<td>☐</td>
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<td>▪ overpaving leading to lowered ground water table, leading to land subsidence, etc.?</td>
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<td>▪ road blocking and temporary flooding due to land excavation during rainy season?</td>
<td>☐</td>
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<td>▪ traffic disturbances due to construction material transport and wastes?</td>
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<td>▪ increased local air pollution due to rock crushing, cutting and filling works, concrete mixing, and chemicals from asphalt processing?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>▪ noise, vibration, and dust from construction and operation activities?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>▪ noise and vibration due to blasting?</td>
<td>☐</td>
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<tr>
<td>▪ other social concerns relating to inconveniences in living conditions in the project areas that may trigger cases of upper respiratory problems and stress?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>▪ social conflicts between construction workers from other areas and local workers?</td>
<td>☐</td>
<td>☐</td>
<td></td>
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<tr>
<td>▪ hazardous driving conditions where construction interferes with pre-existing roads?</td>
<td>☐</td>
<td>☐</td>
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<td>▪ poor sanitation and solid waste disposal in construction camps and work sites, and possible transmission of communicable diseases from workers to local populations?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>▪ creation of temporary breeding habitats for mosquito vectors of disease?</td>
<td>☐</td>
<td>☐</td>
<td></td>
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<tr>
<td>▪ dislocation and involuntary resettlement of people living in right-of-way?</td>
<td>☐</td>
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Annex 2: OUTLINE OF AN ENVIRONMENTAL IMPACT ASSESSMENT REPORT

This outline is part of the Safeguard Requirements 1 of ADB’s SPS 2009. An environmental assessment report is required for all environment category A and B projects. Its level of detail and comprehensiveness is commensurate with the significance of potential environmental impacts and risks. A typical EIA report contains the following major elements, and an IEE may have a narrower scope depending on the nature of the project. The substantive aspects of this outline will guide the preparation of environmental impact assessment reports, although not necessarily in the order shown.

A. Executive Summary

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

B. Policy, Legal, and Administrative Framework

This section discusses 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.

C. Description of the Project

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.

D. Description of the Environment (Baseline Data)

This section describes relevant physical, biological, and socioeconomic conditions within the study area. 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.

E. Anticipated Environmental Impacts and Mitigation Measures

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 [Appendix 2, para. 6]), 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.

F. **Analysis of Alternatives** *(to be included for Category A Projects only)*

This section examines alternatives to the proposed project site, technology, design, and operation—including the no project alternative—in terms of their potential environmental impacts; the feasibility of mitigating these impacts; their capital and recurrent costs; their suitability under local conditions; and their institutional, training, and monitoring requirements. It also states the basis for selecting the particular project design proposed and, justifies recommended emission levels and approaches to pollution prevention and abatement.

G. **Information Disclosure, Consultation, and Participation**

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.

H. **Grievance Redress Mechanism**

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.

I. **Environmental Management Plan**

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.

J. Conclusion and Recommendation

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