Proposed Multitranche Financing Facility
India: South Asia Subregional Economic Cooperation Road Connectivity Investment Program
CURRENCY EQUIVALENTS
(as of 25 January 2014)

Currency unit – India rupee/s (Re/Rs)

Re1.00 = $0.01594
$1.00 = Rs62.7250

ABBREVIATIONS

ADB – Asian Development Bank
ASEAN – Association of Southeast Asian Nations
EARF – environmental assessment and review framework
EIA – environmental impact assessment
EPC – engineering, procurement, and construction
FAM – facility administration manual
FFA – framework financing agreement
ISC – implementation support consultant
MFF – multitranche financing facility
MoRTH – Ministry of Road Transport and Highways
MPWD – Manipur Public Works Department
NB-NER – North Bengal and Northeastern Region
NGO – nongovernment organization
NHDP – National Highway Development Program
PIU – project implementation unit
SAARC – South Asian Association for Regional Cooperation
SASEC – South Asia Subregional Economic Cooperation
SRCIP – SASEC Road Connectivity Investment Program
WBPWD – West Bengal Public Works Department

NOTES

(i) The fiscal year (FY) of the Government of India and its agencies ends on 31 March. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2011 ends on 31 March 2011.

(ii) In this report, "$" refers to US dollars.
In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.
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<td>Design and Monitoring Framework for the Investment Program</td>
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**INVESTMENT PROGRAM AT A GLANCE**

1. **Project Name:** SASEC Road Connectivity Investment Program  
2. **Project Number:** 47341
3. **Country:** India  
4. **Department/Division:** South Asia Department/Transport and Communications Division

5. **Sector Classification:**
<table>
<thead>
<tr>
<th>Sectors</th>
<th>Primary</th>
<th>Subsectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transport, and information and communication technology</td>
<td></td>
<td>Road transport</td>
</tr>
</tbody>
</table>

6. **Thematic Classification:**
<table>
<thead>
<tr>
<th>Themes</th>
<th>Primary</th>
<th>Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic growth</td>
<td></td>
<td>Promoting economic efficiency and enabling business environment</td>
</tr>
<tr>
<td>Regional cooperation and integration</td>
<td></td>
<td>Cross-border infrastructure</td>
</tr>
<tr>
<td>Private sector development</td>
<td></td>
<td>Public sector goods and services essential for private sector development</td>
</tr>
</tbody>
</table>

6a. **Climate Change Impact**
   - Adaptation: Medium  
   - Mitigation: Low

6b. **Gender Mainstreaming**
   - Gender equity theme (GEN)  
   - Effective gender mainstreaming (EGM)  
   - Some gender elements (SGE)  
   - No gender elements (NGE)

7. **Targeting Classification:**
<table>
<thead>
<tr>
<th>General Intervention</th>
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<tbody>
<tr>
<td>Geographic dimensions of inclusive growth</td>
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</tr>
<tr>
<td>Income poverty at household level</td>
<td></td>
</tr>
</tbody>
</table>

8. **Location Impact:**
   | National | Regional |
   | High     | High     |

9. **Project Risk Categorization:** Complex

10. **Safeguards Categorization for Tranche 1:**
    | Environment | Involuntary resettlement | Indigenous peoples |
    | A           | A                      | C                   |

11. **ADB Financing:**
    | Sovereign/Nonsovereign | Modality | Source | Amount ($ Million) |
    |------------------------|----------|--------|--------------------|
    | Sovereign              | MFF      | Ordinary Capital Resources | 500.0  |
    | Total                  |          |        | 500.0              |

12. **Cofinancing:** None

13. **Counterpart Financing:**
    | Source | Amount ($ Million) |
    |--------|--------------------|
    | Central Government and Manipur State Government | 261.6 |
    | Total | 261.6 |

14. **Aid Effectiveness:**
    | Parallel project implementation unit | No |
    | Program-based approach | Yes |
I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed multitranche financing facility (MFF) to India for the South Asia Subregional Economic Cooperation (SASEC) Road Connectivity Investment Program (SRCIP). The design and monitoring framework is in Appendix 1.

2. SRCIP will improve the road connectivity and efficiency of the international trade corridor by expanding about 500 kilometers (km) of roads in the North Bengal and Northeastern Region (NB-NER) of India. The project area under SRCIP is a key strategic thoroughfare integrating South and Southeast Asia, and bordering Bangladesh, Bhutan, Myanmar, and Nepal. Improvements in road connectivity in NB-NER will enable efficient and safe transport within India and regionally with other SASEC member countries. Ultimately, SRCIP will pave the way from India and other South Asian countries to Myanmar, and further afield to link with the Association of Southeast Asian Nations (ASEAN). SRCIP was endorsed by the SASEC trade facilitation and transport working group meeting in Singapore on 30 October 2013.

II. THE INVESTMENT PROGRAM

A. Rationale

3. Although South Asia is one of the fastest growing economic regions in the world, intra-regional trade is still only some 2% of total trade, compared with 25% in ASEAN, 40% in North American Free Trade Agreement countries, and 63% in the European Union. While free trade movements are being agreed and implemented, investment needs to be stimulated through improved road and cross-border connectivity, particularly in less developed areas like NB-NER.

4. Road transport is the dominant mode among SASEC countries, accounting for 65%–70% or more of freight movement. Since most trade between India and its neighbors is by road, the role of road transport is expected to increase with development and the easing of cross-border trade restrictions. Trade between SASEC countries via India to Myanmar and Thailand is currently by sea, which makes exchanges slow and expensive, especially for landlocked countries and NB-NER. Cross-border trade by road between India and Myanmar comprises only 1.5% of the total road-based cross-border trade of Myanmar ($1.1 billion), against 70% with the People’s Republic of China and 26% with Thailand. Industry estimates suggest that improved connectivity through the India–Myanmar–Thailand trilateral highway could increase India’s trade with ASEAN to about $100 billion by 2020.

5. One of the major constraints for regional connectivity is the “last-mile” connectivity between the in-country trunk road network and neighboring countries, which is often left out of development plans. This is the case in NB-NER where the in-country trunk road has four-lanes and is mostly in good condition under the government’s National Highway Development Program (NHDP) while extensions from the trunk road to neighboring countries are generally narrow two-lane roads in poor condition. The annual average traffic on these last-mile stretches is generally 20,000–30,000 passenger car units along the trunk road to only 3,000–9,000 passenger car units near the border, mainly because of the limited road capacity which is exacerbated by cross-border transport inefficiency. In general, the road network capacity in NB-NER is limited by geographic constraints, limited availability of land, and increased congestion. Security concerns in border areas also lower network utilization. Nonetheless, improving

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1 Comprising Bangladesh, Bhutan, India, and Nepal.
connectivity in NB-NER is the key to regional integration of South and Southeast Asia. Improved road capacity and conditions, along with easing of cross-border movement restrictions, will increase trade and the resultant traffic and network utilization, and will ultimately improve the security situation in the region and cross-border transport efficiency.

6. Four regional platforms involving India provide strategic direction for regional transport connectivity: (i) Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), (ii) South Asian Association for Regional Cooperation (SAARC), (iii) SASEC, and (iv) the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP). The UNESCAP Asian Highway Network provides interregional priority roads for South Asia, while the SAARC highway corridors provide intra-regional priority roads for South Asia. BIMSTEC has developed a policy framework and strategy for regional connectivity.

7. Investment in last-mile connectivity is in line with the central government’s prioritization of the non-NHDP network, which contributes directly to regionally balanced and inclusive growth for remote, economically lagging or challenging regions. During the Five-Year Plan, FY2012—FY2016 the broad assessment of investment needs for the non-NHDP network with state public works departments is about Rs570 billion, out of which Rs74 billion is expected to be mobilized from the private sector and Rs108 billion will be an external assistance loan. The central government is also finalizing a regional road connectivity program (Fostering Regional Connectivity: Widening and Upgrade of Highways Along the International Borders). This program targets 1,000 km at a cost of about Rs65,000 million. Financing from the Asian Development Bank (ADB) can be effectively utilized for last-mile connectivity to strengthen both intra-SASEC and SASEC–Myanmar connectivity by leveraging public–private partnership projects undertaken for the trunk road network under the NHDP.

8. ADB is supporting the development of major international roads in neighboring countries, and strengthening customs systems. Land customs stations with Bhutan, Bangladesh, Myanmar, and Nepal are under development with support from the respective governments and ADB. SRCIP is part of the critical development for regional connectivity.

9. India’s road sector faces several issues, including inefficient implementation, poor road asset management, high incidence of road accidents, and vehicle overloading. The government is confronting these deficiencies through various initiatives and support from development partners. For national highways, the World Bank’s National Highway Interconnectivity Investment Program is expected to provide substantial support to the Ministry of Road Transport and Highways (MoRTH) to implement contracting and institutional reform measures and to develop sector policies with emphasis on road safety. For state road agencies in NB-NER, including Manipur Public Works Department (MPWD), which will implement state roads improvement under SRCIP, capacity development support is ongoing through technical assistance together with the ADB-assisted Northeastern State Roads Investment Program for road asset management, road safety quality systems, and institutional strengthening.

10. SRCIP will include the first stage of the government regional connectivity program. The planned investments under SRCIP underline the connectivity with neighboring countries

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2 Comprising Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka, and Thailand.
4 ADB. 2011. Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility and Administration of Technical Assistance Grant to India for the Northeastern State Roads Investment Program. Manila (Loan 2770, TA 7838, and TA 8063).
(Bangladesh, Bhutan, Nepal, and Myanmar). Subprojects being considered under SRCIP include improvement to roads covering last-mile connectivity in the states of West Bengal and Manipur. The road map of the investment program also includes improvement to state roads in Manipur to avoid congestion, taking into account expected increases in international traffic, and provision of alternate routes to national highways for greater access to isolated border areas.

11. NB-NER is an underdeveloped region. Improved connectivity to NB-NER for regionally balanced and inclusive growth would be well served by the envisaged subprojects under SRCIP. These subprojects will bring new wealth to NB-NER, providing alternative optimal routes for NB-NER to reach the established deep water seaports in Bangladesh, India, and Myanmar. These routes are along Asian Highways 1, 2, and 48; and overlap with SAARC highway corridors, and their extensions and/or alternates. The investment program may cover additional routes to provide regional connectivity among SASEC and with Myanmar. Traffic through Manipur and West Bengal is expected to increase substantially because of improved access to and from other Indian states, and connectivity with neighboring countries—transforming NB-NER into a regional trading hub.

12. Transport infrastructure development is the government’s high priority, making ADB’s strategy of reducing poverty through infrastructure-led growth especially relevant. ADB’s continued support for regional connectivity is in line with its India country partnership strategy, 2013–2017. SRCIP has been designed in coordination with development partners to avoid overlaps, and continues ADB support for implementation efficiency of road agencies in parallel with improvement to last-mile connectivity for regional cooperation. Recommendations by the country partnership strategy final review validation report (footnote 6) have been taken into account, e.g., enhancing project readiness and engaging consultants for project implementation support. SRCIP is also relevant to the Regional Cooperation Strategy in South Asia, 2011–2015 aimed at improving subregional connectivity and promoting intraregional trade.

13. The framework financing agreement (FFA) details the road map, strategic context, policy framework, and investment program. The MFF is the modality best suited for the investment program, which has multiple executing agencies, by allowing ADB to enter into a sustained and planned, yet flexible partnership, with the central government for a long-term investment in regional connectivity—in parallel with continued support for implementation efficiency improvement. Different levels of progress in project preparation by different agencies can be well managed by the phased approach of the MFF. Lessons learned for a new contracting initiative, including performance-based maintenance, can be incorporated in tranche 2. Preparation can be undertaken under tranche 1 for tranche 2 subprojects and a planned central government program to develop regional connectivity. A solid pipeline of regional connectivity projects encourages contractors to invest in projects in remote areas.

B. Impact and Outcome

14. The impact will be increased domestic and regional trade through NB-NER. The outcome will be improved road connectivity and efficiency of the NB-NER international trade corridor.

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8 Framework Financing Agreement (accessible from the list of linked documents in Appendix 2).
9 Comparison of Multitranche Financing Facility and Project Loan (accessible from the list of linked documents in Appendix 2).
C. Outputs

15. **Road improvement for regional connectivity.** SRCIP will rehabilitate and upgrade about 500 km of regional connectivity roads, which are part of the Asian Highways, SAARC Highway Corridors, or their alternate routes. It will cover both national highways and state roads. The upgrading will be mainly two-laning with paved shoulders, together with safety features including construction of overpasses at busy junctions and bypasses for smooth traffic. Some sections will be widened to four lanes to serve future traffic. Performance-based maintenance will be undertaken for 5 years after construction. The engineer will be engaged for engineering, procurement, and construction (EPC) contracts; and the construction supervision consultants for item-rate contracts. In addition, the implementation support consultant (ISC) will be engaged to support the executing agencies in (i) external safeguard monitoring, (ii) third-party quality check on maintenance, (iii) road safety audit, (iv) financial management, and (v) preparation for subsequent submission of periodic financing requests to ADB.

16. **Capacity development and implementation support of Manipur Public Works Department.** SRCIP will provide capacity development of MPWD, together with implementation support, especially in strengthening financial management systems and managing larger contracts with performance-based maintenance. This will initially focus on subproject implementation in Manipur, and roll over to the state road network systems.

17. **Tranche 1 outputs.** Tranche 1 will adopt the sector modality to finance (i) upgrading of road subprojects totaling about 300 km, including implementation support, given the highest priority because of their significant regional impacts; and (ii) MPWD capacity development and implementation support. The road subprojects include (i) 37 km of Asian Highway 2 connecting Bangladesh, India, and Nepal, and 97 km of Asian Highway 48 connecting Bangladesh, Bhutan, and India, and Bangladesh; and (ii) about 130 km of state roads extending the connection with Myanmar. The first two subprojects (Asian Highway 2 and Asian Highway 48), which have the most challenging features, have been appraised. Other road subprojects will be appraised for ADB approval during implementation of tranche 1, following the selection criteria and approval process (according to the FFA, schedule 4). All subproject roads are of a similar nature to the last-mile connectivity.

D. Investment and Financing Plans

18. The investment program is estimated to cost $761.6 million, including five-year performance-based maintenance, taxes and duties, physical and price contingencies, interest, and other charges during implementation (Table 1).

19. The central government has requested an MFF in an amount of up to $500.0 million from ADB’s ordinary capital resources to help finance a part of the investment program. The MFF will consist of several tranches, subject to government’s submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the FFA. For each tranche under the MFF, MoRTH will receive a portion of the ADB loan proceeds through the budgetary allocation. Under current policies of the central government, the state government of Manipur will receive 90% of the remaining portion as a grant from the central government as Manipur is a special category state. The financing plan is in Table 2.

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10 Financing includes part of customs and duties amounting to about $88 million. The estimated expenditure is not excessive (15% of ADB loan resources) and will apply only with respect to ADB-financed expenditures.
20. The first tranche of the MFF will be financed by a loan of $300 million from ADB’s ordinary capital resources. The loan will use a sector modality; and has a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB’s LIBOR-based lending facility, \(^{11}\) a commitment charge of 0.15% per year, and such other terms and conditions set forth in the draft loan and project agreements.

**Table 1: Investment Program ($ million)**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>A. Base Cost(^{a})</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Road Improvement</td>
<td>367.3</td>
<td>265.7</td>
<td>633.0</td>
</tr>
<tr>
<td>2. MPWD Capacity Development and Implementation Support</td>
<td>1.0</td>
<td>0.0</td>
<td>1.0</td>
</tr>
<tr>
<td>3. Five-Year Performance-Based Maintenance</td>
<td>24.1</td>
<td>21.5</td>
<td>45.6</td>
</tr>
<tr>
<td><strong>Subtotal (A)</strong></td>
<td><strong>392.4</strong></td>
<td><strong>287.3</strong></td>
<td><strong>679.6</strong></td>
</tr>
<tr>
<td>B. Contingencies(^{b})</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.1</td>
<td>43.2</td>
<td></td>
<td>66.3</td>
</tr>
<tr>
<td>C. Financing Charges During Implementation(^{c})</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.3</td>
<td>6.3</td>
<td></td>
<td>15.6</td>
</tr>
<tr>
<td><strong>Total (A+B+C)</strong></td>
<td><strong>424.8</strong></td>
<td><strong>336.8</strong></td>
<td><strong>761.6</strong></td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, MPWD = Manipur Public Works Department.
\(^{a}\) In 2013 prices, including taxes and duties of about $88 million to be partially financed from ADB loan resources.
\(^{b}\) Physical contingencies computed at 5% for civil works. Price contingencies computed at 1% for foreign currency and 8% on local currency costs annually; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.
\(^{c}\) Includes interest and commitment charges. Interest during construction for ADB loan(s) has been computed at the 5-year forward London interbank offered rate plus a spread of 0.5% and applicable maturity based premium of 10 basis points. Commitment charges for an ADB loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

**Table 2: Indicative Financing Plan of the Investment Program Amount ($ million)**

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Asian Development Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ordinary Capital Resources</td>
<td>300.0</td>
<td>200.0</td>
<td>500.0</td>
<td>65.6</td>
</tr>
<tr>
<td>Central and Manipur State Governments</td>
<td>124.8</td>
<td>136.8</td>
<td>261.6(^{a})</td>
<td>34.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>424.8</strong></td>
<td><strong>336.8</strong></td>
<td><strong>761.6</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

\(^{a}\) Including five-year performance-based maintenance, land acquisition, part of taxes and duties, remuneration of counterpart staff, office accommodation, interest and financing charges during implementation, and other miscellaneous costs.

Source: Asian Development Bank estimates.

E. Implementation Arrangements

21. The implementation arrangements for the investment program are summarized in Table 3 and described in detail in the facility administration manual (FAM).\(^{12}\)

22. The works contracts will incorporate performance-based maintenance for 5 years as part of public–private partnership initiatives. MoRTH will adopt e-procurement for international competitive bidding works packages. Distribution of bidding documents and submission of bids will be done only electronically. The World Bank has adopted the same approach for projects with MoRTH. The e-procurement system has been in use since about 2010 with the National Highways Authority of India, MoRTH, and many state government departments. Assessment for e-procurement in the road transport subsector has indicated substantial response and

\(^{11}\) The interest includes a maturity premium of 10 basis points. This is based on the above loan terms and the government’s choice of repayment option and dates.

\(^{12}\) Facility Administration Manual (accessible from the list of linked documents in Appendix 2).
competition. The system has been assessed to be secure, accessible, and robust. The associated procedure and mechanism in place have been reviewed as satisfactory. The e-procurement may also be adopted for state roads.

### Table 3: Implementation Arrangements

<table>
<thead>
<tr>
<th>Aspects</th>
<th>Arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation period</td>
<td>1 January 2014 to 31 December 2021 (Facility and Tranche 1), including pre-construction activities</td>
</tr>
<tr>
<td>Estimated completion date</td>
<td>31 December 2021</td>
</tr>
<tr>
<td>Management</td>
<td>(i) Oversight bodies: SASEC Transport Working Group Representative for India: MoRTH</td>
</tr>
<tr>
<td></td>
<td>(ii) Executing agencies: MoRTH (for national highways), MPWD (for state roads and capacity development)</td>
</tr>
<tr>
<td></td>
<td>(iii) Key implementing agencies: MoRTH, MPWD, WBPWD</td>
</tr>
<tr>
<td></td>
<td>(iv) Implementation units: National highways: MoRTH 2 regional offices (Kolkata and Guwahati) and 1 site office supported by 16 MPWD staff proposed; and WBPWD in Kolkata, and 2 project site offices with 15 staff proposed State roads: MPWD in Imphal, and 2 project site offices with 15 staff proposed</td>
</tr>
<tr>
<td>Procurement (ADB-financed packages)</td>
<td>International competitive bidding 8 works contracts $493.0 million</td>
</tr>
<tr>
<td>Consulting services (ADB-financed packages)</td>
<td>Implementation support consultants for national highways (QCBS 90:10) 31 international and 116 national person-months $2.0 million</td>
</tr>
<tr>
<td></td>
<td>Wildlife external monitoring (QCBS 90:10) 57 national person-months $0.5 million</td>
</tr>
<tr>
<td></td>
<td>MPWD capacity development and implementation support consultants (QCBS 90:10) 6 international and 96 national person-months $1.0 million</td>
</tr>
<tr>
<td></td>
<td>Construction and maintenance supervision for state roads (QCBS 90:10) 30 international and 276 national person-months $5.0 million</td>
</tr>
<tr>
<td>Retroactive financing and advance contracting</td>
<td>Goods and works, and consulting services</td>
</tr>
<tr>
<td>Disbursement</td>
<td>The loan proceeds will be disbursed in accordance with ADB’s Loan Disbursement Handbook (2012, as amended from time to time) and detailed arrangements agreed upon between the government and ADB.</td>
</tr>
</tbody>
</table>

ADB = Asian Development Bank, MoRTH = Ministry of Road Transport and Highways, MPWD = Manipur Public Works Department, QCBS = quality- and cost-based selection, SASEC = South Asia Subregional Economic Cooperation, WBPWD = West Bengal Public Works Department.

Sources: Asian Development Bank.

### III. DUE DILIGENCE

#### A. Technical

23. The engineering design was prepared to minimize land acquisition as well as social and environmental impacts. The recommendations of the road safety audit were incorporated in the design. As part of road sector reform initiatives, national highway stretches will be taken up under the EPC mode, including five-year performance-based maintenance, so that a part of the design and completion risk is transferred on to the EPC contractor to gain design and implementation efficiencies. State highways will be contracted as item rate contracts using ADB’s standard bidding documents with modification to include performance-based maintenance.

#### B. Economic and Financial

24. The economic assessment for subprojects (Asian Highways 2 and 48) was carried out in
accordance with ADB’s *Guidelines for the Economic Analysis of Projects*.\textsuperscript{13} The principal benefits calculated are savings in vehicle operating costs and travel time. The estimated economic internal rates of return are 22.4\% for Asian Highway 2 and 16.3\% for Asian Highway 48. The sensitivity analysis indicates that the project roads have economic internal rates of return above 12\% even with adverse variation in costs and benefits, so the proposed improvements are economically viable. In addition to the quantified benefits, the project will bring significant benefits to overall regional trade among SASEC countries. Incremental recurrent costs associated with all possible subprojects under SRCIP are estimated at about 1.5\% of the current MoRTH and 3.3\% of the MPWD maintenance budget on an annual basis, which are likely to be provided by both agencies without difficulties. The initial five-year maintenance has been budgeted under the investment program.

C. Governance

25. **Financial management.** A financial management assessment indicated that MoRTH and MPWD have adequate capacity in financial management for ADB-financed projects. MoRTH has established financial management systems in the regional offices and regional pay and accounts offices to account for and report on the project expenditure. MoRTH’s capacity is being strengthened by the World Bank, including development of enterprise resource planning systems and a financial management manual. MPWD’s capacity will be strengthened by ISC, especially in initial computerization of financial management systems and strengthening the audit review mechanism. The investment program will also provide training and support to MPWD on ADB procedures and financial management systems.

26. **Procurement and anticorruption.** Contracts financed by ADB will follow ADB’s Procurement Guidelines (2013, as amended from time to time), include a policy statement on avoiding corrupt practices, and ensure compliance with core labor standards. Information relating to the investment program will be published on the MoRTH and MPWD websites. The government has started performance monitoring and evaluation systems for government departments and ministries (including MoRTH) to assess key governance indicators. Parliament is considering bills on public procurement, whistleblower protection, and prevention of money laundering. MoRTH and states have started road sector-specific initiatives such as the introduction of a longer defect liability period and new procurement modes such as EPC, performance-based maintenance and e-procurement. MoRTH-wide enterprise resource planning, supported by the World Bank, and computerization of financial management systems in state road agencies, supported by ADB, will also help enhance good governance. ADB’s Anticorruption Policy (1998, as amended to date) was explained to and discussed with the central government, the state government of Manipur, and state government of West Bengal; and MoRTH, MPWD, and the West Bengal Public Works Department (WBPWD). The specific policy requirements and supplementary measures are described in the FAM.

D. Poverty and Social

27. For Asian Highway 2 and Asian Highway 48, the subproject impact area can be characterized by a predominance of traditional farming, and lack of road connectivity at the desired level—causing limited access to health care, educational institutions, commercial facilities, and government development agencies. Respondents engaged during the poverty and social survey expressed that they could not reap the benefits of locational advantages because of inadequate road connectivity despite proximity to bordering nations and other Indian states.

Half of the working population is self-employed in trade and business, including cross-border trade. Agriculture, non-farm labor, and the service sector each account for an equal proportion of workers while about 11% are engaged by tea gardens. The work participation ratio is 37% for men and 31% for women of working age. A more efficient road network will provide stronger links between remote, poor regions, and more developed markets both within India and at a subregional level, and thus improve the socioeconomic situation and enhance poverty reduction. The improvement will directly benefit about 1.3 million people in the project area.

28. **Gender.** Women in Asian Highway 2 and Asian Highway 48 project areas are mainly involved in household work, cultivation, working in tea estates, and other farming activities. Women indicated that improved road conditions and connectivity will provide better access to health services, higher levels of education, economic opportunities, and social interactions. Mitigation and proactive key actions for tranche 1 include (i) constructing over 30 km of paved, raised sidewalk in urban areas that will be highly beneficial to pedestrians, elderly, women, and children; (ii) encouraging civil works contractors to engage women workers as wage laborers and ensuring equal pay for equal work; and (iii) providing awareness-raising seminars for contractors, construction workers, and women in the project areas on HIV/AIDS, health and hygiene, road safety, and human trafficking. The implementing agencies and project implementation units (PIUs) will monitor the implementation.

29. **HIV/AIDS and trafficking.** The Asian Highway 2 and Asian Highway 48 subproject area is characterized by increasing rates of HIV/AIDS and other sexually transmitted infections, with concentrated epidemics. Based on the assessment, the National AIDS Control Organization of the Ministry of Health and Family Welfare and the State AIDS Prevention and Control Society are tasked to provide medical and health services, public awareness raising and social sector services, and monitoring. The state governments have set up the District AIDS Prevention and Control Unit to provide more targeted interventions to high-risk groups, and an integrated and augmented system of prevention, care, support, and treatment at the district level. Based on existing government initiatives, mitigating measures are in place to address all health and social risks and impacts associated with infrastructure development in the project area. The implementing agency and PIU will ensure that civil works contractors conduct awareness programs in HIV/AIDS, human trafficking, and child labor at construction camp sites and workplaces. All contracts will have clauses on these initiatives, and the state governments will monitor compliance during implementation. A nongovernment organization (NGO) will conduct awareness programs in HIV/AIDS, and human trafficking in project-affected communities.

**E. Safeguards**

30. **Involuntary resettlement.** Tranche 1 is categorized A for involuntary resettlement, in accordance with ADB’s Safeguard Policy Statement (2009). The investment program was developed to minimize the need for land acquisition and involuntary resettlement. Two combined resettlement and indigenous peoples plans have been prepared for Asian Highway 2 and Asian Highway 48. These were approved by ADB and disclosed on the ADB website. A total of 9.05 hectares of private land will need to be acquired at replacement cost. Some 4,132 households will be affected, occupying 3,578 structures. A total of 489 households will experience physical displacement, 1,944 households will experience economic displacement, and 354 households will experience both physical and economic displacement. The displaced households will be entitled to compensation for the loss of land and structures at replacement cost, shifting cost, and other income restoration assistance. Resettlement for the two roads is estimated to cost about $12.5 million. The implementing agency and/or the PIU is experienced with the land acquisition process and implement the land acquisition. The PIU will be staffed
with experienced social safeguard personnel, with a resettlement officer to oversee each affected district. An experienced NGO will be engaged by the PIU to implement the resettlement plan for each subproject. A resettlement framework was approved and disclosed on the ADB website for the investment program, under which a resettlement plan will be prepared by the relevant executing agency for each subsequent subproject, with resettlement impact, and submitted to ADB for approval.

31. **Indigenous peoples.** Tranche 1 is categorized C for indigenous peoples. In the Asian Highway 2 and Asian Highway 48 project areas, 135 indigenous peoples households will be impacted by involuntary resettlement. The census found that these households are not distinctive because they are integrated with the dominant population of the project area. Tribal groups in the subproject areas freely interact with the outside community. These groups have nuclear families, and are open to new ideas like family planning and formal education. Social impact assessments confirm that the socioeconomic impacts caused by the subprojects will not be different for these people when compared with the remainder of the population. Two combined resettlement and indigenous peoples plans have been prepared for the two subprojects. Adequate compensation provisions are made to mitigate adverse impacts on indigenous peoples. An indigenous peoples planning framework was prepared. In accordance with the framework, if any significant impacts on indigenous peoples are identified in the subsequent subprojects, the relevant executing agency will prepare an indigenous peoples plan and submit it to ADB for approval.

32. **Environment.** Tranche 1 is categorized category A for environment since one of the subproject roads passes through a national park with critical habitat areas. A consolidated environmental impact assessment (EIA) for both Asian Highway 2 and Asian Highway 48 has been prepared. The draft EIA was disclosed on the ADB website on 9 August 2013. An environmental assessment and review framework (EARF) was prepared to guide compliance with environmental safeguard requirements in accordance with the provisions of the Ministry of Environment and Forests, the central government, and the Safeguard Policy Statement in the subsequent subprojects. Anticipated significant environmental impacts from the two subprojects entail disruption of wildlife migratory routes, disturbance to wildlife, and removal of a large number of trees. Mitigation and environmental enhancement measures, including modifications to the technical design of the road to address these impacts and ensure no net loss of biodiversity, have been included in the subproject designs. Other anticipated impacts entail typical road construction-related issues such as generation of dust, noise, exhaust, waste from construction and worker camps, water contamination, occupational health and safety, erosion, and siltation. Mitigation measures to address these have been included in the environmental management plan, which will be implemented by the contractor. Meaningful consultations have been held with affected persons and other key stakeholders, such as national park officials and the World Wildlife Fund, while preparing the EIA. Technical recommendations from park officials and the World Wildlife Fund have been incorporated in the EIA. Concerns of affected persons and relevant stakeholders will continue to be addressed during project implementation through the grievance redress mechanism proposed in the EIA.

33. The environmental capacity of the executing and implementing agencies will need to be strengthened during project implementation. An authorized officer for environmental safeguards will be appointed at the executing agency level and an environmental focal person at the implementing agency and/or PIU level. The PIU will carry out internal monitoring of the implementation of environment safeguards while the ISC will perform external monitoring. For environment category A and B subprojects, another external monitoring agency will be engaged to conduct third-party monitoring. An initial coordination-cum-training workshop will be
conducted by the implementing agency, with technical support from ADB. The ISC or ADB will conduct on-the-job training as necessary during project implementation.

F. Risks and Mitigating Measures

34. The key risks are delays in implementation and sustainability (Table 4). Other risks and mitigating measures are described in the risk assessment and risk management plan.\textsuperscript{14}

\begin{table}[h]
\centering
\begin{tabular}{|l|l|}
\hline
Risks & Mitigation Measures \\
\hline
Project implementation delay & Advance actions taken to ensure project readiness. PIUs engaged safeguard focal persons. Contract packaging was made to attract qualified contractors. MoRTH will set up PIU for national highways in Manipur to supplement MPWD capacity and streamline the decision-making process. MPWD increased its staff for the investment program. \\
\hline
Safeguard compliance & Adverse impacts of land acquisition, social, and environmental impacts have been minimized by undertaking all engineering measures and consultation. Works contracts will be awarded only after substantially completing safeguard requirements. Consultants will be engaged for implementation support. Before commencing construction, a due diligence mission will be fielded to confirm that rights-of-way to be handed over to contractors are free of encumbrances; and create awareness among project authorities of ADB’s social safeguard requirements. \\
\hline
Sustainability & A five-year performance-based maintenance will be adopted. The appropriate budget was provided under the investment program. Road asset management systems being developed by the World Bank to MoRTH and by ADB to MPWD. \\
\hline
\end{tabular}
\caption{Summary of Risks and Mitigating Measures}
\end{table}

ADB = Asian Development Bank, MoRTH = Ministry of Road Transport and Highways, MPWD = Manipur Public Works Department, NGO = nongovernment organization, PIU = project implementation unit.


IV. ASSURANCES

35. The central government, MoRTH, MPWD, and WBPWD have assured ADB that implementation of SRCIP shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the FAM and loan documents. The central government has agreed with ADB on certain undertakings for the MFF, which are set forth in the FFA. Specific covenants agreed by the central government, MoRTH, MPWD, and WBPWD with respect to Tranche 1 under the MFF are set forth in the related loan and project agreement.

V. RECOMMENDATION

36. I am satisfied that the proposed multitranche financing facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve (i) the provision of loans under the multitranche financing facility in an aggregate principal amount not exceeding $500,000,000 to India for the South Asia Subregional Economic Cooperation Road Connectivity Investment Program, from ADB’s ordinary capital resources, with interest to be determined in accordance with ADB’s London interbank offered rate (LIBOR)-based lending facility, and such other terms and conditions as are substantially in accordance with those set forth in the framework financing agreement presented to the Board; and (ii) the e-procurement arrangements described in paragraph 22 of this report.

Takehiko Nakao
President

4 March 2014

\textsuperscript{14} Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).
### Design and Monitoring Framework for the Investment Program

<table>
<thead>
<tr>
<th>Design Summary</th>
<th>Performance Targets and Indicators with Baselines</th>
<th>Data Sources and Reporting Mechanisms</th>
<th>Assumptions and Risks</th>
</tr>
</thead>
</table>
| **Impact**     | By 2025: Growth rate of traffic along the project corridor increased by 20% (2013 Baseline: 4.5% in West Bengal and 5.7% in Manipur) | MoRTH and state road agencies’ reports of road conditions and maintenance needs | Assumptions: Various government development activities effectively coordinated with road sector investment. Cross-border transport procedures are streamlined.  
Growth rate of cross-border traffic increased by 40% (2013 Baseline: 3%) | Border post statistics of customs |
| Outcome        | By 2022: Average daily vehicle-km in the first full year of operations is 1,936,000  
Average travel time along project major trade roads reduced by 40% (2013 baseline: 1.7 hours along Asian Highway 2, 3.5 hours along Asian Highway 48, 3.0 hours along Imphal–Moreh)  
Fatal accident rate along the project roads reduced by 30% of the level in 2012 (2012 baseline: Fatal accidents per 100 km—58 on Asian Highway 2, 46 on Asian Highway 48, 12 on Asian Highway 1, and 24 on state roads in Manipur) | Post-implementation measurement by consultants, MoRTH, and state road agencies | Assumption: The government provides adequate funds for operation and maintenance on time. |
| Outputs        | By 2021: 500 km of roads upgraded and maintained using performance-based contracts  
Civil works contractors comply with core labor standards  
Two workshops covering project implementation and financial management for all indicators: Monitoring reports of MoRTH and state road agencies | For all indicators: Monitoring reports of MoRTH and state road agencies | Assumptions: Availability of key construction materials and equipment is stable. The approved counterpart funding is released on time. |
|                | 1. Improved roads for regional connectivity  
2. Developed capacity and supported project | | |
### Design Summary

<table>
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<tr>
<th>Implementation for MPWD</th>
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### Performance Targets and Indicators with Baselines

- 10 MPWD staff completed awareness-raising seminars delivered for contractors and construction workers on health and social impacts (including HIV/AIDS)

### Data Sources and Reporting Mechanisms

### Assumptions and Risks

### Activities with Milestones

**1. Improved roads for regional connectivity**

1.1 Engage construction supervision consultants for initial packages by September 2014
1.2 Complete bidding process for civil works for initial packages by September 2014
1.3 Complete construction of all civil works by end of 2021

**2. Developed capacity and supported project implementation for MPWD**

2.1 Complete staffing of PIUs by January 2014
2.2 Recruit consultants by September 2014
2.3 Complete two workshops covering project implementation and financial management for MPWD staff by 2016

### Inputs

- **ADB:** $500.0 million
- **Government of India:** $242.0 million
- **Government of Manipur:** $19.6 million

**Source:** Asian Development Bank.

**ADB =** Asian Development Bank, **km =** kilometer, **MoRTH =** Ministry of Road Transport and Highways, **MPWD =** Manipur Public Works Department, **NB-NER =** North Bengal and Northeastern Region, **PIU =** project implementation unit.
LIST OF LINKED DOCUMENTS
http://www.adb.org/Documents/RRPs/?id=47341-001-3

1. Framework Financing Agreement
2. Periodic Financing Request for Tranche 1
3. Sector Assessment (Summary): Regional Road Transport
4. Facility Administration Manual
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Economic and Financial Analysis
8. Country Economic Indicators
9. Summary Poverty Reduction and Social Strategy
10. Environmental Assessment and Review Framework
11. Environmental Impact Assessment
12. Resettlement Framework
13. Resettlement Plan: Asian Highway 2
15. Indigenous Peoples Planning Framework
16. Risk Assessment and Risk Management Plan

Supplementary Documents
17. Regional Transport Connectivity in South Asia
18. List of Project Roads and Design Summary
19. Climate Change: Project Adaptation Action Report (Tranche1)
20. Comparison of Financing Modality for IND: SASEC Road Connectivity Investment Program