



# Report and Recommendation of the President to the Board of Directors

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Project Number: 47284-002  
August 2016

## Proposed Loan and Grant Kingdom of Bhutan: South Asia Subregional Economic Cooperation Transport, Trade Facilitation, and Logistics Project

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## CURRENCY EQUIVALENTS

(as of 8 August 2016)

Currency unit – ngultrum (Nu)

Nu1.00 = \$0.0149

\$1.00 = Nu66.835

## ABBREVIATIONS

|       |   |   |
|-------|---|---|
| ADB   | – | Asian Development Bank                      |
| CSC   | – | construction supervision consultant         |
| DOR   | – | Department of Roads                         |
| DRC   | – | Department of Revenue and Customs           |
| EIRR  | – | economic internal rate of return            |
| EMP   | – | environmental management plan               |
| LCS   | – | land custom station                         |
| km    | – | kilometer                                   |
| MDP   | – | mini dry port                               |
| O&M   | – | operation and maintenance                   |
| PAM   | – | project administration manual               |
| SASEC | – | South Asia Subregional Economic Cooperation |
| SDR   | – | special drawing right                       |
| SEWH  | – | Southern East–West Highway                  |

## NOTES

- (i) The fiscal year (FY) of the Government of Bhutan and its agencies begins on 1 July and ends on 30 June. “FY” before a calendar year denotes the year in which the fiscal year ends, e.g., FY2016 ends on 30 June 2016.
- (ii) In this report, “\$” refers to US dollars.

|                         |  |
|-------------------------|--|
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## PROJECT AT A GLANCE

|  |  |  |  |
|--|--|--|--|
| <b>1. Basic Data</b>                               |  | <b>Project Number: 47284-002</b>       |  |
| <b>Project Name</b>                                | South Asia Subregional Economic Cooperation Transport, Trade Facilitation and Logistics Project                  | <b>Department /Division</b>            | SARD/SATC  |
| <b>Country Borrower</b>                            | Bhutan<br>Kingdom of Bhutan  | <b>Executing Agency</b>                | Department of Revenue and Customs, Department of Roads |
| <b>2. Sector</b>                                   | <b>Subsector(s)</b>  | <b>ADB Financing (\$ million)</b>      |  |
| ✓ <b>Transport</b>                                 | Road transport (non-urban)   |  | 14.61  |
| <b>Industry and trade</b>                          | Trade and services   |  | 5.00   |
|  | <b>Total</b>   |  | <b>19.61</b>   |
| <b>3. Strategic Agenda</b>                         | <b>Subcomponents</b>   | <b>Climate Change Information</b>      |  |
| Inclusive economic growth (IEG)                    | Pillar 1: Economic opportunities, including jobs, created and expanded   | Adaptation (\$ million)                | 5.50   |
| Environmentally sustainable growth (ESG)           | Global and regional transboundary environmental concerns   | Climate Change impact on the Project   | High   |
| Regional integration (RCI)                         | Pillar 1: Cross-border infrastructure<br>Pillar 2: Trade and investment<br>Pillar 4: Other regional public goods |  |  |
| <b>4. Drivers of Change</b>                        | <b>Components</b>  | <b>Gender Equity and Mainstreaming</b> |  |
| Governance and capacity development (GCD)          | Organizational development   | Some gender elements (SGE)             | ✓  |
| <b>5. Poverty Targeting</b>                        |  | <b>Location Impact</b>                 |  |
| Project directly targets poverty                   | No   | Regional                               | High   |
| <b>6. Risk Categorization:</b>                     | Low  |  |  |
| <b>7. Safeguard Categorization</b>                 | Environment: B Involuntary Resettlement: C Indigenous Peoples: C   |  |  |
| <b>8. Financing</b>                                |  |  |  |
| <b>Modality and Sources</b>                        |  | <b>Amount (\$ million)</b>             |  |
| <b>ADB</b>   |  | <b>19.61</b>                           |  |
| Sovereign Project grant: Asian Development Fund    |  | 5.00                                   |  |
| Sovereign Project loan: Asian Development Fund     |  | 14.61                                  |  |
| <b>Cofinancing</b>                                 |  | <b>0.00</b>                            |  |
| None   |  | 0.00                                   |  |
| <b>Counterpart</b>                                 |  | <b>3.46</b>                            |  |
| Government   |  | 3.46                                   |  |
| <b>Total</b>                                       |  | <b>23.07</b>                           |  |
| <b>9. Effective Development Cooperation</b>        |  |  |  |
| Use of country procurement systems                 |  | Yes                                    |  |
| Use of country public financial management systems |  | Yes                                    |  |

## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on (i) a proposed loan, and (ii) a proposed grant, both to the Kingdom of Bhutan for the South Asia Subregional Economic Cooperation (SASEC) Transport, Trade Facilitation, and Logistics Project.<sup>1</sup>

2. The project will promote regional connectivity in the Phuentsholing area with a direct road connection between Samtse and Chhukha districts. The new road section between Phuentsholing and Chamkuna will (i) complete the last missing 3.3-kilometer (km) link along the Phuentsholing–Samtse national highway, (ii) activate the full value of the entire 58 km Southern East–West Highway (SEWH) section for road users, and (iii) link Samtse district to the rest of the country. The trade facilitation and logistics component is aimed at improving the infrastructure and services at the border crossing points by adding additional equipment to facilitate cross-border traffic and transit of goods and services, trade, and commerce nationwide.<sup>2</sup> These interventions are targeted at improving the working conditions and service delivery at the checkpoints so that goods and services can be exported and imported safely and efficiently.

## II. THE PROJECT

### A. Rationale

3. Landlocked Bhutan faces unique development challenges and opportunities. The country's small population of about 745,000 is dispersed throughout its mostly mountainous terrain.<sup>3</sup> Formidable weather conditions make it difficult and expensive to deliver services and build and maintain vital infrastructure, particularly roads. Almost two-thirds of Bhutan's population still lives in rural areas and depends on an improved and available road network to ensure its daily basic needs. Bordered by India in the east, west, and south, Bhutan is heavily reliant on its much larger neighbor for international trade. India accounts for 84% of its exports, including electricity, and 73% of its imports.<sup>4</sup> However, Bhutan's inadequate cross-border road network and customs infrastructure are hampering its international trade and logistics capacity. It is important to lower high transport costs and improve accessibility and customs clearance services to spur the country's economic and social development.

4. Road transport is the dominant mode of transport for passengers and freight within the country and with neighboring states in India, and national highways are the main arteries in the road network. However, road construction in Bhutan remains a challenge due to the difficult environment and extreme weather conditions, especially during the monsoon season, when landslides make roads along the hillsides unpassable.

5. The main border crossing point between Bhutan and India is in the city of Phuentsholing and connects Bhutan's north–south highway to India's national highway network. Phuentsholing is the most important gateway for cross-border traffic and accounts for 74% of the total value of import and export trade in the country. The inadequacy of the border facilities in dealing with this

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<sup>1</sup> The design and monitoring framework is in Appendix 1.

<sup>2</sup> The Asian Development Bank (ADB) provided project preparatory technical assistance for preparing the project; BHU TA 8708 Kingdom of Bhutan: South Asia Subregional Economic Cooperation Transport, Trade Facilitation and Logistics Project.

<sup>3</sup> ADB. 2015. *Basic Statistics 2015*. Manila.

<sup>4</sup> Bhutan's international sea trade currently moves through Kolkata Port in India. Chittagong Port in Bangladesh is expected to become an alternative port in the future.

traffic causes long idle times, particularly when clearing goods for transport, which leads to heavy congestion and constrains trade in the city.

6. Bhutan is a member of the SASEC Trade Facilitation Program and receives support through the Asian Development Bank (ADB) and other multilateral donors in complying with international standards and facilitate the safe and efficient trade of goods. However, cross-border trade, logistics procedures, and infrastructure require more extensive assistance. Currently there are no cross-border facilities for trade on either side of the border. Through ADB assistance, construction of a new mini dry port (MDP) in Phuentsholing and a land custom station (LCS) in Allay will be completed by early 2019.<sup>5</sup> The trade facilitation and logistics component under this project will finance identified additional equipment for trade facilitation, which will supplement the ADB-financed infrastructure and improve the customs processes for handling goods in the two cross-border facilities to support efficient and secure cross-border trade in the subregion. The main beneficiaries of improved handling of goods are the industry and trade, and agriculture sectors. Key imports are construction materials, food, and household goods; key exports are timber, cardamom, apples, potatoes, oranges, steel, and ferro-alloys. The project will expedite customs modernization and reform processes and help Bhutan comply with the revised Kyoto Convention standards to simplify and harmonize customs procedures.<sup>6</sup>

7. The government's strategic thrusts under the country's Eleventh Five Year Plan, 2013–2018, are inclusive social development, accelerated green economic development, and strategic infrastructure development.<sup>7</sup> In the transport sector, this involves the construction and improvement of national highways. Improving efficiency in the sector will boost domestic and cross-border trade and allow for better delivery and wider coverage of basic social services.

8. The Department of Roads (DOR) has aimed to improve road conditions through sustainable road development and maintenance. It provides its staff with on-the-job training about international best practices from international consultants, mainly during the course of implementing projects financed by ADB or other bilateral development partners. This has resulted in a growing number of dedicated and technically capable staff, and has helped overcome deficiencies in road maintenance capacity, road asset management, and road safety issues. The budget allocation for appropriate road maintenance has steadily increased since 2011, and the DOR is increasing the number of maintenance centers to provide sufficient preventive maintenance and respond faster to damage caused by landslides or other natural disasters. ADB has helped Bhutan develop its road sector strategy, road asset management, and road safety program through more than 10 technical assistance projects, which have facilitated the establishment and enhancement of the DOR's internal capacity.

9. The government has requested ADB financial assistance for the prioritized construction of the missing 3.3 km Phuentsholing–Chamkuna link. The completed SEWH section between Phuentsholing and Samtse will provide a direct inland connection, which is important to develop the southwestern part of Bhutan. Currently, connecting to Samtse district involves indirect routes, either south via India or through a long indirect journey using the northern east–west highway. The completed section also runs parallel to the Indian border and connects several towns in the country's southwestern part, which had previously not been connected by a

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<sup>5</sup> ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Grant to the Kingdom of Bhutan for the South Asia Subregional Economic Cooperation Road Connectivity Project*. Manila.

<sup>6</sup> World Customs Organization. 2006. *International Convention on the Simplification and Harmonization of Customs Procedures (as amended)*. Brussels.

<sup>7</sup> Government of Bhutan, Gross National Happiness Commission. 2013. *Eleventh Five Year Plan, 2013–2018, Volume I: Main Document*. Thimphu.

continuous domestic road. It will also indirectly connect with Ha district, which is now only connected to the north and requires long detours to reach the commercial hub and border crossing point in Phuentsholing. The provision of a domestic road connection will reduce the travel distance between Samtse and Chhukha districts and decongest the main border crossing in Phuentsholing. As a result, the Phuentsholing–Chamkuna road will foster inclusiveness by giving larger segments of Samtse and Ha districts’ populations better access to markets and basic services in Phuentsholing.

10. The 3.3 km Phuentsholing–Chamkuna link will complete the last part of the 58 km SEWH section and allow travelers to reap the full benefit of this national highway between the two districts. The 3.3 km road section is constructed partly on the bed of the Amochu River and adjoins to a steep and unstable slope on the eastern side. Due to these characteristics and technical challenges, the road could not be developed solely with government funding, especially since the road is also the first of this type to be built in the country. In the west, the road will connect to the existing road formation leading to the Amochu Bridge. At the eastern start point, it will connect to the northern bypass road (footnote 5) and to the Omchu Bridge in Phuentsholing, and will supplement infrastructure projects in the region funded with ADB assistance.<sup>8</sup> Through traffic from the west, bound for the north and east, will therefore be able to bypass Phuentsholing.

11. The project and its outcome are consistent with the strategic objective set in ADB’s country partnership strategy, 2014–2018 for Bhutan, which is to assist the government in (i) achieving inclusive economic growth by developing key infrastructure for transport and enhancing trade facilitation, and (ii) broadening access to economic opportunities and making growth more inclusive by providing support to enhance national and cross-border connectivity.<sup>9</sup> The project also supports government plans for the construction and improvement of national highways to boost international and regional trade. The project is included in the country operations business plan, 2016–2018 for Bhutan and in the regional operations business plan, 2016–2018 for South Asia.<sup>10</sup>

## **B. Impact and Outcome**

12. The impact will be improved mobility and cross-border movement of goods and passengers, aligned with Bhutan’s Eleventh Five Year Plan (footnote 7). The outcome will be improved road connectivity and service delivery at the border crossings in Samtse and Chhukha districts.

## **C. Outputs**

13. There will be two outputs: (i) 3.3 km of national highway constructed between Phuentsholing and Chamkuna; and (ii) equipment for trade facilitation and logistics at MDP in Phuentsholing and the LCS in Allay procured and installed. Output 1 consists of a two-lane national highway section with pedestrian walkways on a 6-meter high embankment to take into account the special environmental conditions along a riverbed (para. 10). Output 2 includes a truck X-ray scanner, handheld scanners, heavy machinery for transshipment and off-loading

<sup>8</sup> ADB. 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Bhutan for the Urban Infrastructure Project*. Manila (Loan 2816-BHU).

<sup>9</sup> ADB. 2014. *Country Partnership Strategy: Bhutan, 2014–2018*. Manila.

<sup>10</sup> ADB. 2015. *Country Operations Business Plan: Bhutan, 2016–2018*. Manila; ADB. 2015. *Regional Operations Business Plan: South Asia, 2016–2018*. Manila.

procedures, surveillance and communication systems, and tools to detect illegal items, which will improve service delivery and safety at the MDP in Phuentsholing and the LCS in Allay.

#### D. Investment and Financing Plans

14. The project is estimated to cost \$23.07 million (Table 1). Detailed cost estimates by expenditure category and financier are in the project administration manual (PAM).<sup>11</sup>

**Table 1: Project Investment Plan**  
(\$ million)

| Item  | Amount <sup>a</sup> |
|---|---------------------|
| <b>A. Base Cost<sup>b</sup></b>                                     |                     |
| 1. Construction of national highway section                         | 15.57               |
| 2. Procurement and installation of equipment for trade facilitation | 4.84                |
| <b>Subtotal (A)</b>   | <b>20.41</b>        |
| <b>B. Contingencies<sup>c</sup></b>                                 | <b>2.48</b>         |
| <b>C. Financing Charges During Implementation<sup>d</sup></b>       | <b>0.18</b>         |
| <b>Total (A+B+C)</b>  | <b>23.07</b>        |

<sup>a</sup> Includes taxes and duties of \$369,000 to be financed by the Government of Bhutan as an exemption.

<sup>b</sup> In April 2016 prices, escalated from July 2015 prices.

<sup>c</sup> Physical contingencies computed at 10.0% for civil works. Price contingencies computed at 1.5% on foreign exchange costs and 6.0% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.

<sup>d</sup> Includes capitalized interest during construction, computed for the Asian Development Bank loan at 1.0% per annum during the grace period and 1.5% per annum thereafter.

Source: Asian Development Bank estimates.

15. The government has requested a loan in various currencies equivalent to SDR10.466 million, and a grant not exceeding \$5 million from ADB's Special Funds resources to help finance the project.<sup>12</sup> The loan will have a 32-year term, including a grace period of 8 years, an interest rate of 1.0% per annum during the grace period and 1.5% per annum thereafter, and such other terms and conditions set forth in the draft financing and project agreement.

16. The financing plan is in Table 2.

**Table 2: Financing Plan**

| Source                          | Amount (\$ million) | Share of Total (%) |
|---------------------------------|---------------------|--------------------|
| Asian Development Bank          |                     |                    |
| Special Funds resources (loan)  | 14.61               | 63.3               |
| Special Funds resources (grant) | 5.00                | 21.7               |
| Government                      | 3.46                | 15.0               |
| <b>Total</b>                    | <b>23.07</b>        | <b>100.0</b>       |

Source: Asian Development Bank estimates.

#### E. Implementation Arrangements

17. The implementation arrangements are summarized in Table 3 and described in detail in the PAM.

<sup>11</sup> Project Administration Manual (accessible from the list of linked documents in Appendix 2).

<sup>12</sup> A country's eligibility for Asian Development Fund grants under the revised grant framework is determined by its risk of debt distress. The latest debt sustainability analysis determined that Bhutan had a moderate risk of debt distress and was therefore eligible to receive 50% of its Asian Development Fund allocation as grants.

**Table 3: Implementation Arrangements**

| Aspects   | Arrangements   |                                      |                 |
|---|--|--------------------------------------|-----------------|
| Implementation period                               | August 2016–December 2021  |                                      |                 |
| Estimated completion date<br>(loan closing date)    | 31 December 2021<br>(30 June 2022)   |                                      |                 |
| Management  |  |                                      |                 |
| (i) Oversight body                                  | National Steering Committee<br>Department of Public Accounts (chair)<br>DRC, Department of Trade, DOR, Department of Engineering Services,<br>Phuentsholing Thromde (members)  |                                      |                 |
| (ii) Executing agency/<br>Implementing agency       | DOR for the 3.3 km Southern East–West Highway section between<br>Phuentsholing and Chamkuna; DRC, acting through Phuentsholing<br>Thromde, for procurement and installation of equipment for trade<br>facilitation   |                                      |                 |
| (iii) Implementation unit                           | 3 staff members each for the DOR and Phuentsholing Thromde   |                                      |                 |
| Procurement <sup>a</sup>                            | International competitive bidding  | 2 contracts                          | \$16.29 million |
|   | National competitive bidding   | 4 contracts                          | \$0.86 million  |
|   | Shopping   | 6 contracts                          | \$0.10 million  |
| Consulting services <sup>b</sup>                    | Quality- and cost-based selection with<br>full technical proposal and a 90:10<br>quality-to-cost proportion, as the nature<br>of the assignment requires priority<br>consideration for quality                       | 1 contract,<br>347 person-<br>months | \$2.18 million  |
| Disbursement  | The loan and grant proceeds will be disbursed in accordance with ADB's<br><i>Loan Disbursement Handbook</i> (2015, as amended from time to time) and<br>detailed arrangements agreed between the government and ADB. |                                      |                 |
| Retroactive financing and/or<br>advance contracting | Advance contracting for detailed design and procurement assistance<br>under the SASEC Road Connectivity Project  |                                      |                 |

ADB = Asian Development Bank, DOR = Department of Roads, DRC = Department of Revenue and Customs, SASEC = South Asia Subregional Economic Cooperation.

<sup>a</sup> All procurement will be carried out in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).

<sup>b</sup> Recruitment of consulting services will be carried out in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time).

Source: Asian Development Bank.

18. The Department of Revenue and Customs (DRC) will appoint Phuentsholing Thromde to act on its behalf as executing and implementing agency for the trade facilitation and logistics component of the project. For this purpose, the DRC will open the project account and channel the funds to Phuentsholing Thromde, but ownership of the trade facilitation equipment procured and installed under this project remains with the DRC. The engineering designs and the preparation of bidding documents for the equipment and the road component are being conducted through existing consultancy contracts under the SASEC Road Connectivity Project (footnote 5).

### III. DUE DILIGENCE

#### A. Technical

19. **Engineering.** The 3.3 km national highway section is constructed partly on the bed of the Amochu River stream. The east side of the road is adjacent to a mostly unstable mountain slope with corresponding degradations. To minimize possible interruptions in the use of the road, a conventional design is not sufficient or sustainable. Technical solutions will be applied to secure the road asset against forces of nature. The engineering design for the road is based on

site conditions and field investigations, and includes protective measures for the embankment. Three actions to avoid erosion and deployment of flood control systems were integrated in the preliminary design: (i) positioning diverging spurs with bank reinforcement and anchoring the embankment, (ii) training the river to maintain a safe distance between the main Amochu river channel and the embankment during the construction, and (iii) controlling surface runoff laden with sediment and boulders from the hillside east of the embankment road by providing adequate channeling structures that will allow water to pass under the road toward the Amochu River. The design will optimize the construction works for cost-effectiveness and use proven technology and standard materials compatible with local conditions for a durable road with optimized maintenance costs. The chosen road alignment has the least impact on the environment and social safeguards and is closely coordinated with future projects in the area. Measures to support road safety and climate resilience features have been included in the preliminary design and will be confirmed during detailed road design.

20. The project will provide trade facilitation equipment at the MDP in Phuentsholing and the LCS in Allay in the form of (i) a truck gantry X-ray scanner; (ii) a container lifter; and (iii) several smaller types of equipment, such as customs rummage kits, drug testing kits, safety protective wear, and closed-circuit television systems. The technical specifications for the trade facilitation equipment have been assessed by the design consultant under the ongoing project (footnote 5) and are included in the design layout of the Phuentsholing MDP and Allay LCS. The number and type of equipment will be further assessed and selected during project implementation to support the best possible functions and roles of the two trade facilities.

21. **Operation and maintenance.** Two agencies will be involved in the operation and maintenance (O&M) of the equipment to be procured and infrastructure to be constructed under the project: the DRC for the equipment at the Phuentsholing MDP and the Allay LCS, and the DOR for the 3.3 km national highway section. For the O&M of major equipment, a maintenance contract and training for operating the machinery and equipment will be included in the supplier contracts. To help sustain the road component, the construction supervision consultant (CSC) recruited under the project will perform on-the-job training to develop the skills and ability of DOR staff to manage the road assets and oversee the road safety and climate resilience aspects of the project throughout construction. The CSC, together with the DOR, will assess the required and preventive road maintenance measures for the road. On this basis, the DOR will prepare and maintain a road asset management system during project implementation to ensure that sufficient annual funding is set aside for O&M after road completion.

## **B. Economic and Financial**

22. The economic assessment was carried out in accordance with ADB guidelines.<sup>13</sup> The project is expected to (i) increase connectivity by completing a missing link of the Phuentsholing–Samtse highway between Phuentsholing and Chamkuna, which will provide travel time and vehicle operating cost savings for road users; and (ii) strengthen cross-border trade and economic development by providing trade facilitation equipment at border crossings, which will enhance operational efficiency and improve fraud prevention, control, and detection. The economic internal rate of return (EIRR) of the project is estimated at 17.0% for the road component and 15.5% for the trade facilitation and logistics component, with an overall EIRR of 16.7%. Sensitivity analysis showed that both project components would remain economically viable in the event of a 10% increase in cost, a 10% reduction in benefits, or a combined 10%

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<sup>13</sup> ADB. 1997. *Guidelines for the Economic Analysis of Projects*. Manila.

increase in cost and 10% reduction in benefits. In this last scenario, the EIRR would be 15.1% for the road component and 11.8% for the trade facilitation and logistics component.

23. The financial sustainability of recurrent O&M costs was assessed for each component. Incremental annual costs for the Phuentsholing–Chamkuna road are estimated to account for 0.24% of the DOR's annual road maintenance budget of Nu3.5 billion in FY2016. Given the actual budget and the commitment of the government to provide adequate funds for road maintenance under the Eleventh Five Year Plan, it is reasonable to expect that funds will be available to meet the O&M costs. While the DOR's budget for routine maintenance has significantly increased from Nu126.8 million in FY2012 to Nu281.1 million in FY2016, the budget for periodic maintenance has varied by a factor of 1 to 7 in the same period. The risk associated with the sustainability of the road section has therefore been rated *medium*, and further discussions are proposed with the DOR and the government to help secure sufficient budget allocations for road O&M. The trade facilitation equipment is non-revenue earning, as cost recovery will not be directly sought from users. Instead, the equipment is expected to generate indirect revenues through additional taxes and fines by use of a truck gantry scanner, which will allow systematic inspections of trucks and increase fraud prevention, control, and detection. The total annual costs required for the O&M of the trade facilitation equipment are estimated to amount to Nu21.8 million in 2019, or 41.1% of the expected additional customs revenues, which are tax revenues accruing to the general revenues of the government.

### C. Governance

24. **Institutional capacity.** The DOR will be the executing agency for the road component, and Phuentsholing Thromde, on behalf of the DRC, will be the executing agency for the trade facilitation and logistics component. Both the DOR and Phuentsholing Thromde have experience in ADB-financed projects as an executing agency and implementing agency and have appropriate staff at their disposal.

25. **Financial management.** An assessment of the accounting systems, financial reporting, and external audit procedures of the DOR and Phuentsholing Thromde concluded that their financial management systems are satisfactory. The accounting and reporting process in the finance and accounting manuals developed by the Ministry of Finance will be followed. The DOR and Phuentsholing Thromde use the government's standardized budget and accounting system, which has been computerized since 2003, produces satisfactory financial reports, and ensures data availability. Each project implementation unit of the DOR and Phuentsholing Thromde will include a suitably qualified accountant. Each will maintain separate project records and accounts to identify financing resources received and expenditures made for the project and ensure an adequate audit trail. The Royal Audit Authority of Bhutan, an independent and nonpartisan institution authorized to perform audits on government agencies, will audit project financial statements annually in accordance with international auditing standards.

26. **Procurement.** The overall risk related to the procurement capacity of the DOR and Phuentsholing Thromde has been assessed as *low*. Both have implemented ADB-funded projects in the past, are presently implementing the SASEC Road Connectivity Project, and have procured works and consulting services under ADB guidelines. The Public Procurement Policy Division under the Ministry of Finance oversees public procurement under the government's Procurement Rules and Regulations (2009). The division is mandated to recommend reforms of the procurement policy or laws to the government, prepare standard bidding documents, issue technical guidelines and manuals on procurement, and liaise with government organizations to develop human resources and professionalism in procurement.

The regulations recognize that the procurement rules and procedures of development partners may prevail in projects funded by development partners.

27. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, the DOR, and Phuentsholing Thromde. The specific policy requirements and supplementary measures are described in the PAM (footnote 11).

#### **D. Poverty and Social**

28. **Poverty reduction and social impact.** Key project beneficiaries are the estimated 65,387 Samtse district residents, 25,000 Phuentsholing residents, and traders and business owners from India and Bhutan. Chhukha district, where Phuentsholing is located, has a poverty rate of 11.2% compared with 22.2% in Samtse district. The road component will facilitate safer and more reliable access between Samtse and Phuentsholing, providing an alternative to traveling via India, which is currently the main link between these two towns. It will provide Samtse district residents with better access to markets and services in Phuentsholing. The trade facilitation and logistics component will improve import and export processes in the most important gateway for cross-border traffic in the country, facilitating household access to competitively priced goods and contributing to the country's development and integration with regional and international markets.

29. **Gender.** The gender assessment conducted during preparation (footnote 2) indicates that women will benefit equally from the road, with 90% of them feeling comfortable traveling alone in taxis and buses or using their private vehicles. Most of the women consulted (92%) were not interested in participating in construction activities, as most of them work in the civil service or in the private sector, or manage their own businesses. Women are, however, likely to participate in maintenance activities, as females represent currently already more than 50% of the road maintenance national workforce. The project is to be categorized as having some gender elements with the implementation of the following gender mainstreaming activities: (i) including pedestrian- and women-friendly design features, such as pedestrian walkways, benches, and signage; (ii) conducting (a) training sessions for DOR officials on how to better integrate gender design features into future projects, and (b) on-the-job training for DOR staff on improving the integration of social and gender mainstreaming features into future project designs; and (iii) targeting 50% participation of women in community awareness campaigns on sexually transmitted infections, HIV/AIDS, and human trafficking.

30. **HIV/AIDS, human trafficking, and labor.** The prevalence of HIV and human trafficking in the project area is low, and public information on human trafficking is not available. The majority of people (92%) surveyed during project preparation were aware of HIV transmission, protection practices, and detection programs in Phuentsholing. However, given that the project is located in a border area, community awareness campaigns on HIV/AIDS and human trafficking will be conducted as part of the project, and the contractor will conduct HIV/AIDS awareness sessions for its labor force. Moreover, the labor force will benefit from government programs under the National AIDS Control Program.

#### **E. Safeguards**

31. **Involuntary resettlement and indigenous peoples.** The project is categorized as C for involuntary resettlement as per ADB's Safeguard Policy Statement (2009). Due diligence of social impacts of the road works concluded that the project will neither affect private assets nor cause physical or economic displacement. The road alignment is located on government land,

and field verification and consultations confirmed the absence of private assets within the corridor of impact. The trade facilitation and logistics component does not have any resettlement impacts. There are no indigenous people in the project area. The civil works under this project will not affect any persons and the project is categorized as C for indigenous peoples.

32. **Environmental impact.** In accordance with the requirements of the Safeguard Policy Statement, the road project component has been classified as environment category B. Therefore, an initial environmental examination, including an environmental management plan (EMP), has been prepared and disclosed on the ADB website. The main environmental impacts of the project are related to the construction of the 3.3 km embankment road that is 4–6 meters above the existing ground level, of which about 1.0 km directly abuts the Amochu River bank. The construction will require dredging, erosion protection works, and river training. Significant slope stabilization in the form of gabions, spur dikes, and river channels were incorporated in the design to provide adequate toe and flank protection of the embankment road against the erosive force of the Amochu River. Although less severe, other impacts are related to the borrow area and the transport of material and should also be addressed. The environmental impacts include deterioration of air quality from dust and vehicular emissions, increased noise level, vibration, deterioration of surface water quality, and occupational and community health and safety. Adequate mitigation measures are included in the EMP to address these impacts and will be an integral part of the bidding documents. The key long-term impacts of vehicular emissions will be managed through mandatory annual vehicular emission testing. Meaningful consultations were conducted during the project preparation stage, and concerns of the affected persons and stakeholders were considered in the initial environmental examination and the EMP. The consultations were attended by representatives from key environmental agencies, roadside communities, and nongovernment organizations. An integrated social and environmental grievance redress mechanism has been formed to continue receiving feedbacks and complaints, if any, from affected parties, and to address them during the construction and operation stages. The project management unit for the Phuentsholing–Chamkuna road will be created under the DOR, which will include an environmental specialist to supervise the effective implementation of the EMP and the preparation of semiannual environmental monitoring reports for public disclosure. The project management unit will be supported by the CSC who will include an environmental specialist in their team.

## F. Risks and Mitigating Measures

33. Major risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.<sup>14</sup> The integrated benefits and impacts are expected to outweigh the costs.

**Table 4: Summary of Risks and Mitigating Measures**

| <b>Risks</b>   | <b>Mitigating Measures</b>  |
|--|---|
| Inadequate coordination among relevant ministries and project executing agencies | A steering committee representing all the project-related government institutions will be formed for project implementation, and regular meetings will be held twice a year, or as may be necessary.  |
| Project implementation delay   | Detailed design and bidding for the road component and the trade facilitation and logistics component will be conducted by existing CSCs under the SASEC Road Connectivity Project (footnote 5). Recruitment of a CSC will be completed before commencement of civil works. |
| Insufficient maintenance and reduced sustainability                              | The detailed design for the road will include protection measures for the road asset to minimize risks and maintenance costs and avoid direct   |

<sup>14</sup> Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

| Risks | Mitigating Measures   |
|-------|---|
|       | exposure of the embankment to the adjoining bed of the Amochu River at any time. An annual preventive maintenance plan to support the intended operation of the structures will be developed during the design stage. A CSC will provide continuous on-the-job training to DOR staff on important aspects of road design and asset management, and on key aspects for the proper maintenance of climate-resilient structures. The DOR will work with the Ministry of Finance to set aside sufficient funding for O&M as part of annual budget bids. |

CSC = construction supervision consultant, DOR = Department of Roads, O&M = operation and maintenance, SASEC = South Asia Subregional Economic Cooperation.  
Source: Asian Development Bank.

#### IV. ASSURANCES

34. The government, the DOR, and Phuentsholing Thromde have assured ADB that implementation of the project 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 PAM and loan documents.

35. The government, the DOR, and Phuentsholing Thromde have agreed with ADB on certain covenants for the project, which are set forth in the financing and project agreements.

#### V. RECOMMENDATION

36. I am satisfied that the proposed loan and grant would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve:

- (i) the loan in various currencies equivalent to SDR10,466,000 to the Kingdom of Bhutan for the South Asia Subregional Economic Cooperation Transport, Trade Facilitation, and Logistics Project, from ADB's Special Funds resources, with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; for a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft financing agreement presented to the Board; and
- (ii) the grant not exceeding \$5,000,000 to the Kingdom of Bhutan, from ADB's Special Funds resources, for the South Asia Subregional Economic Cooperation Transport, Trade Facilitation, and Logistics Project, on terms and conditions that are substantially in accordance with those set forth in the draft financing and project agreements presented to the Board.

Takehiko Nakao  
President

8 August 2016

## DESIGN AND MONITORING FRAMEWORK

| <b>Impact the Project is Aligned with</b>   |   |   |  |
|---|---|---|--|
| Mobility and cross-border movement of goods and passengers improved (Eleventh Five Year Plan, 2013–2018) <sup>a</sup>     |   |   |  |
| <b>Results Chain</b>  | <b>Performance Indicators with Targets and Baselines</b>  | <b>Data Sources and Reporting</b>                 | <b>Risks</b>   |
| <b>Outcome</b><br>Road connectivity and service delivery at the border crossings in Samtse and Chhukha districts improved | By 2022<br>a. Average travel distance between Phuentsholing and Samtse reduced to 58 km (2016 baseline: 78 km through India)<br>b. The Samtse–Phuentsholing national highway achieves 54,752 average daily vehicle-km and the Chamkuna–Phuentsholing highway section achieves 9,405 average daily vehicle-km in the first full year of operation (2016 baseline: 0 vehicle-km)<br><br>By 2020<br>c. Custom processes improved/enhanced:<br>(i) Systematic custom inspections performed to detect illegal items and prevent importation of duty-unpaid goods; (ii) time-saving, safe transshipment, and off-load procedures carried out; (iii) average physical truck inspection time reduced to less than 5 minutes; and (iv) container off-loading time reduced to 3 minutes (2016 baseline: NA) | a.- c. Post-implementation measurement by the DOR | a. Other sections of the national highway between Phuentsholing and Samtse are not passable due to landslides or other natural disasters<br><br>b. Free trade agreement with India is discontinued<br><br>c. Completion of civil works at installation sites under another project is delayed <sup>1</sup> |
| <b>Outputs</b><br>1. National highway between Phuentsholing and Chamkuna constructed                                      | By 2021<br>1. 3.3 km of national highway constructed between Phuentsholing and Chamkuna (2016 baseline: 0.0 km)   | 1. Construction supervision consultant's report   | 1. Slow work execution due to exceptional weather conditions   |

<sup>1</sup> ADB. 2014. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Grant to the Kingdom of Bhutan for the South Asia Subregional Economic Cooperation Road Connectivity Project*. Manila.

| Results Chain  | Performance Indicators with Targets and Baselines   | Data Sources and Reporting                    | Risks   |
|--|---|---|---|
| 2. Equipment for trade facilitation and logistics at MDP in Phuentsholing and the LCS in Allay procured and installed  | By 2019<br>2. Gantry truck X-ray scanner, handheld scanners, container lifter, forklift trucks, and communication and safety equipment procured and installed (2016 baseline: NA) | 2. Post-implementation measurement by the DRC | 2. Delayed installation progress due to incomplete infrastructure |
| <p><b>Key Activities with Milestones</b></p> <p><b>Output 1: National highway between Phuentsholing and Chamkuna constructed</b></p> <p>1.1 Advertise bid documents by Q2 2017<br/>1.2 Mobilize construction supervision consultant and award civil works contract by Q4 2017<br/>1.3 Complete construction by 31 December 2021</p> <p><b>Output 2: Equipment for trade facilitation and logistics in mini dry port in Phuentsholing and the LCS in Allay procured and installed</b></p> <p>2.1 Complete bidding documents for equipment by Q2 2017<br/>2.2 Award contracts for major equipment at the Phuentsholing MDP and the Allay LCS by Q1 2018<br/>2.3 Complete installation of equipment (in line with completed infrastructure for the MDP and the LCS) by Q1 2019</p> <p><b>Project Management Activities</b></p> <p>Project implementation units in the DOR and Phuentsholing Thromde operational by Q3 2016<br/>Counterpart funds available by Q3 2016</p> |   |   |   |
| <p><b>Inputs</b></p> <p>ADB: \$14.61 million (loan)<br/>ADB: \$5.00 million (grant)<br/>Government: \$3.46 million</p>   |   |   |   |
| <p><b>Assumptions for Partner Financing</b></p> <p>NA</p>  |   |   |   |

ADB = Asian Development Bank, DOR = Department of Roads, DRC = Department of Revenue and Customs, km = kilometer, LCS = land custom station, MDP = mini dry port, NA = not applicable, Q = quarter.

<sup>a</sup> Government of Bhutan, Gross National Happiness Commission. 2013. *Eleventh Five Year Plan, 2013–2018, Volume I: Main Document*. Thimphu.

Source: Asian Development Bank.

**LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/RRPs/?id=47284-002-3>

1. Financing Agreement
2. Project Agreement
3. Sector Assessment (Summary): Transport (Road Transport [Nonurban])
4. Project 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. Initial Environmental Examination
11. Risk Assessment and Risk Management Plan

**Supplementary Documents**

12. Climate Risk Assessment and Management Report
13. Financial Management Assessment
14. Regional Cooperation and Integration