



# Concept Environmental and Social Review Summary

## Concept Stage

### **(ESRS Concept Stage)**

Date Prepared/Updated: 09/18/2019 | Report No: ESRSC00820



**BASIC INFORMATION**

**A. Basic Project Data**

Country	Region	Project ID	Parent Project ID (if any)
Bhutan	SOUTH ASIA	P171012	
Project Name	Bhutan Green Transport Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Transport	Investment Project Financing	10/30/2020	5/31/2021
Borrower(s)	Implementing Agency(ies)		
Ministry of Finance. Government of Royal Bhutan	Thimphu Thromde		

Proposed Development Objective(s)

The Project Development Objective of the project is to improve access to opportunities for the residents of Thimphu City, and provide reliable, safe, and green urban mobility options to them along the North-South Axis of Thimphu City, as well as, the City Center.

Financing (in USD Million)	Amount
<b>Total Project Cost</b>	<b>29.69</b>

**B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?**

No

**C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]**

In the long run the project will increase livability of Thimphu city from the transportation perspective. This will be achieved by developing a Priority Bus Service along one of the key transportation corridors in Thimphu which connects the various neighborhoods of the city and by decongesting the city center (through the pedestrianization of a main city boulevard).

The project is expected to have three components:



Component 1—Priority bus service infrastructure, fleet, and systems: This component will finance the development of the 16 km priority bus service corridor along Thimphu’s north-south axis (Babesa to Dechencholing). The characteristics of the service (grade separated, priority lane, signal prioritization etc.) will be determined during project preparation. Provisionally, the interventions are expected to include road infrastructure (including cycling and pedestrian pathways), vehicles, and an Intelligent Transport Systems (ITS). For the vehicle fleet, different bus technologies will be assessed to select an environmentally friendly technology suitable for the context of Thimphu. The ITS is expected to include, Automatic Vehicle Location System, Passenger Information System, and Automated Fare Collection. (Provisional Cost US\$ 26.8 million);

Component 2—Pedestrianization of Norzin Lam: This component will finance the pedestrianization of Thimphu’s main 1.3 km boulevard known as Norzin Lam. This will allow priority for pedestrian access along Thimphu’s main business district and is expected to decongest the city center. Norzin Lam is envisaged as exclusively for pedestrian and non-motorized traffic during peak hours with vehicle traffic to support businesses allowed only during defined morning or late evening hours (with exceptions made for emergency vehicles, disability access, public service vehicles, and possibly buses). There are two parking garages close to Norzin Lam, as assessment of whether these would suffice as an alternative parking option for Norzin Lam will be evaluated during project preparation and suitable additional alternative parking options identified as needed. (Provisional Cost US\$ 2.3 million); and

Component 3—Capacity Development: This component will finance goods purchase, consultancies, and trainings for institutional strengthening for the operation of the Priority Bus Service. The technical assistance provided through this component may include administrative and financial management aspects of the Priority Bus Service, study of alternative enforcement measures, training to operators and drivers, and better user information systems. This component will also finance a communication campaign to promote the Priority Bus Service and modern public transport in Thimphu. (Provisional Cost US\$ 0.9 million).

Public Disclosure

#### **D. Environmental and Social Overview**

D.1. Project location(s) and salient characteristics relevant to the ES assessment [geographic, environmental, social]  
The proposed investment will be for upgrading and expanding sections of the the existing highway into a priority bus corridor from Babesa in the south of the City towards Dechencholin in the north. The existing highway is mostly a four-lane road with several sections of two lanes, particularly at the northern end through hill ranges and will be expanded to four-lanes, where justified, to accommodate the dedicated lanes for priority buses. The investment will also include pedestrianization of Norzin Lam, the main boulevard through the City. There will be also a third component related to capacity building of the client/implementing agency.

Thimphu, the Capital City of the Kingdom of Bhutan, is situated in the western central part of Bhutan under Thimphu District, on the valley of the Thimphu River. The City extends in a north-south direction on the west strip of the Thimphu Valley. The thinly forested Thimphu city is the fourth highest capital in the world by altitude (2248 – 2648 meters). The Thimphu River, through the city, has many tributaries flowing from the Himalayan peaks and is delimited by a steep eastern ridge rising from the riverbed. It has a gradually sloping topography on the western banks of the river. The north-south orientation of the hill ranges of the Thimphu Valley are exposed to moist monsoon winds. Due to varying rainfall in the windward and leeward sides of the hill ranges, Thimphu Valley – in the leeward side – is comparatively dry and contains a different type of vegetation. The city experiences a southwest monsoon-



influenced subtropical highland climate. Continuous rainfall for several days occurs during June-September sometimes resulting in landslides and blockage of roads. Thimphu experiences a wet season, which runs from May through September and a dry season covering remainder of the year.

Thimphu has witnessed rapid expansion since 1974 and the growing population with the increase in automobiles and housing settlements, necessitated the Thimphu Structure Plan for 2027. The structure plan calls for protection of the fragile ecology of the valley, including its rivers and forests, and recognizes integrity of the building of notes, monasteries, temples, chortens and prayer flags, the urban core, urban villages and the urban corridor. The structure plan imposes a bar on construction within 30 meters of a river or stream and encourages decongestion of the city removing the economic activities. Rapid expansion has resulted in considerable rebuilding in the city centre and mushrooming of suburban development elsewhere. Norzin Lam, the main thoroughfare, is lined with shops, restaurants, retail arcades and public buildings. The settlements along the Babesa – Dechencholin highway are also expanding.

D. 2. Borrower’s Institutional Capacity

All procurements for preparation and implementation of physical works and contract management will be undertaken by Thimphu Thromde (TT). TT has experience managing a Bank financed urban development project closed on June 30, 2019. However, it holds inadequate capacity for managing environmental and social risks against the standards of the new ESF. The Bank’s engagement with the Thromde under the previous operational policies on safeguards has used the Bhutan country system on environmental safeguards but not on involuntary resettlement. As part of the urban project, establishment of a permanent Environmental and Social Cell (ESC) at TT level was planned, with environmental and social management officers under the Thromde payroll, for managing the environmental and social issues and risks in project management. However, this was not implemented, instead individual consultants were recruited only for the project’s duration. Consequently, an assessment of the Borrower’s Capacity will be carried out which will analyze the E&S systems of RGoB and as well the current capacity of the Thromde and other relevant ministries and agencies against the requirements of the new Environmental and Social Framework (ESF) of the World Bank . In any case, the assessment will include a relevant capacity plan for the borrower and the implementing agency including other relevant agencies of RGoB which will be part of the borrower’s ESCP. The capacity support component will also consider experience sharing and skills training on environmental and social assessment and management of related risks and impacts. The project preparation study will also review the potentials of establishing a permanent ESC within the Thromde.

Public Disclosure

**II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS**

**A. Environmental and Social Risk Classification (ESRC)** Substantial

**Environmental Risk Rating** Substantial

The project includes physical works for development of a priority bus corridor, where justified, and improvement of pedestrian facilities along the 1.3 km main boulevard of the city. The investments will be implemented largely within existing footprints except for widening in some sections to make them 4-lane and possibly on sourcing the construction materials. Potential risks and impacts of the project include occupational and community health and safety during construction, landslides and erosion from terrace cutting and earth excavation, siltation of rivers, vegetation loss from forest clearance, and vibration impacts on structures from earth works and movement of



equipment and vehicles. In view of these potential impacts and weak capacity of the implementing agency to manage risk, environmental risk is rated as Substantial.

**Social Risk Rating**

Substantial

Social risk is also rated substantial. The project activities may involve land acquisition and population displacement, permanent or temporary impact on livelihoods of the affected people, impact on community health and safety due to terrace cutting and vibration from civil works, the issues related to women and persons with disabilities and risks of GBV including labor influx. Besides, the implementing agency does not have adequate capacity in managing social risks and impacts and are new to the relevant standards of the Bank’s ESF Policy. There are equally risks that complaints might be raised by some stakeholders, especially regarding the consultation, participation and inclusion process in design and implementation of activities. Project-related grievances will be dealt with through a Feedback and Grievance Redress Mechanism (FGRM), which will be included as part of the Stakeholder Engagement Plan (SEP). Besides this project related general GRM, separate GRMs will be set up to address the labour issues and the GBV related complaints which might arise under the project.

**B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered**

**B.1. General Assessment**

**ESS1 Assessment and Management of Environmental and Social Risks and Impacts**

**Overview of the relevance of the Standard for the Project:**

Environmental and social risks from civil works activities largely within existing footprints are described under environmental and social risk classification above. These include occupational and community health and safety, landslides and erosion from terrace cutting and earth excavation, siltation of rivers, vegetation loss from forest clearance, vibration impacts on structures from earth works and movement of equipment and vehicles, land acquisition and potential physical displacement, permanent or temporary impact on livelihoods of the affected people, labour influx, inclusion issues for the women and the persons with disabilities and GBV risks. An Environmental and Social Impact Assessment (ESIA) will be prepared which will include assessments of the country E&S framework and institutional capacity, and identification of disadvantaged and vulnerable people in the context of the project. The ESIA will provide measures to be included in the Environmental and Social Commitment Plan (ESCP), Environment and Social Management Plan (ESMP) and other documents of the borrower as described in the sections below (Section III.B).

**Areas where “Use of Borrower Framework” is being considered:**

TBD. The RGoB showed strong interest in using their E&S framework for the project. If the Task Team recommends the consideration/assessment of aspects of the Borrower’s E&S Framework, then the following information will be provided:

- Any aspects of the Borrower’s E&S Framework that the Task Team and the Borrower are recommending be considered and assessed. The relevant ESSs should be identified and preliminary findings should be specified;
- The methodology, process and timeline for assessing the identified aspects of the Borrower’s E&S Framework during Project preparation should be provided; and
- Any aspect of a Borrower’s E&S Framework that is not described and not linked to a relevant ESS will be presumed to not apply to the Project.

Public Disclosure



### **ESS10 Stakeholder Engagement and Information Disclosure**

The key stakeholders in addition to the Thimphu Thromde include (but not limited to) Gross National Happiness Commission (GNHC) the Ministry of Economic Affairs, Ministry of Works and Human Settlement, National Environmental Commission, Department of Forest, National Land Commission, Department of Labor, Department of Immigration, public and private transport operators and users, taxi drivers and owners, transport workers/unions, women and child rights group, disabled and vulnerable persons, educationists, students, environmental activists, sports clubs, national and international contractors, labor contractors, suppliers, and communities/inhabitants around the project areas. Stakeholder engagement will be a critical tool for social and environmental risk management, project sustainability and success. In consultation with the Bank, the Thromde will prepare, consult upon, and implement an inclusive Stakeholder Engagement Plan (SEP) proportional to the nature and scale of the project and associated risks and impacts. The SEP will include relevant measures for communications with the stakeholders and pay attention to the identification of vulnerable groups, particularly women and persons with disabilities, and will facilitate and monitor their participation in the process. In this regard, the Project will also benefit from the ongoing involvement of civil society under the BUDP-II. The SEP will include a Feedback and Grievance Redress Mechanism (FGRM) that will be set up with related communications channels and tools. As part of the environmental and social impact assessment, the Thromde will maintain and disclose a documented record of stakeholder engagement, including a description of the stakeholders consulted and a summary of the feedback received. The draft SEP will be prepared for the Appraisal stage ESRS.

### **B.2. Specific Risks and Impacts**

**A brief description of the potential environmental and social risks and impacts relevant to the Project.**

#### **ESS2 Labor and Working Conditions**

Given the current practice of labor engagement in large civil works in Bhutan and the location of works, the risks and impacts related to ESS2 is rated substantial. In general, construction workers in Bhutan, both direct and contracted workers and primary supply workers with the civil works contractors, are largely employed from abroad including neighboring India and Nepal which exposes the project's implementation to the risk of external labor influx. The total number of such civil construction workers, however, is expected to be, at any given time, below 100. The major civil works will be carried out in the hilly terrain in urban areas, which poses additional safety issues for the contracted workers. The ESIA will therefore identify relevant legal and policy framework and agencies of the Kingdom managing foreign migrant and local laborers which oversee their rights and safety issues. The ESIA will also screen and assess existing labor laws and policies of RGoB and on that basis, will prepare the project's Labour Management Procedures (LMP) , including relevant requirements related to terms and conditions of employment, nondiscrimination and equal employment and wages, worker's organizations, protecting the workforce, and grievances and appeals processes consistent with the requirements of ESS2, including occupational health and safety of staff, child labor, forced labor, gender and GBV issues. The salient points will be addressed in the ESIA and appropriate requirements will be incorporated in the ESCP as required and in Management of Contractors documents. A separate GRM will be provided for addressing the labor related disputes. The labor management procedures will be updated prior to project implementation, if additional labor protections are needed.

### **ESS3 Resource Efficiency and Pollution Prevention and Management**



Bhutan has developed a National Energy Efficiency and Conservation Policy in which promotion of energy efficient transport systems in the Country is emphasized. The project will support low carbon and cleaner transport system and help identify the most energy efficient and cleaner option during technical studies. The project to be prepared under the study will support construction of road and associated facilities which will be planned as more energy and water efficient. Disposal of the construction debris and discharges will be planned to avoid contamination of the water in the Thimphu River. Environment friendly material can be used for slope stabilization. Alternate brick materials can be used for building construction which may eventually reduce the air pollution indirectly. In addition, measures will be identified for raw materials use by exploring use of local materials, recycled aggregates, use of innovative technology so as to minimize project's foot prints on finite natural resources. The ESIA will develop prevention and management measures to offset these risks and impacts and the TOR of the ESIA ensures inclusion of these requirements. The ESIA will also estimate carbon and GHG emissions due to implementation of project, identify feasible measures for reducing such emissions, creating carbon sink, and climate resilient measures to suite local needs and challenges, and by possible use of alternative technologies.

#### **ESS4 Community Health and Safety**

During construction, civil works and vehicles movement in populated urban areas could expose communities to health & safety risks. These will be assessed in the ESIA and the contractor(s) will be required to prepare a Community Health and Safety Plan. Adequate traffic management, provision of alternative access points/roads, road-crossing safety procedures be put in place. The roads will be developed on hilly terrains. The civil works will affect the local communities living and working in the vicinity of the sites. The ESIA will identify and recommend adequate engineering, health and safety measures to avoid any issue on community health, including potential impacts from labor influx. Mechanism will be developed for reporting any accidents, or fatalities on the sites immediately as they may occur. The potential exclusion risk of persons with disabilities will be assessed both from the aspects of infrastructure design as well as transport services, as per the concept of universal access. WBG EHS guidelines will be followed in the preparation of the ESIA and all labor related plans. During operation, road safety and community health and safety are anticipated to significantly improve with the installation of safety features on widened roads.

#### **ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement**

The physical activities to be implemented under the project are expected to require land acquisition and population displacement in a limited scale, although the proposed sites are existing roads owned by RGOB. Detailed assessment will be done under the ESIA on impacts on communities, businesses and common property, livelihood activities, and issues related to hindering access to neighboring settlements. Land acquisition will be kept minimum with feasible design alternatives. However, hill cutting at some sections through settlements may pose threat of displacement of housing from potential risks of landslide and vibration effects. Since the proposed sites are identified, the ESIA will identify the impacts and a Resettlement Action Plan (RAP) will be prepared following the Bhutan Land Act 2007 and the requirements of ESS5. The RAP will be reviewed, consulted upon, approved and disclosed both in the country and on the World Bank's external portal prior to the appraisal of the project and implemented before commencement of the civil works.

#### **ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources**



The civil works will be implemented largely in existing highway although in some sections there will be expansion from 2-lane to 4-lane. Sources of construction materials maybe sourced also from new areas, to the extent that they could not be sourced from existing areas and suppliers. As the project will largely operate within existing footprints, risks and impacts on biodiversity and living natural resources are assessed to be moderate to substantial. The ESIA will assess these impacts and will apply the mitigation hierarchy to manage risks and impacts biodiversity and living natural resources.

**ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities**

There is no indigenous minority communities in and around Thimphu. However, the ESIA will include review and analysis of the ethnic mix of the Thimphu population and their indigenous characteristics. If indigenous peoples are identified, meaningful consultation will be conducted with the communities during ESIA and the consultation approach will include informed consent, if the situation warrants.

**ESS8 Cultural Heritage**

The project will be implemented in developed and semi-developed urban areas of Thimphu. There are few cultural heritage sites in Thimphu including the Simtokha Dzong. The locations of the cultural heritage sites will be identified in the ESIA and mitigation hierarchy will be applied to manage potential impacts on cultural heritage. Vibrations impacts from excavation and use of heavy equipment on cultural heritage will be included in the ESIA and measures will be included in the ESMP. Chance Find Procedures will be included in the ESMP and in the contractor’s contract in case of chance finds during construction.

**ESS9 Financial Intermediaries**

Not relevant.

**B.3 Other Relevant Project Risks**

The ESIA will assess, if there will be any other project risks associated with the project including governance risks and lack of institutional coordination.

**C. Legal Operational Policies that Apply**

**OP 7.50 Projects on International Waterways** No

**OP 7.60 Projects in Disputed Areas** No

**III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE**

**A. Is a common approach being considered?** Yes

Public Disclosure





**Financing Partners**

The project will receive funding from the Green Climate Fund and Korea WB Partnership Facility. It is likely that these partners will follow the World Bank approach. The adoption of a common approach among the financing partners will be discussed and agreed during project preparation. In case of common approach, written agreements with the other financing agencies will be prepared, in addition to including it in the Legal Agreement.

**B. Proposed Measures, Actions and Timing (Borrower’s commitments)**

**Actions to be completed prior to Bank Board Approval:**

As substantial E&S risk project, following documents will be prepared prior to Appraisal.

- Preparation, consultation and disclosure of an ESIA/ESMP
- Preparation, consultation and disclosure of RAP
- Preparation, consultation and disclosure of the Stakeholder Engagement Plan (SEP)
- Preparation and disclosure of Environmental and Social Commitment Plan (ESCP)
- Preparation and disclosure of Labor Management Procedures (LMP)
- Assessment of Borrower’s E&S Framework

**Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):**

The following aspects will be a part of the ESMP:

- Implementation of relevant measures, and other ESF-related plans such as ESMP, RAP, LMP, SEP, etc.
- Preparation and disclosure of relevant additional E&S instruments, if any during project implementation;
- Gap filling, in case the Borrower’s Framework will be partially or fully relied upon.
- Institutional arrangement for E&S aspects including establishment of E&S cell in Thromde (staffing and capacity building cost for E&S management, communication strategies, and monitoring plan).

**C. Timing**

**Tentative target date for preparing the Appraisal Stage ESRS**

30-Sep-2020

**IV. CONTACT POINTS**

**World Bank**

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**Borrower/Client/Recipient**

Borrower: Ministry of Finance. Government of Royal Bhutan

**Implementing Agency(ies)**

Implementing Agency: Thimphu Thromde

Public Disclosure



**V. FOR MORE INFORMATION CONTACT**

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**VI. APPROVAL**

Task Team Leader(s):	Richard Martin Humphreys
Practice Manager (ENR/Social)	David Seth Warren Recommended on 16-Sep-2019 at 14:32:44 EDT
Safeguards Advisor ESSA	Maged Mahmoud Hamed (SAESSA) Cleared on 18-Sep-2019 at 10:40:45 EDT