

Safeguard Diagnostic Review
for
Piloting the Use of Bhutanese Systems to Address
Environmental Safeguard Issues in the
Proposed World Bank-Assisted
Urban Development II Project

Equivalence and Acceptability Report

December 4, 2009

List of Abbreviations/Acronyms

ADB	Asian Development Bank	MoF	Ministry of Finance
BUDP I	Bhutan Urban Development Project	MoHCA	Ministry of Home and Cultural Affairs
BUDP II	Second Bhutan Urban Development Project	MoU	Memorandum of Understanding
CA	Competent Authorities	MoWHS	Ministry of Works and Human Settlements
CBD	Convention on Biological Diversity	NEPA	National Environmental Protection
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora	NEC	National Environment Commission
CSEMP	Contractors' Site Environmental Management Plan	NECS	National Environment Commission Secretariat
CST	College of Science & Technology	NOC	No Objection Certificate
DUDES	Department of Urban Development & Engineering Services	PCC	Phuentsholing City Corporation
DC	Development Consent	PCR	Physical Cultural Resources
EAA	Environmental Assessment Act	PPAH	World Bank's Pollution Prevention and Abatement Handbook
EC	Environmental Clearance	PPD	Policy and Planning Division
ECOP	Environmental Codes of Practice	RAP II	Second Rural Access Project
EI	Environmental Information	RECP	Regulations for Environmental Clearance of Projects
EMP	Environmental Management Plan	RGoB	Royal Government of Bhutan
EU	Environment Unit	RSEA	Regulation for Strategic Environmental Assessment
FAO	Food and Agricultural Organization	SEA	Strategic Environmental Assessment
GNHC	Gross National Happiness Commission	SQCA	Standard and Quality Control Authority
IDA	International Development Association	TCC	Thimpu City Corporation

IDF	Institutional Development Fund	ToR	Terms of Reference
LAPs	Local Area Plans	UCS	Use of Country Systems
LGA 2009	Local Governments Act of Bhutan 2009	UNFCCC	United Nations Framework Convention on Climate Change
MoEA	Ministry of Economic Affairs	WHO	World Health Organization

Contents

INTRODUCTION.....	1
Project Description	1
Implementation arrangement	2
Background	2
Rationale For Project Selection	3
Structure Of The Report	3
PART I. EQUIVALENCE ANALYSIS	4
Applicable World Bank Safeguard and EA Category.....	4
Country legal and policy framework for applicable safeguards	4
Summary of legal framework for environmental safeguard in urban sector	5
Environmental Assessment	5
Environmental Management for Urban Sector	6
Environmental Monitoring	8
Physical Cultural Resources	9
Equivalence of Bhutan’s Environmental Requirements to OP4.00	9
Environmental Assessment	9
Physical Cultural Resources	10
Relevance of Differences to BUDP II Project.....	10
Conclusion of equivalence assessment	10
Measures to attain and sustain equivalence in urban sector	11
PART. II ACCEPTABILITY ASSESSMENT.....	12
Institutional Roles and Capacity of Project-Implementing Institutions.....	12
Environmental Assessment of Urban Development Activities	12
Environmental Management Capacity	16
Monitoring and Coordination Capacity	16
Environmental Assessment and Management Processes and Procedures in the Urban Sector.....	18
Track Record and Performance: Outputs.....	19
Track Record and Performance: Outcomes.....	20
Conclusions.....	21
Proposed Measures to Attain and Sustain Acceptability	21
PART III. Equivalence Analysis Matrix.....	27
Annex A : BUDP II	46

INTRODUCTION

PROJECT DESCRIPTION

IDA started supporting Bhutan's urban development with the Bhutan Urban Development Project (1999-2006) which was designed to support RGoB's objective of achieving carefully planned growth of secondary towns with emphasis on the provision of hygiene and amenity related infrastructure and services. This project helped to develop urban infrastructure such as water supply, sanitation, solid waste management, urban drainage, urban roads and civic facilities in ten small and medium sized-towns. In early 2005, RGoB requested IDA and ADB to finance infrastructure development in ten Local Area Plans (LAPs) within extended areas of the capital city Thimphu, and subsequently, it was agreed that ADB will focus on southern areas and IDA will focus on northern areas, which consist of five LAPs within Thimphu.

The currently proposed Second Bhutan Urban Development Project's (BUDP II) development objectives are to: i) support Bhutan's municipal reform program to achieve a more decentralized and accountable urban local government system, starting in Thimphu and Phuentsholing; and (ii) improve infrastructure services in northern Thimphu where no formal services are currently available. The first objective supports RGoB's municipal reform agenda and helps implement the Bhutan's new Local Government Act of 2009 through a series of technical assistance, policy support, training programs, and studies. The project also aims to help establish an effective intergovernmental fiscal transfer system. The second objective addresses an urgent need for serviced urban land in rapidly growing Thimphu City, given the already substantial and increasing migrant population settling in the peripheries of Thimphu. The process of attaining these objectives would help develop models and capacity for broader urban management in Bhutan

The Project will consist of three components: (i) municipal reform component; (ii) Thimphu northern area development component; and (iii) capacity building component.

The Municipal Reform (US\$ 1.8 million) component aims at strengthening the institutional systems and processes of the two city corporations of Thimphu and Phuentsholing to enable them to function effectively as transparent and accountable local governments capable of providing urban services in a sustainable manner. It will also support RGoB to undertake policy reforms relating to the strengthening of municipal finances. The support for the city-specific reform measures will comprise of two broad areas, namely: (i) strengthening the own source revenues and revenue administration systems of TCC and PCC; and (ii) strengthening the expenditure management systems and financial accountability of TCC and PCC. The support for policy reforms will enable RGoB in the design and implementation of an inter-government fiscal transfer system to the cities that is based on sound principles and is rational, predictable and transparent. Given the recent adoption of the new Local Governance Act 2009 and the ongoing democratization process in the country, BUDP II provide an excellent opportunity to assist RGoB in creating a more autonomous local government system through a series of policy support and institutional building activities focusing on TCC and PCC.

Thimphu Northern Area Development (US\$ 8.5 million) will focus on two smallest Local Area Plans (LAPs) in northern Thimphu, where the preparation for land-pooling is most advanced (Dechencholing and Langjophakha). As per the new rules, at least two thirds of the landowners have to support the land pooling in order for the development plans to proceed. The project will finance development of basic infrastructure systems in these areas, including roads, storm-water drainage, water supply, sewerage, and street lighting. At the same time, this component will support increase in low-income housing units in these areas, and RGoB agreed to use several pieces of surplus plots to be generated through land pooling

for this purpose. RGoB/TCC has been planning to develop the Northern areas, consisting of five LAPs, through a land-pooling approach.

Capacity Building (US\$ 0.7 million) component provides resources for training programs, equipment, technical assistance, and studies based on the perceived needs of the Thimphu and Phuentsholing city corporations (TCC and PCC respectively) and of the Ministry of Works and Human Settlements (MoWHS). This component aims at significant upgrading of the capacities of each city corporation in various aspects of their internal work processes and service delivery to citizens through training of staff and provision of relevant equipment. The training program will be designed to initially cater to the operational staff of the two city corporations and the DUDES/PPD with the objective of augmenting their technical skill levels. During the early years of project implementation, in-country courses of short durations will be administered and participants will be selected by a coordination committee comprising of representatives from the MoHWS, the city corporations and the concerned training institution(s). This component will also support the procurement of appropriate equipment for the TCC, PCC and MoWHS, and incremental operational costs including communication expenses, vehicle fuels for supervision activities, office supplies, and remunerations for contractual staff and technical assistance.

IMPLEMENTATION ARRANGEMENT

There will be a high-level steering committee overseeing project implementation, consisting of representatives from MoWHS, MOF, TCC, and PCC. The committee will meet bi-monthly to review implementation progress and to discuss key implementation issues. All physical works under the project will be implemented by TCC's Engineering Division in close coordination with its Planning Division. DUDES will provide technical backstopping for TCC. The project will also finance TA consultancies to TCC to assist them in implementing this component. Executive Secretary of TCC will have the ultimate responsibility for any physical aspects of the project in the city. TCC's Planning Division, headed by the Chief Town Planner, has already designated one urban planner each for the two project areas (Dechencholing and Langjopakha) and also newly recruited two social development specialists. Working closely with the Engineering Division, the Planning Division will ensure that land pooling schemes will be implemented in a smooth manner. Their responsibilities include: continuous community consultation, information dissemination, timely execution of safeguard actions specified in the resettlement action plans, and any planning adjustment that might become necessary in the course of implementation. The Division will also serve as a secretariat for a Grievance Redress Cell which will consist of council members, a legal officer, local representatives, a concerned urban planner, and other stakeholders. The policy-related TAs will be procured by the Policy and Planning Division (PPD) of MoWHS, and procured services/goods will be provided to TCC and PCC. Most of the in-country training under the capacity building component will be administered under the MoU between the Ministry and the College of Science and Technology (CST), Royal University of Bhutan.

BACKGROUND

Beginning in March 2005, the World Bank has been supporting a limited number of pilot projects in which lending operations are being prepared using the borrowing country's systems for EA and other environmental and social safeguards, rather than the World Bank's operational policies and procedures on safeguards. The rationale for using country systems is to scale up development impact, increase country ownership, build institutional capacity, facilitate harmonization and increase cost effectiveness. These pilot operations are governed by a new operational policy (OP/BP 4.00) on "Piloting the Use of Borrower Systems to Address Environmental and Social Safeguard Issues in Bank-Supported Projects." OP/BP 4.00 elaborates on the approach, enumerates the criteria for assessing country systems, and specifies documentation and disclosure requirements and respective roles of the Borrower and the World Bank

The World Bank considers a Borrower's environmental and social safeguard system to be equivalent to the World Bank's if the Borrower's system, as determined by the World Bank, is designed to achieve the objectives and adhere to the applicable operational principles set out in Table A1 of OP 4.00. Since equivalence is determined on a policy-by-policy basis in accordance with Table A1, the World Bank may conclude that the Borrower's system is equivalent to the World Bank's in specific environmental or social safeguard areas in particular pilot projects, and not in other areas. Before deciding on the use of country systems (UCS), the World Bank also assesses the acceptability of the Borrower's implementation practices, track record, and institutional capacity. The above approach and criteria for assessment were developed with inputs from external stakeholders such as representatives of governments, bilateral and multilateral development institutions, civil society organizations, and the private sector and is consistent with commitments made by the development community in the Paris Declaration on Aid Effectiveness of March 2005.

RATIONALE FOR PROJECT SELECTION

IDA started supporting Bhutan's urban development with the Bhutan Urban Development Project (1999-2006) which was designed to support RGoB's objective of achieving carefully planned growth of secondary towns with emphasis on the provision of hygiene and amenity related infrastructure and services. The Bank has also supported projects such as sustainable land management, rural access, and decentralized rural development, forestry and other sectors. Thus, the World Bank has relevant experience in the urban sector as well as other sector in Bhutan. The World Bank has prior experience of piloting the UCS to address environmental issues in the ongoing bank funded Second Rural Access project (RAP II). The experience of UCS in RAP II until now has showed that although measures to achieve equivalency is a time taking process as it needs to revise rules/ regulations, and involves various institutions, RGoB has already initiated the process of the revisions and these are likely to be achieved within the time frame of RAP II. RGoB has also initiated measures for effective implementation of Bhutan Country System to achieve the same objective of the WB safeguard policies within the scope of RAP II. As a result, RAP II's environmental performance has gradually improved and is generally satisfactory. In addition, Bhutan's satisfactory performance in implementing the environmental safeguard requirements applicable to the UDP I project, as noted in the Bank's Implementation Completion Report on Bhutan Urban Development Project (May 2007), suggests that Bhutan's system may be sufficiently robust to provide the basis for piloting in the urban development activities. On the basis of those experiences, Bhutan Urban Development II Project was selected for participation in the pilot program.

STRUCTURE OF THE REPORT

Part I of this report comprises the Equivalence Analysis, and Part II comprises the Acceptability Assessment. Part III of this report contains a matrix summarizing the major equivalence findings relative to the Objectives and Operational Policies of OP 4.00, and the remaining differences and measures designed to bridge these differences.

PART I. EQUIVALENCE ANALYSIS

APPLICABLE WORLD BANK SAFEGUARD AND EA CATEGORY

Of the eight¹, World Bank safeguard policies included in the OP 4.00 Piloting the Use of Borrower System, three are applicable to the proposed BUDP II Project: Environmental Assessment, Physical Cultural Resources, and Involuntary Resettlement. Safeguard policies and procedures related to Pest Management, Forest, Safety of Dams, and Indigenous People are not triggered. BUDP II has been classified as Environmental Category B Project. Out of the three safeguard policies triggered, only the environmental safeguards are included under the pilot. BUDP II will retain the World Bank policy on Involuntary Resettlement (OP/BP 4.12) as several substantive differences exist between RGoB and Bank's policies and requirements. In accordance with World Bank Operational Policy (OP) 4.12, a Resettlement Action Plan (RAP) has been prepared for the Dechencholing LAP. This RAP identifies the broad scope of the project and outlines the policy, procedures for acquisition of land, compensation and other assistance measures for affected persons, as well as required institutional arrangements. An entitlement matrix has been prepared, which will guide to offer compensation and assistance to those persons affected by the project. The RAP also proposes additional measures for restoration of livelihood for the poorer families in the LAP as well as grievance redressal mechanism.

COUNTRY LEGAL AND POLICY FRAMEWORK FOR APPLICABLE SAFEGUARDS

Constitution of the Kingdom of Bhutan (2008). Bhutan's Constitution has incorporated environmental conservation in its Article 5. The constitution states that every Bhutanese is a trustee of the Kingdom's natural resources and environment for the benefit of the present and future generations. It requires RGoB to: a) protect, conserve and improve the pristine environment and safeguard the biodiversity of the country; (b) prevent pollution and ecological degradation; (c) secure ecologically balanced sustainable development while promoting justifiable economic and social development; and (d) ensure a safe and healthy environment. The Constitution requires RGoB to ensure that a minimum of sixty percent of Bhutan's total land be maintained under forest cover for all time. Parliament is empowered to enact environmental legislation and to declare any part of the country to be a National Park, Wildlife Reserve, Nature Reserve, Protected Forest, Biosphere Reserve, Critical Watershed and such other categories meriting protection.

Bhutan 2020: In the last two decades, "Gross National Happiness" - underscoring that economic, spiritual, and environmental well-being are all equally important - has remained the guiding principle of Bhutanese in pursuing national development efforts. Bhutan 2020 provides 20-year perspective of development goals and objectives: environmental conservation is one of the five main development objectives included in the perspective plan.

National Environment Strategy 1998. The National Environment Strategy "the Middle Path" is the policy document for the environment sector. It enshrines the concept of sustainable development and identifies 3 main avenues for such development: (a) hydropower development based on integrated watershed management; (b) agriculture development on sustainable practices, (c) industrial development based on effective pollution control measures and environmental legislation. The strategy also examines

¹ These are OP/BP 4.01 *Environmental Assessment*; OP/BP 4.04 *Natural Habitats*; OP 4.09 *Pest Management*; OP/BP 4.10 *Indigenous People*; OP 4.11 *Physical Cultural Resources*, OP/BP 4.12 *Involuntary Settlement*; OP 4.36 *Forests*, and OP/BP 4.37 *Safety of Dams*.

several areas of special importance for environmentally and culturally responsive economic development, including tourism, roads, urbanization, natural resources management, environmental impact assessment etc. The strategy identifies key cross-sectoral needs that the country must effectively address to integrate environmental consideration into economic development planning and policy making: information systems and research; institutional development and popular participation; policies and legislation; training and education; and monitoring, evaluation and enforcement.

National Environmental Protection Act of Bhutan, 2007. National Environmental Protection Act (NEPA) provides an umbrella framework for all environmental legislation in Bhutan. NEPA establishes principles applicable to environmental protection; constitution, functions and powers of authorities; protection of environmental quality; protection of forest, biodiversity and ecosystem; environmental financing and incentives; right to environmental information and citizens' participation as well as procedures for inspections and verification; enforcement, offences and penalties.

SUMMARY OF LEGAL FRAMEWORK FOR ENVIRONMENTAL SAFEGUARD IN URBAN SECTOR ENVIRONMENTAL ASSESSMENT

Environmental Assessment Act 2000 (EAA). The Environmental Assessment Act 2000 establishes procedures for the assessment of potential effects on the environment from strategic plan, policies, programs, and projects; and for the determination of policies and measures to reduce potential adverse effects and to promote environmental benefits. The Act makes Environmental Clearance (EC) from Competent Authority a pre-requisite for a project, and EC set out environmental terms for the project (article 8, 9 and 10). The Act also requires the RGoB to ensure that environmental concerns are fully taken into account when formulating, renewing, modifying, and implementing any policy, plan, or program as per regulation that may be adopted within EAA provisions. The Act outlines: general procedures for environmental assessment including assessment steps, requirements for EC issuance, consultation; information disclosure; functions and powers of the agencies charged with implementing EAA; monitoring and control of offenses and penalties; and appeals and dispute resolution procedures under EAA. Regulations and guidelines supporting the EA Act include the Regulation for the Environmental Clearance of Projects, Regulation on strategic Environmental Assessment, Application for Environmental Clearance Guidelines, and Environmental Codes of Practices.

Regulation for Strategic Environmental Assessment 2002. The purpose of the regulation is to ensure that environmental concerns as well as cumulative and large-scale environmental effects are taken into account while formulating, reviewing, modifying, or implementing any policy, plan, or programme. The regulations aims: to complement project-specific environmental reviews and to encourage early identification of environmental objectives and impacts; to promote design of environmentally sustainable proposals that encourage the use of renewable resources and clean technologies and practices of all government; and to promote and encourage the development of comprehensive natural resource and land-use plans at the local, district and national levels.

Regulation for the Environmental Clearance of the Project. The regulation defines responsibilities and procedures for the implementation of the Environmental Assessment Act 2000 concerning the issuance and enforcement of environmental clearance for individual projects, and to: (i) provide meaningful opportunities for public review of potential environmental impact of projects; (ii) ensure that all projects are implemented in line with the sustainable development policy of the Royal Government; (iii) ensure that all foreseeable impacts on the environment, including cumulative effects are fully considered prior to any irrevocable commitments of resources or funds; ensure that all feasible alternatives are fully considered; (iv) ensure that all feasible means to avoid or mitigate damage to the environment are implemented; (v) encourage the use of renewable resources, clean technologies and methods; (vi) ensure that concerned people benefit from projects in terms of social facilities; (vii) help

strengthen local institutions in environmental decision making; and (viii) help create a uniform, comprehensive data base on the environmental and cultural conditions and assets in Bhutan.

Application for Environmental Clearance Guidelines for Urban Development (2004). The guidelines suggests inclusion of the following information in the application for environmental clearance: project description including objective and project details such as location, area, cost, activities, excavated materials, explosives, raw materials and resources consumed, production and wastes, labour and machines, methods and technology to be used, sustainability, ancillary facilities, public consultation, description of physical, ecological and social & cultural environment of the project area, project impacts such as impacts on services, houses, infrastructure, cultural & heritage sites, visual impacts etc), mitigation measures , and monitoring program and No-objection Certificates (NOCs). The guidelines require that the applicant must explain to the affected people the expected impacts of the development, where they will occur and how they will be mitigated. The applicant is required provide the record of meetings with the affected people, issues raised by them and the agreement /s arrived at between the applicant and the people to resolve these issue.

ENVIRONMENTAL MANAGEMENT FOR URBAN SECTOR

Local Governance Act of Bhutan 2009 (LGA 2009). Parliament of Bhutan enacted the Local Governments Act of Bhutan 2009 (LGA 2009) on the 11 September, 2009: this is awaiting approval from the His Majesty the King. Upon becoming effective, the LGA 2009 will repeal the Local Governments Act, 2007, and the Thromde Act, 2007; Dzongkhag Yargay Tshogdu Chathrim, 2002; Gewog Yargay Tshogchung Chathrim, 2002 and the provisions of any law, bye-law, regulations, circular and order that is inconsistent with this Act. Under the LGA 2009, local governments are empowered to make rules and regulations consistent with law made by parliament. The LGA 2009 oblige the RGoB to support local governments in the development of administrative, technical and managerial capacities and structures which are responsive, transparent and accountable. The act defines three types of local governments: Dzongkhag Tshogdu, Gewog Tshogde, and Thromde Tshogde (municipality). The Parliament shall, from time to time, declare a certain geographical or administrative or economic area of the country as Thromde (municipality) based on the criteria prescribed in the Act. The demarcation of Thromde boundary shall be carried out in consultation with the National Land Commission Secretariat and local authority.

There shall be two types of municipalities: Dzongkhag Thromde (District Municipality) and Dzongkhag Yenlag Thromde (satellite town). The Government shall further categorize the District Municipalities (Dzongkhag Thromde) as either Class A or Class B Thromde based on criteria such as: total resident population; density of resident population, total area; population dependent on non-primary activities; revenue generated; and trade and commerce. All Class B Thromdes and Yenlag Thromdes (satellite town) shall function either under Dzongkhag Administration or the Gewog Administration, as decided by the Government. Thromde Tshogde shall consist of seven to ten elected members, including the Thrompon. The Class 'A' Thromdes will, however, not be under the Dzongkhag administration and will enjoy a certain degree of autonomy. They can report directly to the government instead of going through the Dzongkhag Tshogdu.

The LGA 2009 mandates local governments wide ranging power and function. The power and functions of the Thromde, for example, include (but not limited to): preserve and promote cultural, architectural and aesthetic aspects of the Thromde; provide civic and other services which are essential for the general well-being of the residents; ensure that development and other activities within a Thromde occur in a planned and harmonious manner; approve land use and development plans in accordance with the laws made by Parliament and rules and regulations made there under; approve local area plan (LAP) including land pooling schemes and any other relevant planning techniques; administer and manage all government

land falling within the jurisdiction of Thromde and register in the name of concerned Thromdes in accordance with the Land Act and approved local area plan; and purchase, lease, or otherwise acquire land and property or dispose it off in the interest of the Thromde in accordance with the policies of the Government. The Thromde can frame and adopt rules and guidelines for enabling the Thromde to carry out its functions; frame and enforce rules for protecting the health, safety and well being of the residents, preserving and promoting the quality of the Thromde environment, prepare urban development plans or amend an approved urban development plan to regulate and enforce land use and building activity in the Dzongkhag Thromde; formulate guidelines for entertainment and recreational activities and venues; enforce all laws and rules pertaining to the urban sector; regulate and enforce appropriate land uses including non-conforming land uses and vehicle repair workshops, and building activities in the Thromde; and control squatter and illegal settlements, and regulate commercial activities.

The Ministry responsible for urban development is required to carry out technical supervision and monitoring of activities of Thromdes. Dzongkhag Thromdes shall submit a copy of half-yearly and annual reports along with any other report to the Ministry responsible for urban development and other relevant agencies. The Ministry responsible for urban development shall formulate national urban policies, guidelines, and standards; approve structure plans including land use plan of the Thromdes; and carry out planning audits in the Thromdes.

The LGA 2009 makes the Ministry of Home and Cultural Affairs (MoHCA) responsible for coordination pertaining to inter-local Government and between Local Governments and Central Government: the ministry, in consultation with concerned agencies and Local Government, shall be empowered to prescribe rules and regulations to support the implementation of the LGA 2009.

The LGA 2009 requires that all activities undertaken by different sectors of the government within the jurisdiction of a Local Government, unless otherwise specified shall be routed through and coordinated by Local Government offices. The concerned sectors shall provide technical and financial support for implementation of the activities and carry out regular monitoring and evaluation of the activities in accordance with the prescribed monitoring and evaluation system of the government. Officials of various sectors and agencies of the Government serving within the jurisdiction of a Local Government shall be administratively accountable to the head of the Local Government and technically to the concerned sector or agency.

All national agencies are required to conduct periodic consultations with a Local Government before any project or program is implemented in the jurisdiction of such Local Government. All national agencies with project implementation functions shall coordinate with the Dzongkhag Administration and with the Local Government concerned in the discharge of their functions.

Application for Environmental Clearance Guidelines for Urban Development: The guidelines recommends that the applicant be responsible for ensuring that environmental terms that are attached to the environmental clearance are carried out, including all activities to be implemented by contractors. It recommends attaching the environmental terms to the contract document so that the contractor has a clear understanding of the environmental requirements that are to be adhered to during construction. At the time of tending, the contractor will be required to prepare a Contractors' Site Environmental Management Plan (CSEMP) that shows how the contractor will implement the environmental terms that are included as part of the tender specifications and applicable ECOP(s).

Environmental Codes of Practice (ECOP). Under article 39 of EAA, the competent authority is mandated to attach environmental terms to the development consent which may contain applicable codes of best practices. NECS has prepared environmental codes of practices (ECOP), such as ECOP for Storm water Drainage Systems, ECOP for Installation of Underground and Overhead Utilities, ECOP for

Hazardous Waste management as well as Environmental Discharge Standards. Environmental Clearance (EC), according to the EA Act (Article 8, 9 and 10) is pre-requisite for any development project. The EC includes terms and conditions which the applicant or holder of the EC must abide by. As a standard operating procedure, relevant ECOP is attached with the EC as environmental terms and conditions, and requires that the ECOP is attached to the Contract Document as a part of the Contract Clause and to be used in conjunction with other requirements of the RGoB and Municipal Authority. In general ECOPs are applied to all stages of project for incorporation of environmental aspects, such as during preparatory phase (planning, survey, design), during construction phase, and during post-construction (operation & maintenance, as well as) phase.

Thimphu Municipal Solid Waste Management Rules and Regulation 2007. This defines responsibilities and powers with regard to solid waste management in Thimphu. The rules and regulations aim to promote sound environmental practices in solid waste management in urban areas, to ensure efficient segregation, collection, transport, storage, and safe disposal of solid waste; to promote reduce, reuse, recycle in solid waste management; to establish polluter pays principle by charging service fee for solid waste collection and disposal; and to introduce and implement system of warning and fines on people for littering and illegally dumping solid wastes.

Water and Sanitation Rules, 1995. The Rules contain quite comprehensive list of provisions related to urban waste management in Bhutan. These provisions relate, for example, to waste collection and disposal, protection of waste facilities, incineration, burning and composting wastes, scrap, health care wastes, wastes generated at institutions (offices, school) and activities such as vehicle repair workshops, wastes from industries etc.

The Penal Code of Bhutan. Article 408 of the Penal Code of Bhutan states that ‘ A defendant shall be guilty of the offence of environmental pollution, if the defendant knowingly, or recklessly pollutes or contaminates the environment including air, water and land, and makes it noxious to the public health and safety’. This provides basis upon which an entity can be sued for polluting the environment.

Notifications. The NEC issued a notification banning car washing in streams and rivers around the country in 1994. The Ministry of Trade and Industry issued notification in 1999 banning the use and sale of plastic carry bags, package, wrappers and pouches in the Kingdom (Thimphu City Corporation) reaffirmed the notification in 2005.

ENVIRONMENTAL MONITORING

Under the EA Act Article 34.2, 35.4, and 39.3 and Chapter IV, NECS and / or CA is mandated to carry out environmental monitoring, and enforce and control compliance. The terms of environmental clearance including ECOP form basis for monitoring and compliance checks, and the environmental clearance issuing agency is responsible for monitoring compliance. Under the mandate, CA and/ or NECS can monitor as well as control and enforce the terms of the environmental clearance, including ordering sanctions and compensation for environmental damage. The CA and / or NECS has right to enter project sites with or without prior notification in order to ensure compliance with the terms of an environmental clearance; to make visual inspections and spot checks; to interview employees, occupants, or other persons on site; to collect samples, inspect, and take copies of relevant data or documents; and to take all other control measures necessary to protect the environment. Legislation requires CA and NECS to report annually. The EA Act also has provisions for spot checks and unannounced visits.

Application for Environmental Clearance Guidelines for Urban Development explains that regular monitoring will be the responsibility of the Holder of the EC and will be detailed within the EC; and either the CA or the NEC may conduct unannounced monitoring checks.

According to ECOP, the applicant must ensure that the Contractor understands the relevant sections of the ECOP. During construction the Contractor will be responsible for regular monitoring to ensure that work is executed as per the terms and conditions of the Contract Document and the ECOP. ECOP further explains that compliance monitoring is the responsibility of: (i) The Project Proponent - who has the overall responsibility for monitoring; (ii) the Competent Authority; and (iii) the NEC. The CA and/ or NECS may conduct routine monitoring or may undertake spot checks at any time.

PHYSICAL CULTURAL RESOURCES

Bhutan does not have legislation specific to immovable physical cultural property, such as archeological, paleontological, historical and sacred sites during the development process. RGoB expresses a need for legislation for Conservation of Archeological Heritage. The existing legislation regarding trade in artifacts does not apply to most forms of physical cultural property as defined in the Bank's OP 4.11 on PCR. However, the need to protect such sites is referenced in the National Environment Strategy and requirements of the EA Act, and RECP as well as Application for Environmental Clearance Guidelines and ECOPs.

EQUIVALENCE OF BHUTAN'S ENVIRONMENTAL REQUIREMENTS TO OP4.00

A comparative analysis was conducted on the Bhutan's law and regulations corresponding to the World Bank's safeguards on Environmental assessment, and Physical Cultural Resources in accordance with the objectives and operational principles of OP 4.00 Table A1. The results of this comparison are in a narrative format below and in the Equivalence Analysis Matrix in Part III Equivalence Matrix Major findings of the analysis are discussed here, with an emphasis on differences between Bhutan's systems and the required elements of OP 4.00 Table A1 and the relevance of these differences to BUDP II Project.

ENVIRONMENTAL ASSESSMENT

Bhutan's policies, legislation and regulations pertaining to the EA process and EA documentations are relatively recent and reflect international best practice to a significant extent, resulting in a substantial degree of equivalence between Bhutanese EA systems and the required elements of OP 4.00, Table A1. The remaining differences between the Bhutan EA system and the World Bank OP 4.00 include: (i) transboundary and global concerns, (ii) Application of World Bank's Pollution Prevention and Abatement Handbook (PPAH).

Transboundary and global concerns. One potentially significant difference with respect to environmental assessment is the absence of any explicit requirement to assess potential impacts of project on "transboundary and global concerns". According to Article 18 of the EA Act, environmental clearance can be issued only after findings that the project is consistent with the environmental commitments of the Kingdom. RECP Annex 3 (8) requires assessment of cumulative impacts of the project. These references may be interpreted to cover transboundary and global concerns. However, in the absence of an explicit statement requiring that environmental assessment address global and transboundary issues, it is unclear whether these provisions would effectively provide for their inclusion in the environmental assessment process.

International environmental commitments. Article 107 of NEPA states that "multilateral and bilateral environmental agreements ratified by the parliament shall be enforceable as any other domestic laws, retrospectively as well as prospectively." However, there is no explicit legal requirement that EA include the application of international conventions to which Bhutan is party, such as Convention on Biological Diversity (CBD), the UN Framework Convention on Climate Change (UNFCCC), the CITES, and the

Kyoto Protocol. Absence of explicit legal provisions to require consistency with international environmental commitments of Bhutan is a significant difference. Although National Environmental Strategy emphasizes Bhutan's adherence to commitment it has made through international conventions, except general and undefined requirement of the EA Act Article 18 (that an EC may be issued only when a project is consistent with the environmental commitments of the Kingdom), there is no clear and explicit provision covering this aspect.

Application of World Bank's Pollution Prevention and Abatement Handbook (PPAH). Bhutan's EA system does not include any reference to the Pollution Prevention and Abatement Handbook. However, many of Bhutan's system of environmental codes of practice do reference other international standards, such as those issued by the World Health Organization and the Food and Agriculture Organization. The objective of referencing the PPAH is to ensure that a country's domestic environmental legislation provides for some international benchmarking with respect to the standards it applies to various pollutants and industries.

PHYSICAL CULTURAL RESOURCES

Although Bhutan has not enacted specialized legislation for the protection of immovable cultural resources, the requirement in the EA Act and RECP as well as legislation pertaining to the responsibilities of local authority collectively address nearly all of the requirements of OP 4.00 Table A1 with respect to PCR. The one difference that remains is related to "chance finds"; i.e. the PCR discovered during project implementation. Bhutan's legislation does not address the issue of "chance found" PCR. The EA Act and EMP requirements regarding cultural heritage appear to restrict its treatment to pre-implementation phase or to know sites or those discovered during EA process.

RELEVANCE OF DIFFERENCES TO BUDP II PROJECT

Not all of the differences between Bhutan's systems and the Objectives of the Operating Principles of OP 4.00 are relevant to BUDP II. The type of activities to be funded under BUDP II include the design and construction of basic urban infrastructure, including streets/roads, storm-water drainage, water supply, sewerage, and street lighting within small Local Area Plans (LAPs) in northern Thimphu. These do not raise transboundary or global issues nor does it implicate any of Bhutan's international environmental commitments. The absence of reference to PPAH is not a substantial difference with the OP 4.00 Table A1 because the codes of practices do reference to other international standards such as those issued by WHO, FAO etc and the intention of referencing to the PPAH is to ensure that country's domestic environmental requirements provides for some international benchmarking with respect to the standards it applies to various pollutant and industries. In the context of BUDP II, the difference with respect to "chance find" PCR could be address through an appropriate provision in the terms of reference and/ or attaching condition in the EC.

CONCLUSION OF EQUIVALENCE ASSESSMENT

There is substantial equivalence between Bhutan's environmental safeguard requirements and objective of OP 4.00 Table1. The remaining differences are related to transboundary and global issues, Bhutan's international environmental commitments, and to the World Bank PPAH: these are not relevant to the proposed BUDP II activities.

MEASURES TO ATTAIN AND SUSTAIN EQUIVALENCE IN URBAN SECTOR

In the context of BUDP II, PCR related difference regarding “chance find” is the only gap that needs to be addressed. This can be done by including an appropriate provision in the ToR or attaching condition in the EC for the protection of the “chance find” physical cultural resources encountered during implementation. The recently enacted NEPA provides an “umbrella” framework for all environmental legislation in Bhutan. Harmonizing the existing legislations including EA Act, RECP and ECOPs with NEPA, through revisions, provides an opportunity to attain and sustain equivalence in all the areas discussed above.

PART. II ACCEPTABILITY ASSESSMENT

INSTITUTIONAL ROLES AND CAPACITY OF PROJECT-IMPLEMENTING INSTITUTIONS

ENVIRONMENTAL ASSESSMENT OF URBAN DEVELOPMENT ACTIVITIES

Role and Capacity of NEC. The National Environment Commission (NEC) is a high-level autonomous agency of the RGoB and is mandated to look after all issues related to environment and its management in Bhutan. The National Environment Protection Act (NEPA) of Bhutan 2007 and Environment Assessment Act (EAA) 2000 mandate the NEC to protect and promote a safe and healthy environment; prevent control and abate environmental harm including pollution; ensure conservation and sustainable use of natural resources; and institutionalize environmental assessment process as an integral part of the development planning process. The NEC mandates also include monitoring the impact of development on the environment, putting in place the necessary controls, regulations and incentives to the private/public sectors to achieve sustainable development through the judicious use of natural resources, coordination of inter-sectoral programs, the implementation of policies and legislation with regard to the environment. The NEC Secretariat (NECS) is responsible for ensuring that Bhutan follows a sustainable development path and that all projects be it public or private, take into consideration environmental aspects. With respect to environment assessment the NEC is given the following functions and powers: i) Supervise the activities of the competent authorities and NECS, provide guidance and ensure the EAA implementation, ii) Adopt regulations – a) defining requirements for strategic environmental assessment of policies, plans and programs of the RoGB; b) specifying the time frame within which existing projects shall achieve compliance with this the EAA; c) issuing guidelines on public information, consultation, mediation and appeals, and on incentives for persons who may inform authorities about emergency situations under EAA Article 48; d) concerning decision-making and appeal procedures under EAA, where procedures do not exist under other laws; e) concerning administrative sanctions, fines, and the payment of compensation for environmental damage resulting from projects that have received an environmental clearance under EAA; and iii) bring complaints to the Department of Legal Affairs for the prosecution of violations of this Act.

The NEC may also adopt a list of projects which the CA shall screen and issue Environmental Clearances (EC), adopt emission control limits for projects under the EAA, adopt fine schedules (which may be reviewed and revised), and hear and decide disputes under the EAA.

The NECS is empowered to issue EC to projects, unless the authority is delegated to Competent Authorities (CA)² as per Annex 2 of the Regulation for the Environmental Clearance of Projects 2002 (RECP), monitor and control compliance with the terms of EC, inform the CA of any violation of terms of EC or any other potentially dangerous activities of a project under article 40, and report annually to the NEC on the implementation and enforcement of the EAA, and propose necessary changes to it. The NECS, in consultation with concerned CA, can issue regulations and guidelines concerning: i) Terms of reference for an Environmental Assessment (EA), Environmental Management Plan (EMP) and other environmental documents; ii) information to be included in the application for EC, which is a prerequisite for a Development Consent (DC); iii) fee schedule to cover the costs of administering the EAA, iv) monitoring and controlling compliance; v) emergency response; and vi) reporting on the implementation and enforcement of the EAA.

² If the CA is also the project applicant EC issuance authority is retained with the NECS, for delegated as well as non-delegated activities,

NECS Capacity. The Technical Division of NECS is responsible for environmental assessment related activities. The division is divided into three sections: research, monitoring and statistics; environmental assessment, and information, communication and outreach. The division screens the EA application and issues ECs for larger size projects that are not delegated to CAs under Annex 2 of the RECP) reviews and clears Terms of Reference (ToRs) submitted by the applicant for EA where required, conducts announced and unannounced monitoring to check compliance with the terms of the ECs, prepares national status reports to inform NEC of implementation status, conducts orientation/capacity building activities, and commissions ambient water and air quality monitoring.

NECS has considerable experience in screening and issuing EC to projects that do not require full EA and has been able to perform this task reasonably well.. With regard to full EA, the scoping document and ToR for full EA is submitted to NECS through the concerned CA (usually the line ministry). This is reviewed by an NECS officer who is familiar with the type of project/ activity. The officer may consult with other officer(s)/ peer(s) if necessary. Site visits and stakeholder consultations are not conducted at this stage. Any changes or addition needed in the submitted draft ToR is discussed and negotiated with the proponent. In comparison with screening and EC issuance for projects not requiring full EA, NECS staff is less experienced in projects/activities requiring full EA simply because until now there have been fewer projects requiring full EA. The situation might change in the future as Bhutan embarks on larger infrastructure projects in support of economic growth.

During the BUDP I implementation, NECS provided support in reviewing and screening project activities and issued ECs for project activities. In BUDP I, landfill sites were the most environmentally sensitive activity. NECS helped in developing criteria for landfill site selection as well as in selecting the actual sites.

The Gross National Happiness Commission (GNHC)³ is the CA for Strategic Environmental Assessment (SEA) for Plans and Policies. Therefore, neither NECS nor sectoral ministries have any experience related to SEA. In Bhutan's environmental system, a "Sectoral Environmental Assessment," such as done for BUDP I, is considered as an extended form of full EA, addressing cumulative impacts of multiple activities rather than one single project. Such sectoral environmental assessments are typically done for larger donor funded projects and are usually outsourced to joint ventures of international and domestic consulting firms. The ministries/ line agencies largely rely on the donor in formulating and reviewing the ToRs as well as in reviewing reports of such sectoral assessments.

NECS monitored ambient air quality in Thimphu between June 2004 and May 2006, and also conducted baseline water quality survey along major rivers in the country for the purpose of developing ambient standards. However, this ambient monitoring program has been discontinued. A draft Water Quality Standard has been prepared, but there is no nationally approved ambient air quality standard as yet.

Shortage of qualified human resources is a major constraint for the already understaffed NECS as the number of larger (and potentially more complex) projects is increasing and more staff time is demanded by various agencies. Recognizing this, NECS is in communication with the Royal Civil Service Commission to increase the human resources at the Secretariat. National capacity building particularly for conducting SEA as well as for improving the full EA processes and outputs are other areas which need attention. NECS' role of compliance monitoring could be strengthened at the project level by allocating project resources for this purpose and with NECS and project proponents agreeing on a clear plan/schedule at the beginning of project implementation which may be detailed and updated each fiscal year.

³ Previously known as the National Planning Commission.

Roles and capacity of MoWHS/DUDES. As noted above the MoWHS is the line ministry for urban development. Accordingly, RECP Annex II has designated MoWHS as the CA⁴ for issuing EC for ten simple types of projects/activities including construction of urban roads, location of housing colonies, construction of urban drainages, utilities and service lines etc.

As required by the EAA, an Environment Unit (EU) was established, in MoWHS, in January 2003, under the Standard and Quality Control Authority (SQCA). The environmental human resource component of the EU⁵ was transferred to the Policy and Planning Division (PPD) of MoWHS in February 2006 as a result of a reorganization. Their responsibilities include: reviewing technical proposals submitted by the Departments, Divisions, Agencies under the MoWHS; reviewing and, where necessary revising categorizations of projects/activities that are candidates for EC; obtaining NECS approval; issuing EC as the CA or designated categories of activities; facilitating EC from NEC for project proposals or activities for which NEC is the issuing authority ; acting as a nodal agency for communication between MoWHS and NEC and informing NEC of MoWHS sponsored activities through annual reports; developing and issuing simple rules and regulations to govern activities that do not require EC; managing EA consultancy services for projects; conducting environmental monitoring and ensuring compliance by the projects/ programs with respective EMPs; and preparing strategies, rules and regulations for integrated solid waste management as well as overseeing their implementation. To date the PPD environmental officers, have been responsible for issuing ECs for the ten simple activities listed in the RECP Annex II and has developed Project Prospectus Documents for two types of activities: Road Widening and River Control/ training, because these are the more common activities for which the team needs to issue ECs. The Project Prospect Document is a type of checklist designed to facilitate EC processing. As far as possible, the PPD/ Environment Team carry out site visits before issuing an EC to the listed type of project and prepare field notes as well as put terms and conditions on the EC. Site visits, however, are not always undertaken, particularly when the project site is remote from Thimphu.

The Department of Urban Development and Engineering Services (DUDES) is the technical arm of the ministry in urban development related activities. The ministry, in the projects/ activities implemented directly by the ministry and/or by the departments/ agencies under it, is responsible for implementation, enforcement and monitoring compliance of the Environmental Assessment Act as well as with the terms of environmental clearances and occupational health & safety requirements. Where full EA is required, MoWHS and DUDES are responsible for facilitating the full EA process by reviewing the scoping documents and ToRs as well as EA Reports before forwarding them to the NECS for final approvals and issuance of EC. However, DUDES does not have a dedicated environmental unit, nor does it have environmental specialist among its staff. Some of the staffs have taken a course on environmental management as part of their higher studies, usually on urban infrastructure or engineering. They are basically engaged in urban infrastructure related technical/ engineering works, not on environmental screening/ assessment and other environmental management functions. Even donor funded urban development projects have no full time environmental specialist. The DUDES requests the MoWHS for support as and when environmental issue arises.

Lack of human resources at the MoWHS and DUDES is becoming a serious constraint as the workload is increasing and more complex projects are being proposed. For example the PPD's environment team is being asked to help supervise larger projects such as RAP II and now BUDP II and also to support the various departments under MoWHS on environment related matters. While the PPD/Environment Team is experienced and comfortable in screening and issuing the ECs for the listed type of projects, it is

⁴ National Authority for Construction Standards and quality Control was the original designated CA. This has been changed later due to a reorganizational.

⁵ These consist of a Senior Environmental Officer with a M Sc degree and six years of work experience an Environmental Officer with a B Sc degree and about three years of work experience.

finding it increasingly difficult to manage these increased responsibilities. With respect to full EA, the PDD/ Environment Team have very little experience. In fact the team has not been directly involved in any full EA to date, with the exception of participating in early stage due diligence for the BUDP II project. Specifically, the PPD environmental team has had no experience in reviewing Scoping documents for EA, supervising consultation in the EA process, or reviewing draft EMPs preparation.

Roles and capacity of TCC. Under the Royal Decree of 1995 and Bhutan Municipal Act 1999 the Thimphu City Corporation (TCC) became an autonomous and self-governing body. It is governed by the City Committee. As noted above in the context of the evolving scenario of democratization and development of the local governments in Bhutan, the Thromde Act of Bhutan 2007 has been enacted. This Act lays down the legal guidelines and assigns a range of functions and responsibilities to local governments, expects them to provide democratic and accountable government for urban communities, ensure the provision of the urban services in a sustainable manner, and encourage the involvement of urban communities in the matters of urban governance for the general well-being of the residents of the Thromde.

The TCC's main objectives are to: i) provide planned growth of Thimphu City and provide efficient and effective services to the residents; ii) ensure that the development and other activities within the boundaries of a Municipal Corporation occur in a planned and harmonious manner; and iii) undertake activity, consistent with the other relevant laws and policies of the Royal Government, which may preserve and promote the environment within the limits of a Municipal corporation. Through these and other activities, TCC aims to become a regulating body through privatization of public services; especially water supply, solid waste, sewerage, and parking. TCC reports to MoWHS as its the line ministry of the TCC which at present is responsible for: i) identifying and preparing Local Area Plans (LAPs) for development, ii) approve individual layout of new houses, iii) arrange and provide treated water to the Thimphu residents, iv) provide sewage and drainage systems as well as sewage treatment facilities, and v) provide solid waste management system.

Under the RECP, TCC is mandated to act as the CA to issue Environmental Clearance for: i) construction of buildings, and ii) any other activities within the municipal boundary duly approved by the government. In case of the listed project, the competent authority, under the RECP Article 34, is also responsible for monitoring of compliance.

TCC has an Environment Division with sections for Urban Forestry, City Beautification, Management of Parks, Solid Waste Management, Sanitation, Stray Dogs, and Cremation. Including the chief of the division, there are three officer level staff in the division mainly involved in urban forestry and city beautification works. There are four junior staff looking after solid waste, stray dogs, sanitation and cremation related activities. In the background of the preparation for the 2008 coronation, recently four staff have been deputed from the Forestry Department to the TCC's environment division. TCC has also temporarily hired 20 site inspectors with 10 to 10+2 grade education for inspecting waste disposal and cleanliness in the city. TCC has not undertaken any EA yet; to date staff has not been involved in any EA process. Consequently, TCC has only limited knowledge regarding issuance of ECs. In the opinion of the TCC, EA and issuance of EC are the responsibility of other sectoral agencies (ministries or departments), with TCC being consulted during preparation of the EA or during reviewing application for EC by the concerned agencies. However, there is apparent confusion regarding responsibilities for EC in the urban sector arising from the ambiguities and/or overlaps in the existing legislations. NECS is currently revising the EAA and the RECP, in part to address this issue.

ENVIRONMENTAL MANAGEMENT CAPACITY

Environmental clearances contain terms and conditions to protect the environment. At the minimum the EC specifies: i) binding mitigation and compliance measures; and ii) appropriate monitoring, recording and reporting requirements. For simple projects EC is issued based on “Environmental Information” (EI) contained in the application for EC (EI). The EI includes, inter alia, a description of how the project will comply with relevant sectoral guidelines or Environmental Codes of Practice (ECoP), and descriptions of how the impacts of the project will be avoided, minimized or reduced. These descriptions, combined with the additional terms and conditions put in the EC are the functional equivalent to an EMP. For these simple projects. In the case of larger or more complex projects, an EA is prepared which produces a project specific EMP. The contract documents refer to the EC, EMP and the relevant ECoP.

The available urban environmental guidelines include NECS prepared Environmental Codes of Practice for various urban development activities including for overhead and underground utilities, for storm water drainage system, for municipal solid waste management for urban areas, for hazardous wastes management, and for urban roads and traffic. There are also environmental discharge standards (liquid and gaseous), Thimphu Municipal Solid Waste Management Rules and Regulations 2007, Policy framework for Solid Waste Management, and National Strategy and Action Plan: Integrated Solid Waste Management.

The Environmental Assessment Application Guidelines stipulates, and standard clauses in the tender documents oblige contractors, to prepare and submit a Contractors’ Site Environmental Management Plan (CSEMP) that shows how the contractor will implement the environmental terms included in the tender specification, EC, EMP and/ or relevant ECoP.

As noted above, MOWHS, DUDES and TCC all face capacity-constraints for environmental management activities as well as in ensuring implementation of the specific EMP or environmental terms attached with the EC. There are only two environmental officers at the MoWHS who are already overburdened, and there is no environmental specialist at the DUDES. The MoWHS environmental officers’ experiences to date have been limited to the screening of the simple categories of listed projects, issuing EC to the listed projects and limited compliance checks. The MoWHS officers have very limited (virtually no) experience regarding full EA and Sectoral EA. Therefore, there is a general lack of know-how on preparing EMPs, internalizing the mitigations into project documents as well as implementing and monitoring them in practice. TCC has an Environmental Division, which is mainly involved in city cleanliness and beautification activities; it lacks qualified staff and expertise on urban environmental management. There has been very limited training to staff on environmental requirements and management, and training whenever organized, is usually ad hoc and general rather than targeted to specific environmental functions. Transfer trained staff is another area of concern – indicating a need for a strategy of continuous or more regular training.

MONITORING AND COORDINATION CAPACITY

Bhutan’s environmental legislation requires NECS (or the designated CA) to conduct annual compliance monitoring, against the terms and conditions set in the EC (including EMP, where applicable). NECS conducts annual monitoring visits to certain geographic areas. NECS, as far as possible, include relevant competent authority officials in the annual compliance monitoring visits with the intention of having better coordination. The EA Act also has provisions for spot checks and unannounced visits by NECS or CA: The surprise and announced checks are carried out when the NECS team visits certain geographical region and en route to the region. The opportunity is also used to orient and aware the stakeholders on the environmental requirements. However, only limited number of projects/ activities was possible to cover during such visits because of time and resources constraints. Priority is given to those project/ activities

which are environmentally more sensitive and/ or there has been indication of environmental concerns. It may be possible to further improve the compliance monitoring by conducting these monitoring checks under a well defined annual plan such as percentage of different types of project/ activity to be covered in different regions, frequency of site inspections, delegating some of responsibility to other agencies (such as District Environment Committee/ Officer) etc, and preparing database on the monitoring results. However, due to lack of resources and capacity, this is being implemented only when problem is reported, but not as a general practice.

The CA, for example MoWHS for some urban development activities and the City Corporation for other activities, is authorized to monitor, control and enforce the terms of the EC including ordering sanctions and compensation for environmental damages. The CA is also required to report to the NECS on implementation, monitoring and enforcement aspects. These monitoring and reporting, by the designated CAs in general including MoWHS and TCC, are not being done at present as envisaged in the legal provisions because of lack of human resources, expertise and also due to lack of budget as well as weak enforcement of these provisions. Although, the MoWHS/PPD's environmental team, visit site before issuing an EC (as far as possible with the limited human resources), visiting the sites for compliance check has not been possible with the limited number of staff and available resources. Therefore, monitoring at site is left to the implementing party. TCC has recently hired inspectors, temporarily, and engaged them mainly for inspecting waste disposal practices and ensuring cleanliness and for awareness campaign against littering. Their activities, however, are not directly related to the implementation of terms and conditions of EC or EMPs. The common approach, therefore, is to ask the implementing party or the holder of the EC to monitor regularly, and visits by the CA's environment team when there is a complaint or if a problem is reported. In practice, there is no system of regular monitoring by the implementing part(ies) or of reporting by the implementing party to CAs or reporting by CA to NECS. In practice, no complaint or problem has been reported to CA or MoWHS to date. Therefore, in most cases, implementation status of the environmental terms and conditions including the EMPs that have been attached to the EC is not clear. There is no database on issued ECs and compliance status.

The fact that there are many different agencies undertaking different urban development activities makes coordination more difficult than in other sectors. Therefore, coordination among various agencies for environmental management functions in the urban development sector is an area that needs urgent attention and improvement. One reason of low level of coordination is absence of an effective mechanism for coordination and follow up actions. The PPD/MoWHS holds policy and planning coordination meeting every month, which is attended by all heads of the department within the ministry. This mechanism may be utilized for improving coordination within the ministry for environmental management responsibilities. Mechanism is needed for improving coordination with other (agencies external to the MoWHS) such as TCC, NECS, and MoEA.

Poor monitoring and enforcement of environmental provisions and terms & conditions also arise from the overlapping mandates, confusion and ambiguity regarding issuance of EC and responsibility for compliance checks. RECP Annex II, for example designates TC as the CA to issue EC for the construction of buildings and any other activities within the municipal boundary duly approved by the government. There is no clear definition with regard to the criteria for what constitutes government approval. In addition, sectoral agencies are also designated as CAs for EC and compliance monitoring. For example, MoWHS (NACSAC) is so designated for construction of urban roads, urban drainage and utilities and services lines; the District Environmental Committee for Solid Waste Disposal; and the Ministry of Trade and Industry (now the Ministry of Economic Affairs) for automotive services, photo studios, dry cleaning, and its Department of Trade for fuel stations, and the Ministry of Agriculture/ Department of Forest Services for afforestation/ reforestation .

This confusion and ambiguity needs to be resolved. The RGoB is in the process of revising the EAA, the RECP and the Regulation on Strategic Environmental Assessment of 2002 as well as the Applications for Environmental Guidelines and various ECoPs. The revision should clarify the respective roles and responsibilities of various agencies in light of their comparative advantages in implementing various environmental protection divisions as demonstrated by implementation experience, and in consistent with the Thromde Act 2007, the National Environment Protection Act of Bhutan 2007, and the need for strengthening decentralization as well as improving coordination.

ENVIRONMENTAL ASSESSMENT AND MANAGEMENT PROCESSES AND PROCEDURES IN THE URBAN SECTOR

Under the EAA and the RECP a project proponent is required to obtain EC from the CA except for those activities included in the exemption list in RECP Annex II. The formal EA process begins with application for EC by the project proponent. The application must contain i) No Objection Certificates (NOCs) from the relevant line agencies, and ii) the EI. The submitted EI must include the applicant's assessment of potential environmental adverse effects as well as benefits, and also a plan for mitigation and compliance with environmental guidelines and any applicable ECoPs. In Bhutan's system, there is no initial environmental examination step: the requirement to submit EI as part of the EC application is functionally equivalent to an "initial environmental examination" under other EA systems. The Application for Environmental Clearance Guidelines issued by NEC provides guidance on the potentially relevant agencies from whom NOC is required. Although there is no pre-defined list of agencies from which NOC is required for a particular activity, NOCs may be required from any number of agencies depending on the type of activity, its location and surroundings. For example NOC is required from Department of Health if activity is located within 50 meters of a hospital, from the Department of Education if an activity is located within 50 meters of a school, from the Bhutan Telecom Authority/ Bhutan Telecom Corporation if a telephone line needs to be relocated, and from the Municipality if the proposed activity is located within municipal boundary..Staff of relevant agencies may conduct a quick site visits before an NOC is given to the applicant and the NOC may include conditions.

Environmental screening is the first step in Bhutan's environmental assessment system. Environmental screening is based on the EI submitted by the applicant. Urban development activities are diverse; different activities fall within the mandates of different sectoral agencies. Therefore, who screens a proposal for an urban development activity and issues EC depends on the type of proposed activity. For example screening is done by MoWHS for construction of urban roads, location of housing colonies, construction of urban drainages, utilities and service lines, so long as MoWHS itself is not the proponent for those activities. Screening for the construction of buildings is conducted by TCC, for construction of solid waste disposal by District Environmental Committee, and for automotive services, bakery/confectioneries, photo studios, dry cleaning, etc., by MoEA (earlier Ministry of Trade and Industry).

MoWHS or TCC sometimes conduct field visits as a part of screening process. However, site visits during the screening is not a general practice; rather it is based on the review of the submitted EI in light of the knowledge of the reviewer and readily available secondary information regarding the environmental nature/ sensitivity of the proposed site. Screening of urban development activity is done by the NECS if a project is not listed in Annex II, or located within defined environmental sensitive area, or if the applicant/proponent happens to be the CA for the particular activity.

The screening either by MoWHS or by TCC or by MoEA or NECS is an internal review process which leads to one of three outcomes: a) issuance of an environmental clearance; b) requirement for further study (EA); or c) rejection of the application. If screening determines that a full Environmental Assessment is required, then the applicant is required to prepare and submit draft Terms of Reference

(ToR) to NECS or relevant CA for approval. The draft ToR is internally reviewed by NECS or the CA before approval and the ToR may be revised, in which case revisions are discussed and agreed with the proponent: there is no consultation with the stakeholders at this stage.

The EC, either issued after screening or after EA, contains environmental terms and conditions. These terms of conditions as well as applicant- proposed mitigation and management actions or specific EMP are binding. The contract documents are required to refer to the EC, EMP and the relevant ECoPs. In addition, the contractor is required to prepare and submit a Contractors' Site Environmental Management Plan (CSEMP) that shows how the contractor will implement the environmental terms included in tender specification, EC, EMP and/ or relevant ECoP. However, it should be noted that the effectiveness and efficiency of these provisions needs to be improved by ensuring incorporation of the recommended environmental measures into all project documents with clarity and in a time-bound action plan. The applicant is responsible for the implementation of the environmental measures and the EC issuing CA is responsible for the compliance monitoring. Due to inadequate capacity and resources, the CA tends to monitor compliance only when a complaint or a problem is reported. The common approach used is to ask the implementing party or the holder of the EC to monitor regularly and report to the CA. In practice, there is no enforcement of regular monitoring and reporting by the implementing party(ies). Therefore, in most cases, the implementation status of the environmental terms and conditions including the EMPs that have been attached to the EC is left unclear. ar. Clarity on the roles and responsibilities on various environmental management functions, allocation of resources, and building capacity of TCC, MoWHS/ DUDES as well as contractors, including the site supervisors, is necessary to improve environmental and management in Thimphu and other municipalities. Capacity building is also needed to ensure the capacity of contractors to prepare and implement CSEMPs, for the applicant to incorporate environmental measures into project documents and budgets, and for site supervisors to provide on-site support to workers and machine operators etc.

TRACK RECORD AND PERFORMANCE: OUTPUTS

Strategic and Sectoral EA. There is no clear view regarding whether the Regulation for Strategic Environmental Assessment (RSEA) is applicable in the proposed Urban Development Project. As per the RSEA the regulation is applied for policies and plans, not for projects. In any case, the Gross National Happiness Commission is the competent authority for a SEA. According to NECS' interpretation, the Sectoral Environmental Assessment for Bhutan Urban Development Project (SEA-BUDP II) is an extended form of EA, rather than an SEA, and complements any required project-component-specific EA by considering the cumulative impacts of various sub-sector urban activities rather than one single activity..

Acknowledging the limited experience and capacity for SEA (including sectoral EA) in Bhutan the RGoB has contracted an international consulting firm in joint venture with local consulting firms to undertake SEA-BUDP II for the sectoral environmental assessment of BUDP II. A similar arrangement was followed for the Environmental Management Framework undertaken at World Bank initiative for the World Bank funded Second Rural Access Project (EMF- RAP II). The SEA-BUDP II Report's format and style are largely the same as EMF-RAP and some of the content is also similar.

The Sectoral EA covers the existing legal environmental requirements in Bhutan and compares the World Bank policies, and makes suggestion for regulatory reform. It describes environmental roles and responsibilities of various agencies including MoWHS/PPD, DUDES, NECS, and TCC as well as MoA and DoF: but this lacks an analysis of implications and appropriateness of these roles as well as relatively weak in assessing their capacity with regard to urban environmental management functions. The Environmental Management Guidelines presented in the SEA Report begins with a review of the environmental issues and impacts, which identify a large number of potential issues and impacts

associated with a variety of urban development activities such as water supply, sanitation, roads and drainage, municipal solid waste, and electricity and lighting. An assessment of priority environmental issues in different categories of Bhutan's urban areas, considering the type/size and location/ terrain of the urban areas, would be desirable.

Project-Level EA and EMP. The screening report of the proposed BUDP II prepared by the RGoB with support from international consulting firm is generally good in highlighting the potential issues of BUDP II and suggest preparation of subproject specific EMPs during implementation. The predecessor of BUDP II, i.e. BUDP I was categorized as environmental category B (consistent with the World Bank classification), and a Sectoral Environmental Assessment was prepared, including a simple Environmental Management Plan for the overall project. Preparation and implementation of BUDP-I occurred at a time when Bhutan's environmental legislation, guidelines and codes of practices were developing and their implementation was in the initial stages. Guidelines and codes of practices for some urban infrastructure activities were developed during the project period. The BUDP I period was, therefore, an early learning phase for Bhutan as far as application of the environmental requirements and guidelines in the urban sector was concerned. In the initial stage of BUDP I implementation, there was confusion whether a separate ECs would be required for each of the project- supported activities including landfill/ waste facilities, water supply, roads drains/ foot paths and electricity supply. To compensate for limited capacity at MoWHS and DUDES, as well as in the municipalities, NECS provided back up support as and when required and at the request of the MoWHS. No separate or specific EMP was prepared for each activity; rather provisions of the environmental codes of practices, for example criteria for landfill site selection, were applied. NECS environmental officers provided important support to the process, including site inspections and approval, in. The environmental mitigation measures implemented were generally consistent with the guidelines and codes of practices.

The ADB funded Urban Infrastructure Development Project is currently under implementation in three municipalities: Thimphu, Phunsoling, and Dagana, with the Project Management Unit (PMU) centrally located at Thimphu, MoWHS/ DUDES is supported by international Project Management Consultant (PMC), and Project Implementation Unit (PIUs) are located in respective municipalities, and supported by Design and Supervision Consultants. In accordance with the ADB requirements, an Initial Environmental Examination of the project was undertaken during preparation, which prepared an Environmental Framework for the project according to which each contract package to be supported by the project needs to be screened, specific EMPs prepared, with the resulting contract package to include environmental parameters. Contractors, with endorsement of Project Environmental Specialists (PES), may update these parameters during implementation to take the site conditions into account and the PES provides overall supervision support during implementation. The Government of India is also providing financial and technical support for urban development in one town, mainly in urban infrastructure and housing. The environmental approach taken here is not as systematic and comprehensive as those in the WB and ADB supported activities.

TRACK RECORD AND PERFORMANCE: OUTCOMES

Development of environmental application guidelines, codes of practices and the enactment of EA Act and Regulations have, over the years, helped to identify environmental impacts and promote environmental considerations in development activities, including in urban development. The management of solid waste has been a consistent environmental issue encountered across all urban areas in Bhutan, and the significance of environmental factors in planning, development and operation of landfill site and other waste handling facilities has been well recognized. The past urban development projects such as BUDP I contributed positively to management of household waste improved landfill sites, reduced the threats from flooding, (through the storm water drains and the river training works), and

have installed street lights and parking lots to improve safety and reduce traffic congestion, Aesthetic improvements have also resulted from landscaping and beautifications activities.

The late stage cancellation of a proposed landfill site in Paro and the redesign of an irrigation canal in Wangdue due to local opposition, indicate both the effectiveness of the local consultation process but also the failure to consult adequately during early stages of the EA process. During implementation, the mitigations were not necessarily updated / refined to take account of the site conditions encountered during construction or minor changes in the urban development activities. This is attributed to the fact that contractors field staff as well as project supervisors/ junior engineers were frequently inexperienced and lack specific environmental mitigation skills and know-how. This tells the significance of the on-site training, support and supervision during implementation. Monitoring and evaluation of the mitigation implementation has been generally weak; monitoring capacity was neither available nor in-built at either central or district levels.

The existing policies and requirements are reasonably sound on paper. The real difficulty is in the implementation. Capacity is just developing. Capacity at the site level is particularly weak, and the contractors capacities are probably the weakest link in the chain of project implementation. In many cases contractors' EMPs as per Bhutan's environmental requirements are missing, probably because of low capacity of the contractor, lack of knowledge/skills, and also due to lack of enforcement. Capacity building at all levels, with emphasis on those who are directly involved at the field, is critical to ensure significant improvement in environmental performance.

CONCLUSIONS

NECS and MoWHS/ PPD as well as other central agencies involved in urban development activities have the necessary capacity for screening the simple type of activities that do not require a full EA process. NECS has considerable expertise and experience in the screening and issuance of EC and has been able to perform this task reasonably well. NECS staff is less experienced in projects requiring full EA. Capacity of the MoWHS/PPD's environmental team is adequate for screening the simple type of activities mandated to it and listed in the RECP Annex II. MoWHS/PPD's environmental team has very little exposure to the full EA process and even less or non-existent experience in SEA. Although TCC, has an Environment Division, it has a limited number of qualified staff in the environmental field and little experience related to environmental screening and issuing EC.

As the number of applications for screening and issuance of EC is increasing as well as larger and more complex projects are being proposed, the limited knowledge/ expertise/ skill of environmental staff at NECS, MoWHS/PPD and TCC is becoming a constraint. In NECS, MoWHS/PPD and TCC, there is less knowledge and experience regarding full EA process, and in sectoral or strategic environmental assessment. Compliance monitoring systems and capacity is generally weak at all levels. Management and monitoring deficiencies appear to be related also to the ambiguity in the environmental management mandates, roles and responsibilities as well as to lack of human and other resources. Implementing party and contractor capacity to internalize the inputs from environmental screening, EC's terms and conditions, ECoP provisions, EMP measures into the project are also generally weak.

PROPOSED MEASURES TO ATTAIN AND SUSTAIN ACCEPTABILITY

Clarifying mandates, roles and responsibilities. Overlap and /or gap in mandates, roles and responsibilities with respect to environmental management functions is one of the major factors creating confusion and affecting urban environmental management in Bhutan. As a number of agencies are involved in urban development activities, it is agreed by the involved agencies that clarity is needed at least in the context of BUDP II, for who is responsible for what in each of the environmental assessment

and management functions. In particular, the environmental mandates, roles and responsibilities of NECS, MoWHS/PPD, DUDES, and TCC as well as of other relevant central agencies such as MoEA, the Department of Forest, and the private sector (consulting firms and contractors) in different types of urban development activities remain to be clarified. This objective may be attained through revision of the RECP, ECoPs and other guidelines. Revision is also necessary in the context of recently enacted NEPA in order to streamline the provisions of NEPA, the EAA RECP. The ongoing IDF grant support for Strengthening Institution Capacity for Implementation of Environmental Safeguards provides an opportunity to address this issue, through donor technical assistance. Table II summarizes proposed responsibilities in BUDP II.

Capacity and awareness building Capacity of all the involved institutions needs to be enhanced to discharge the functions for which the agencies are made responsible. Shortage of qualified human resources at NECS, MoWHS, and TCC needs to be addressed. In this context, NECS is in communication with the Royal Civil Service Commission for increasing human resources at the secretariat. NECS surprise and announced and unannounced site visits can be strengthened at the BUDP II Project level by NECS and the Project agreeing a clear plan/ schedule at the beginning (and updating the schedule in each fiscal year). Capacity building, particularly for conducting sectoral EA as well as for improving the full EA processes and outputs are other areas which need attention. MoWHS/ PPD's environmental team may be strengthened by deputing an environmental specialist from BUDP II. In the broader perspective, the NECS should introduce a system of regular review of project environmental management capacity including the human resources of TCC, DUDES, MoWHS, other central agencies involved in urban development as well as private sectors.

Training and orientation programs need to be carefully designed and conducted tailored to the needs and responsibilities of various agencies. Some potential training and orientation topics could be, for example: Contractor's Site Environmental Management Plans, incorporation of EMP/EC/ ECoP provisions into project documents and budgets; ; provide on-site supervision support to workers and machine operators;,, NECS/ CA formulation and review of project specific scoping documents & ToR; review of EA Reports, preparation of site specific environmental management plans, effective public and stakeholder consultation in EA; and linking environmental monitoring and reporting with project management for better environmental performance.

These activities can be initiated during or prior to BUDP II implementation and regularized for continued capacity building in the agencies. NECS may take a lead role in development, designing and implementing such training – initially a core group of trainers may be developed, who will train others in the urban environmental management. It is important to have a clear understanding and strategy for continuity of such training beyond the proposed project period as well as covering other urban areas besides Thimphu. As one approach to transfer of know-how, officers from the MoWHS/PPD and TCC could be sent to international agencies (including WB) as intern (s) for some limited period of time to work under an experienced specialist.

Improving consultation. Consultation with the affected parties and stakeholders takes place at two stages – when NoC is issued by the responsible agency and during preparation of full EA. General practice is to consult the directly affected parties individually. Current public and stakeholder consultation practices can be improved by: i) holding consultations with the general public and civil society also (not only with directly affected parties), ii) consulting with stakeholders' interest groups during different phases of environmental assessment and management (such as during drafting ToR for EA, prior to issuing EC (and during compliance monitoring. Accurate information about the proposed activities should be shared with stakeholders and potentially affected parties during the consultation process. Meeting with the directly affected parties should continue where appropriate to discuss stakeholder-specific options and

implications. Inputs from all these consultations should be properly documented and the project document should clearly show how the relevant issues and views have been addressed.

Enhancing coordination. As many different agencies are involved in urban development activities, coordination among them for better environmental management is difficult to achieve. At the MoWHS, there is practice of monthly coordination meeting attended by all heads of departments within the ministry. This mechanism is intended for overall coordination within the ministry. The effectiveness of this mechanism needs to be reviewed and applied to BUDP II for enhancing coordination not only for environmental management but for overall urban development. Coordination need to be strengthened with agencies such as TCC, NECS, MoEA, DEC and others agencies involved in the urban development process.

Strengthening monitoring. Monitoring, as provisioned into Bhutan's legislation, particularly compliance with the environmental terms and conditions attached to the EC or to the measures suggested in the EMP, is generally weak. For example, the EC issuing agency is required to conduct annual compliance monitoring as well as unannounced checks, and holders of EC to monitor and report regularly to CAs. However, this is rarely done in the urban sector due to a variety of reasons including lack of capacity and resources, absence of clear system sand mechanisms, and ambiguity regarding responsibilities. In addition to compliance with EMP and contract conditions ambient urban environmental quality impacts need to be systemically monitored and compared before, during and following completion of urban development projects. Although NECS monitored ambient air quality in Thimphu during 2004-2006 and also conducted baseline water quality survey along major rivers in the country, this has been discontinued. By building on the baseline information obtained during 2004-06 and continuing monitoring during and after project implementation, BUDP II can pilot a model for compliance monitoring with multi-stakeholder participation/ responsibilities as well as ambient environmental quality monitoring for a number of key priority environmental parameters for Thimphu city.

Urban Environmental Information System for Thimphu City. MoWHS, with support from UNEP, has prepared the Thimphu City State of the Environment 2007 following a "pressure-state-response" model. RGoB/ NECS had also prepared a conceptual framework and a development strategy for an Environmental Information Management System, including the urban environment. However, as noted earlier, there is general lack of systematic monitoring of ambient and baseline environmental information as well as the status of environmental compliance.

According to RGoB, Environmental Information Management software is available and there is a draft strategy for an Environmental Information Management System. Despite all these, at present there is no user-friendly and easily-accessible urban environmental information system in operation in Bhutan. Whatever environmental data and information do exist, are scattered in various agencies and vary in format and quality. To date, the collection of such environmental information has been ad hoc, discontinuous and limited primarily to some specific needs rather than as part of a r coherent environmental information management strategy. As a result the existing data is often incomplete lacking in temporal and spatial coverage, qualitative rather than quantitative, and of variable quality with respect to the reliability of the data.

During the BUDP II implementation, therefore, it is worthwhile to introduce an Urban Environmental Information Management System for Thimphu City – building on the existing resources. This may potentially be done by TCC ensuring coordinated collection of reliable information from diverse sources on various parameters as well as processing and dissemination of information, easy access to the information data base, and continuity of the system. This can be useful in many ways including for informed decision-making; ; raising awareness about the quality of the urban environment; assessing the level and extent of environmental pollution and environmental change in the urban areas; day-to-day

environmental management; identifying emerging urban environmental problems and setting priorities and targets; for understanding the trends and helping to devise strategic urban environmental management initiatives, and for evaluating the impacts of the policy actions that have been taken; and for increasing knowledge regarding the environment. The system can be replicated to other smaller towns in future.

Table I - Summary action plan of proposed measures to sustain acceptability for BUDP II

Action	Time	Responsible agencies
Clear and agreed responsibilities and authorities in environmental management functions among agencies involved in BUDP II (particularly among NECS, MoWHS/PPD, DUDES, TCC, MoEA, DEC).	During BUDP II preparation, prior to appraisal.	Facilitated by Project preparation team in cooperation with NECS. Table II contains proposed summary of responsibilities.
Revision of EA Act, regulation, application guidelines, and codes of practices as well as developing new guidelines and codes of practices.	Initiate in 2009 and continue. Key revisions to be completed by 2010.	NECS in cooperation with other relevant stakeholders
Environmental Capacity building		
<ul style="list-style-type: none"> Decide HR needs of NECS 	Complete current process by 2009	Royal Service Commission and NECS
<ul style="list-style-type: none"> Review HR and capacity of NECS, MoWHS/PPD, DUDES, DEC, MoEA and TCC as well as contractor (junior engineer, supervisor/ operator) and preparation of capacity building plan (including necessary training plan such as SEA, and full EA, on-site training to field persons etc) 	Prior to BUDP II Implementation effectiveness.	Facilitated by BUDP II preparation and implementation team in cooperation with NECS, TCC and other stakeholders
<ul style="list-style-type: none"> Deputation of environmental specialist from BUDP II to MoWHS/PPD or TCC 	During early stage of BUDP II implementation	BUDP II
Design environmental training and awareness action plan/ program, targeting and tailoring to BUDP II implementing parties.	Early stage of BUDP II implementation	NECS in collaboration with MoWHS/PPD/BUDP II
Conduct targeted/ tailored environmental training/ orientations to BUDP II implementers	During BUDP II implementations	NECS in collaboration with MoWHS/PPD/BUDP II
NECS and MoWHS/BUDP II, and TCC agreement on specific tasks such as schedule of NECS surprise and regular inspection/ monitoring in BUDP II.	Prior to BUDP II implementation effectiveness	BUDP II/ MoWHS NECS, and TCC
Explore possibilities of sending MoWHS/PPD and TCC's environmental staff as intern to international agencies for a limited period of time (and send as intern).	During BUDP II initial stage of implementation.	MoWHS and TCC in cooperation with international agency
Improved consultation in BUDP II environmental process	elaborate process for BUDP II early stage of implementation	BUDP II/ MoWHS, NECS and TCC
Use twice-monthly review mechanism for internal coordination	During implementation	MoWHS/PPD/BUDP II
Establish coordination mechanism for relevant external agencies	Early stage of implementation	MoWHS/PPD/BUDP II with support from NECS

Monitoring and disclosure (as agreed above)	Throughout during implementation	As agreed, facilitated by BUDPII, if necessary
Piloting Urban Environmental Information System in Thimphu City, including ambient environmental quality monitoring.	During BUDP II implementation	TCC with technical support from NECS and BUDP II

Table II - Summary of Institutional Responsibilities (Proposed)

Phase and Requirements, as per Bhutan System	Responsibility and time	Remarks
Subproject/ investment preparation phase		
<p>Obtaining No Objection Certificates (NOCs), and preparation of Environmental Information (EI), highlighting potential impacts, compliance plan, management plan, and benefits.</p> <p>Application for Environmental Clearance (for each of the investment subproject, e.g. water supply, street lighting, roads/street and drainage, etc).</p>	<p>subproject proponent TCC, during feasibility study</p>	<p>This is currently on-going with support from BUDP II</p> <p>Application for EC routed through DUDES and PPD/MoWHS.</p> <p>NECS screens the application and decides if: (i) EA is required, or (ii) EC can be issued. If EC issued, environmental terms attached with EC.</p> <p>PPD/MoWHS is overall executing agency of the BUDP II – hence, it cannot be CA for the BUDPII activities.</p>
<p>If NECS decides that EA is required,</p> <p>Drafting and submission of EA ToR to NECS for approval</p> <p>Conducting EA as per approved ToR</p> <p>Make EA report publicly available for 3 weeks for comments</p>	<p>(EA is done during feasibility study or prior to detailed engineering design & estimates) Proponent/ TCC with support from DUDES, and PPD/MoWHS.</p> <p>Proponent/TCC (can hire consultant,)</p> <p>NECS - as soon as report is submitted to NECS for approval</p>	<p>ToR submitted to NECS via DUDES and PPD/MoWHS.</p> <p>NECS internally reviews EA ToR (if necessary modify the ToR and debrief the proponent). PPD/MoWHS supports TCC in overseeing the EA and reviewing reports NECS internally reviews</p> <p>If EA is approved, EC is issued with environmental terms.</p>
<p>Preparation of Site specific Environmental Management Plan (EMP) of each subproject/ investment proposal</p>	<p>Subproject proponent/ TCC, as part of Application for Environmental Clearance</p>	<p>Make use of the generic EMP suggested for each subproject type in the Sectoral Environmental Assessment.</p>

	or EA	
Inclusion of EMPs in contract / bid documents	Subproject team of TCC, during detailed engineering and preparation of bid documents	DUDES and PPD/MoWHS checks to ensure incorporation.
Briefing bidders on environmental requirements of each bid	Subproject team of TCC, prior to bidding	DUDES and PPD/MoWHS supports subproject teams.
Subproject Construction phase		
Preparation of contractors site EMP (CS-EMP)	Contractor, prior to starting construction activities	Contractor may need to be trained PPD/MoWHS to approve the CS-EMP
Regular monitoring and reporting by holder of the EC	Subproject team, on behalf of TCC, monitors regularly and reports monthly.	PPD/MoWHS to review and provide feedbacks as well as consolidate.
Periodic compliance check	Jointly by PPD/MoWHS and DEC, six-monthly	Debriefs TCC, project management/steering committee and reports to NECS
Annual compliance monitoring	NECS, once a year	Debrief PPD, Project Steering Committee.
Unannounced/ surprise check	NECS	Debrief PPD, Project Steering Committee
Completion check and demobilization certificates	Jointly by PPD/MoWHS and DEC, before making final payment to contractor.	Debriefs TCC, project management/steering committee and reports to NECS.

PART III. Equivalence Analysis Matrix

<i>World Bank (OP 4.00) Requirements</i>	<i>Government of Bhutan's Equivalent Requirements with specific reference to urban development and Rural Access II projects</i>		<i>Differences between OP 4.00 and Bhutan's requirements</i>	<i>Gap- filling measures needed to attain equivalenc e with OP 4.00 requireme nts</i>
<i>(Objective and operational principles)</i>	<i>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</i>	<i>References to the relevant sections of the laws, rules, regulations, procedures, and policies</i>		
ENVIRONMENTAL ASSESSMENT				
<p>Objective: To help ensure the environmental and social soundness and sustainability of investment projects. To support integration of environmental and social aspects of projects into the decision-making process.</p>	<p>Under Bhutan's policies and laws, the objectives of the EA is to establish procedures for the assessment of strategic plans, policies, programs and projects for the determination of policies and measures to reduce potential adverse impacts and promote environmental benefits.</p> <p>The Strategy Paper "Bhutan 2020" places high priority on institutionalizing capacities for EA which must be applied a wide variety of projects and activities in order to evaluate their likely impacts on the environment. It states: EA is "particularly important...for helping ensure that development projects are environmentally and economically sound in the longer term. Adverse environmental, social, economic and cultural impacts of development projects are minimized. Environmental impacts on ecologically fragile systems receive prior evaluation >"</p> <p>The National Environment Strategy of Bhutan (NES), 1998 stresses the importance of EA as</p>	<p>Bhutan 2020</p> <p>NES, 1998</p> <p>EAA, Article 8: "The issuance of environmental clearance shall be prerequisite to the issuance</p>	None	None

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
	<p>a major way to ensure a sustainable natural resource base for the country.</p> <p>The Environmental Assessment Act of 2000 (EAA) mandates the Government to ensure that environmental concerns are fully incorporated into development activities, and while implementing any policy, plan or program. No development consent can be issued without first seeking environmental clearance.</p>	<p>of a development consent”</p>		
<p>Operational Principles:</p> <p>1. Use a screening process for each proposed project, as early as possible, to determine the appropriate extent and type of environmental assessment (EA) so that appropriate studies are undertaken proportional to potential risks and to direct, and, as relevant, indirect, cumulative, and associated</p>	<p>A screening process is in force for projects requiring an Environmental Clearance (EC) from permitting authorities. “Screening is defined as “the determination by the Secretariat or Competent Authority [CA] of how the environmental assessment processshall be applied to a project.” An EC is required for all projects that require a Development Consent (DC) A DC is required for all projects requiring a license, lease or permit for land use or construction as well as the renewal of same. In addition, all projects of the RGoB that do not require that DC must also receive EC. Project proponents must submit an application in a standard form for all prescribed projects. The Competent Authority (CA) shall determine</p>	<p>EAA Arts. 6.6, 8 and 9. Regulations for Environmental Clearance (EC) for Projects (RECP), Chapter I, Art. 5.19 and Chapter II Sections 16 through 28 and Annex 2.</p>	<p>None.</p>	<p>None.</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
<p>impacts. Use sectoral or regional environmental assessment when appropriate.</p>	<p>whether the proposed project requires an EA. Once screening determines the need to undertake an EIA, the level of EA effort is determined. The NEC has enacted sectoral guidelines to define process, content and level of assessment. Eight such sectoral guidelines are in force. The Project proponent must check whether its project falls under the eight activities for which the NEC has issued sectoral guidelines. If so, the proponent must follow the standard guidelines as to determine what data and information need to be provided to the CA. If the project does not fall under any of the eight sectors, then the NEC and/or CA will issue terms of reference commensurate to the project. The CA would issue an EC, reject the application or subject the project to a full EA and/or further studies.</p>			
<p>2. Assess potential impacts of the proposed project on physical, biological, socio-economic and physical cultural resources, including transboundary</p>	<p>Under NEPA, “Environment is defined to include “the physical factors of the surroundings of human beings including the earth, soil, water, atmosphere, climate, sound, odors, tastes and the biological factors of animals and plants of every description including the complex web of interrelationships between the abiotic and biotic components which sustain life on earth.”</p>	<p>NEPA 95.17</p>	<p>Absence of clear reference to “transboundary and global impacts” may be considered a significant gap. There is no explicit reference to trans-boundary</p>	<p>Enactment of NEPA provides provides an “umbrella” framework for all environmental legislation in Bhutan and</p>

<p><i>World Bank (OP 4.00) Requirements</i></p> <p><i>(Objective and operational principles)</i></p>	<p><i>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</i></p> <p><i>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</i></p>	<p><i>References to the relevant sections of the laws, rules, regulations, procedures, and policies</i></p>	<p><i>Differences between OP 4.00 and Bhutan’s requirements</i></p>	<p><i>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</i></p>
<p>and global concerns, and potential impacts on human health and safety.</p>	<p>Under NEPA, Environmental assessment “means all procedures required under Bhutanese law to identify means to ensure that the activities of a project are managed in an environmentally sound and sustainable way.”</p> <p>Under NEPA, an “Environmental impact assessment report- means a written analysis of the predicted environmental developmental activity and containing an environmental cost-benefit analysis.”</p> <p>Under NEPA, a “Project means an activity which may have significant effects on the environment.”</p> <p>An EC is issued if the CA is of the opinion that a proposed project : (i) “alone or in connection with other programs or activities” contributes to the sustainable development of the Kingdom and the conservation of its natural and cultural heritage”, (ii) grants adequate attention to the interests of “concerned people” and is (iii) consistent with the environmental commitments of the Kingdom”</p>	<p>NEPA 95.19</p> <p>NEPA 95.22</p> <p>NEPA 95.44</p> <p>EAA , Section 18 RECP, Section 28.2 and Annex 3 on the description of the Environmental Assessment Report Format, notably Section 8 On Assessment of Impacts.</p>	<p>impacts; however, there is reference to impacts on the “immediate surroundings and region.”</p>	<p>authorizes NEC to ensure that the EA process becomes an integral part of the development planning process, through implementation of the EAA, and would include transboundary consultation when a plan, program or project may have an impact on a neighboring country . The proposed revision of EAA and RECOP as required by NEPA provides an opportunity to bridge the gap.</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p> <p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>	<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>The minimum requirements and level of detail for EAs reflect the potential environmental, economic and social impacts of the proposal. The EA report must be prepared in accordance with NEC sectoral guidelines, which list common environmental concerns associated with different development activities. Apart from a project description, the EA is to include, a description of the existing environment, an assessment of impacts (positive and adverse), mitigation measures, and a response to comments received from “concerned people” on the environmental report. “The potential adverse effects of the project...including the direct, indirect and cumulative effects” must be clearly stated in the application.</p> <p>“Environment is defined as “the complex web of relationships between the abiotic and biotic components which sustains life on earth, including the social, health and cultural aspects of human beings.”</p>			
<p>3. Assess the adequacy of the applicable legal and institutional framework,</p>	<p>The Environmental Codes of Practice issued by the NEC require that the EC shall refer to the legal and regulatory framework for the proposed</p>	<p>EAA, Section 18 Environmental Codes of Practice for Hazardous Waste Management,</p>	<p>The requirement to refer to the legal and regulatory framework for</p>	<p>The recently enacted National Environmen</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
<p>including applicable international environmental agreements, and confirm that they provide that the cooperating government does not finance project activities that would contravene such international obligations.</p>	<p>project, including the provisions of the relevant Code of Practice. “Bhutan respects international environmental laws and has acceded to major international environment and sustainable development instruments.” Although policy documents, including the NES, state a strong commitment to environmental protection and commitments made through international conventions there is no explicit legal requirement that EA include the assessment of applicable international conventions to which Bhutan is party. Such conventions and agreements include the Convention on Biological Diversity (CBD), the UN Framework Convention on Climate Change (UNFCCC), the CITES, and the Kyoto Protocol (acceded 2002). The EA Act makes general reference to “the Kingdom commitments” and states that no project would be granted an EC if it is not “consistent with the environmental commitments of the Kingdom.” However, the term “the Kingdom commitments” is not defined. The recently enacted National Environment Protection Act (NEPA) provides an “umbrella” framework for all environmental legislation in Bhutan, that</p>	<p>Chapter III, NEPA, Preamble</p> <p>Environmental Code of Practice for Sewage and sanitation Management in Urban Areas, Chapter III</p>	<p>the proposed project stops short of requiring the EA to “assess the adequacy of the applicable legal framework.” The absence of any reference in the EA process to laws enforcing Bhutan’s commitments to international environmental agreements constitutes a significant gap</p>	<p>t Protection Act (NEPA) provides an “umbrella” framework for all environmental legislation in Bhutan, that would require that international (multilateral and bilateral) environmental agreements ratified by the National Assembly be enforceable as any other domestic laws, retrospectively as well as prospectively None. As required by NEPA, the proposed revision of EAA and</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p> <p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>	<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>require that international (multilateral and bilateral) environmental agreements ratified by the National Assembly shall be enforceable as any other domestic laws, retrospectively as well as prospectively.</p>			<p>RECOP provides an opportunity to bridge the gap</p>
<p>4. Provide for assessment of feasible investment, technical, and sitting alternatives, including the “no action” alternative, potential impacts, feasibility of mitigating these impacts, their capital and recurrent costs, their suitability under local conditions, and their institutional, training and monitoring requirements associated with them.</p>	<p>Under NEPA an “Environmental management plan means a plan which specifies the environmental, health and safety terms for the design, construction, operation, and decommissioning of a project.”</p> <p>Under Bhutan’s system, the EA must provide a detailed analysis of the negative and positive impacts of the proposed project and its alternatives including the “alternative of not undertaking the project and include: (i) analysis of all feasible alternatives, (ii) analysis of the principal differences among the feasible alternatives under consideration, particularly regarding environmental impacts, and (iii) discussion of any alternative non longer under consideration”</p> <p>.The NEC has the authority to inspect any premises, plant, equipment, machinery,</p>	<p>NEPA 95.24</p> <p>RECP, Annex 3, Sections 6 and 8.</p> <p>NEPA 40.8</p>	<p>None.</p>	<p>None.</p>

<p><i>World Bank (OP 4.00) Requirements</i></p> <p><i>(Objective and operational principles)</i></p>	<p><i>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</i></p> <p><i>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</i></p>	<p><i>References to the relevant sections of the laws, rules, regulations, procedures, and policies</i></p>	<p><i>Differences between OP 4.00 and Bhutan’s requirements</i></p>	<p><i>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</i></p>
	<p>manufacturing or other processes, materials or substances and giving, by order, of such directions to such authorities, officers or persons as it may consider necessary to take steps for the prevention, control and abatement of environmental pollution</p>			
<p>5. Where applicable to the type of project being supported, normally apply the Pollution Prevention and Abatement Handbook (PPAH). Justify deviations when alternatives to measures set forth in the PPAH are selected.</p>	<p>There is no reference to the PPAH Guidelines in Bhutan’s environmental legislation.</p> <p>However, under NEPA, polluting products and technologies that can cause adverse impacts on the environment in the absence of appropriate treatment or design may be regulated under this Act, via environmental standards established by the Commission or certification by recognised international standards organizations, in consultation with other relevant agencies and stakeholders concerned.” (emphasis added)</p> <p>However, the NEC has the authority to set --standards for emission or discharge of environmental pollutants (including noise pollution) from various sources whatsoever; Provided that different standards</p>	<p>NEPA 43</p> <p>NEPA 40.2-40.6</p>	<p>No significant gap. Absence of reference to PPAH is partially mitigated by the use of internationally recognized guidelines and standards (WHO, FAO) for the development of discharge standards applicable to specific industries.</p>	<p>References to internationally recognized standards should be incorporated into ECPs where appropriate.</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p> <p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>	<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>for emission or discharge may be laid down under this clause from different sources having regard to the quality or composition of the emission or discharge of environmental pollutants from such sources;</p> <p>-laying down, after consultation, restrictions and procedures on the disposal of waste;</p> <p>- examination of, and restrictions with regard to, any industries, operations or processes or class of industries, operations or processes in any area as are likely to cause environmental pollution;</p> <p>laying down standards and procedures for labeling and best environmental practices with regard to any industries, operations or processes or class of industries, operations or processes; and</p> <p>- laying down procedures and safeguards for the handling of hazardous substances;</p> <p>Moreover, the Sectoral Guidelines and Environmental Codes of Practices for specific activities provides very specific guideline and discharge</p>	<p>Environmental Discharge Standard, NEC, August 2004/</p>		

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
	<p>standards setting out acceptable levels of air, noise and other pollutants applicable to specific industries, some of which are drawn from international organization’s guidelines such as WHO and FAO and were drafted with technical assistance from the Asian Development Bank.</p>			
<p>6. Prevent and, where not possible to prevent, at least minimize, or compensate for adverse project impacts and enhance positive impacts through environmental management and planning that includes the proposed mitigation measures, monitoring, institutional capacity development and training measures, an implementation schedule, and cost estimates.</p>	<p>“Principle of 3Rs: Every activity shall be planned and implemented in a way which will cause the least possible change in the environment; present the least environmental risk; minimize the consumption of space, raw materials, and energy during construction, production, distribution and utilization to the greatest extent possible including consideration of the principles of reduce, reuse and recycle; and forestall or limit environmental impact from the start.”</p> <p>The EAA provides for the formulation of environmental management plans (EMPs). The EMPs must identify environmental risks and address means of avoiding or minimizing adverse impacts (including direct, indirect and cumulative effects) and</p>	<p>NEPA 4.7</p> <p>EAA, Sections 7 through 10, 23, 26 through 31, 40 through 43 and RECP, Sections 30, 31, 33-34, 40, 44 and Annex to the Regulations</p>	<p>None</p>	<p>None.</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
	<p>enhancing positive impacts. Applicants must also set out a monitoring program (both baseline and compliance monitoring) and are responsible for all project monitoring (project monitoring is undertaken by CA or NEC).</p> <p>The Code of Environmental Practice for Highways and Roads (CEPHR) requires that EMPs include the proposed mitigation measures, the need to budget mitigation measures, supervision, monitoring and evaluation requirements for the construction, operation and maintenance of the project cycle.</p> <p>The RECOP provides that: (i) “the CA shall be responsible for monitoring compliance” for projects requiring development consent and EC, and (ii) the Secretariat [of NEC] shall monitor projects “that do not require development consent”. The EA Act states that “compliance monitoring of projects” is undertaken by the Secretariat [of NEC]...of non-compliance with the terms or other activities related to a project that may be dangerous to the environment.” In addition, the NECS or CA may, without prior notification, enter the site</p>			

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p> <p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>	<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>of a project to ensure compliance</p> <p>EC for a project must be reviewed every 5 years and may be revised and renewed upon review but the Secretariat is empowered to review the EC at any time where there is new information indicating the project creates unacceptable risks to the environment, where improved and cleaner technology becomes available, and where the review is needed to bring the project into compliance with changes to Bhutanese laws.</p>			
<p>7. Involve stakeholders, including project-affected groups and local nongovernmental organizations, as early as possible, in the preparation process and ensure that their views and concerns are made known to decision makers and taken into account. Continue consultations throughout project</p>	<p>The NECS has the responsibility of “enabling public participation in environmental decisions, including assessments carried out under the Environmental Assessment Act, 2000 and its Regulations.”</p> <p>Under the EAA, applicants have a duty to inform and consult with “concerned people” and organizations before submitting the EA documents to the CA where the project is classified as a “significant project”. NECS or the CA is authorized to “ensure that concerned people are given adequate opportunity to express their views on the project and that their views are adequately taken into account. ‘Concerned people’ and “organizations” are</p>	<p>NEPA 33.5.</p> <p>EAA Sections 16 and 22</p> <p>RECP: Sections 5.4, 28.8, 29, 30 and 31. and Annex 1 to the Regulations (Timing of EA processing including for consultation and disclosure)</p>	<p>None.</p>	<p>None</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
<p>implementation as necessary to address EA-related issues that affect them.</p>	<p>those “individuals, groups or communities whose interests may be affected by a project or proposal” and “significant project” is defined as a project nominated as a type A or B project by sectoral guidelines issued by the NEC. (Category C and D projects may also be considered significant if the cumulative effects of two or more projects are significant.)</p> <p>The NECS and the CA are authorized to ensure that the views of concerned people and organizations “are adequately taken into account in the project”.</p> <p>Where it applies, the duty to inform and consult includes, at a minimum, written notice to local people, a newspaper notice, and public hearings. Local authorities are directed to assist people express their views to the applicant; the public and other agencies have three weeks to respond to the application with comments. The applicant is solely responsible for costs associated with public consultation. The Secretariat of NEC or CA may require the applicant to undertake public consultation beyond the minimum standard, including public notice and review procedure.</p> <p>Public information: The</p>	<p>Environmental Codes of Practice: Highways and Roads, Annex 1, 2000</p>		

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap- filling measures needed to attain equivalenc e with OP 4.00 requireme nts</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
	<p>Secretariat of NEC or CA must make a public announcement of the decision to issue an environmental clearance and provide reasons for decision including information to the public describing the project, and its environmental terms, describing measures to avoid or mitigate potential adverse effects and to enhance positive impacts, and a non-technical summary of this information. Public notice must be made within 15 days of a decision by the Secretariat or CA. The Secretariat or competent authority may take comments of the public made during the public consultation stage into account when making a decision.</p> <p>All sectoral for applications for environmental clearances detail requirements for public consultation. The applicant must explain the expected impact to affected people, where these impacts will occur and how they will be mitigated; the applicant must provide a record of the meetings (including a record of names, times and place of meeting and information on issues raised and agreements made). Signatures of consulted parties as proof of consultation are required, as is a description of unresolved issues of</p>			

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p>		<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
	<p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>		
	discussion.			
<p>8. Use independent expertise in the preparation of EA where appropriate. Use independent advisory panels during preparation and implementation of projects that are highly risky or contentious or that involve serious and multi-dimensional environmental and/or social concerns.</p>	<p>The Secretariat is authorized to establish an Environmental Assessment Advisory Board to advise him on particular projects. The Board membership includes “qualified or knowledgeable persons” and may include (among others) representatives of ministries – representatives of local administrations, municipalities, representatives of NGOs, and representatives of local communities affected by the project. The Advisory Board is authorized to adopt rules and procedures governing its activities.</p> <p>The Head of the Secretariat may also nominate up to three experts to advise on particular projects.</p>	<p>EAA, Section 38 on the establishment of an Environmental Assessment Advisory Board (EAAB). RECP: Sections 6 through 13 on the EAAB membership and procedures and more specifically Section 11 on the three member’s expert panel to advise on specific projects.</p>	None	None
<p>9. (EA) Provide measures to link the environmental assessment process and findings with studies of economic, financial, institutional, social and technical analyses of a proposed project.</p>	<p>“Because project activities require environmental clearance prior to development consent, the environmental assessment process and findings are linked to studies of economic, financial, institutional, social and technical analyses of a particular project contained in the initial application for environmental clearance and where appropriate, an environmental assessment report .”</p>	EAA Sections 9-10	None.	None

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p> <p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>	<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap-filling measures needed to attain equivalence with OP 4.00 requirements</p>
<p>10. Provide for application of the principles in this Table to subprojects under investment and financial intermediary activities.</p>	<p>There is no reference to Financial Intermediary and subprojects as such, however, EC are granted to “individual projects”. Any individual project is subject to the EA Act and its implementing regulations and subject to screening and EAA as appropriate.</p>	<p>EAA, Chapter III, Sections 11 through 25</p> <p>RECP, Section 2 <i>in fine</i></p>	<p>None. Bhutan’s laws and regulations make no distinctions between projects financed directly and those financed through intermediaries.</p>	<p>None</p>
<p>11. Disclose draft EA in a timely manner, before appraisal formally begins, in an accessible place and in a form and language understandable to key stakeholders.</p>	<p>“Right to information: Every individual has the right to be informed about the state of the environment and all activities which are being proposed that could affect the environment.”</p> <p>“The Commission and its Secretariat shall therefore: - make environmental information available in electronic databases which are easily accessible to the public through public telecommunications networks...and 61.4. encourage operators whose activities have a significant impact on the environment to inform the public voluntarily of the environmental impact of their activities and products.</p> <p>“Citizens are entitled to participate in decision-making</p>	<p>NEPA 4.11</p> <p>NEPA 61.4</p> <p>NEPA 66.1-66.2</p>	<p>None.</p>	<p>None.</p>

<p>World Bank (OP 4.00) Requirements</p> <p>(Objective and operational principles)</p>	<p>Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects</p> <p>Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*</p>	<p>References to the relevant sections of the laws, rules, regulations, procedures, and policies</p>	<p>Differences between OP 4.00 and Bhutan’s requirements</p>	<p>Gap- filling measures needed to attain equivalenc e with OP 4.00 requireme nts</p>
	<p>processes concerning the environment, when the Royal Government deems appropriate to hold public consultations, including:</p> <ul style="list-style-type: none"> - Contributing views during the process of drawing up policies, plans and project formulation and implementation; <p>66.2 -Consulting the public during environmental impact assessment process before the issuance of environmental clearance. Provided that the larger interest of the community/country shall prevail over individual interest;</p> <p>Accordingly “the public concerned shall be informed in a, timely and effective manner, either by public notice or individually as appropriate, on any environmental decision-making procedure, when all options are open and effective public participation can take place</p> <p>Moreover, under the EAA, applicants have an obligation to inform and consult with concerned people and organizations before submitting the EA documents to the CA or NEC. With respect to “significant</p>	<p>NEPA 67</p> <p>EAA, Sections 16, 28.4 and other provisions cited under Principle 7 above.</p> <p>RECP, Section 31</p>		

World Bank (OP 4.00) Requirements (Objective and operational principles)	Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects		Differences between OP 4.00 and Bhutan’s requirements	Gap- filling measures needed to attain equivalenc e with OP 4.00 requireme nts
	Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*	References to the relevant sections of the laws, rules, regulations, procedures, and policies		
	<p>projects” the proponent has the further obligation ⁶ to provide at a minimum, written notice to local people, a newspaper notice, and public hearings. NECS or the CA may require the applicant to undertake public consultation beyond the minimum standard, including public notice and review procedures. Local authorities are required to make copies of all EA documents and decisions available to affected communities. NECS or the CA must make a public announcement of the decision to issue an environmental clearance and provide reasons for decision including information to the public describing the project, and its environmental terms, describing measures to avoid or mitigate potential adverse effects and to enhance positive impacts, and a non-technical summary of this information. Public notice must be made within 15 days of a decision by the Secretariat or CA. Sectoral guidelines for applications for environmental clearances also detail requirements for public consultation. The applicant must explain the expected impact to</p>			

World Bank (OP 4.00) Requirements (Objective and operational principles)	Government of Bhutan’s Equivalent Requirements with specific reference to urban development and Rural Access II projects		Differences between OP 4.00 and Bhutan’s requirements	Gap- filling measures needed to attain equivalenc e with OP 4.00 requireme nts
	Objectives and operational principles as stated in the relevant laws, rules, regulations, procedures, and policies*	References to the relevant sections of the laws, rules, regulations, procedures, and policies		
	<p>affected people, where these impacts will occur and how they will be mitigated; the applicant must provide a record of the meetings (including a record of names, times and place of meeting and information on issues raised and agreements made). Signatures of consulted parties as proof of consultation are required, as is a description of unresolved issues of discussion.</p>			

Annex A : BUDP II

Second Bhutan Urban Development Project Use of Country Systems – Equivalency and Acceptability Assessment Findings

Consultation

Venue: Ministry of Works and Human Settlement, PPD, Thimphu, Bhutan

Date: 28 October 2009, 1400 hrs – 1700 hrs

List of agencies invited for the consultation:

1. The Director General, NEC
2. The Head, EA Section, NEC
3. The Director, DUDES
4. The Executive Secretary, TCC
5. The Environment Officer, Ministry of Economic Affairs
6. The Environment Officer, Thimphu City Corporation
7. The Environment Officer, The Thimphu Dzongkhag Administration
8. The Executive Director, Royal Society for the Protection of Nature (RSPN)⁷

List of persons invited and feedback requested from:

9. Mr. K.C. Nyeldrup, EA Section, NEC
10. Mr. Tshewang Dorji, EA Section, NEC
11. Mr. Thinley Dorji, EA Section, NEC
12. Mr. Tenzin Khorolo, EA Section, NEC
13. Mr. Sangay Dorji, Environment Unit, MoEA
14. Mr. Dago Tshering, RSPN
15. Ms. Kesang Lhamu, Environment Officer, Thimphu Dzongkhag Administration

Attendance of the consultation

1. Mr. Rinchen Dorji, Director, DUDES MoWHS
2. Mr. Pema Dorji, Senior Environment Officer, TCC
3. Ms. Dawa Zangmo, Senior Environment Officer, PPD MoWHS
4. Ms. Sonam Desel, Environment Officer, PPD MoWHS
5. Mr Addepalli Sita Ramakrishna, World Bank
6. Drona Raj Ghimire, World Bank.

Meetings notes – Comments and Suggestions

1. The Thromde Acts 2007 has been repealed by Local Governance Act 2009. The assessment and writings needs to be revised to incorporate this important change.

⁷ The RSPN is the only recognized non-governmental organization involved in environmental issues in Bhutan.

2. BUDP II preparation has taken a long time. The safeguard issues should be addressed such that it helps in concluding the preparatory process in time.
3. Use of Bhutan's country system for environmental safeguard in BUDP II is a positive step. The Bank has had the prior experience using Bhutan's country system for environmental safeguards in the Bank funded RAP II Project. The use of country system in BUDP II should be informed by the experiences of RAP II.
4. There is some confusion and/ or lack of awareness among the implementers and directly involved stakeholders regarding environmental safeguard roles, responsibilities, authorities, and functions. BUDP II implementing parties need to have a clear understanding of these functions, as required by the Bhutan system, as early as possible.
5. While the legal framework and provisions are reasonably sound, BUDP II needs to emphasize effective implementation and enforcement of the requirements.
6. As the country institutions will have increased role in project implementation under country systems, environmental capacity of the implementing parties remains a concern. The capacity building component of the project can address this aspect. Need based capacity building activities including orientation, training and additional human resources are important in effective implementation of the country system and obtaining good performance. Emphasis should be placed on practical/hands-on training. The training and orientation should also include the private sector as well as on-site entities involved in the project activities. In particular, contractors may also need training/ orientation prior to construction and during construction.
7. Consultation and compliance monitoring should be strengthened in BUDP II. It is important that the right approach be used so that consultation is undertaken and relevant information is disseminated to the likely stakeholders. Consultation should include directly impacted persons as well as other relevant stakeholders including organizations. A clear plan must be agreed for monitoring and feedback system – for example who is responsible for annual compliance monitoring, unannounced and announced checks, periodic compliance checks (how often), and regular monitoring and reporting by holders of the Environmental Clearance, and how these should be done. Format should be developed for these monitoring and checks.