

PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

1 The project preparatory technical assistance (PPTA) is necessary in order to identify, formulate, and prepare the proposed Project. The PPTA will be used for preparing, mainly, a feasibility study, which will include preliminary designs; preliminary engineering; cost estimates; technical, financial, economic, and socioeconomic analysis; environmental analysis; social impact assessment; a study for initial benchmark indicators; and a project administration manual.

B. Major Outputs and Activities

2. Four candidate road sections have been identified to be part of the feasibility study, an estimated 350km of roads total (see Table below). Prioritization will be needed during the PPTA stage. Under the PPTA, the proposed candidate road sections are at follow:

Candidate Road Sections

No.	Road Name (connecting to)	Total Length	District	Proposed Activities	Environmental Conditions Along the Road	Other Remarks
1	Deothang-Nganglam Road	60	Samdrup Jongkhar and Pemagatshel	New Construction		New Construction
2	Gelegphu-Panbang	87	Sarpang and Zhemgang	New Construction		New Construction
3	Lhamoizingkha-Sarpang Road	115	Dagana and Sarpang	New Construction		New Construction
4	Samrang-Jomdshangkha	84	Samdrup Jongkhar	New Construction		New Construction

km = kilometer

Source: Royal Government of Bhutan

3. The major outputs and activities are summarized in Table A5.1.

Table A5.1: Summary of Major Outputs and Activities

Milestones	Major Output	Expected Completion Date
Inception Report	(i) Work program, and (ii) confirmed candidate roads	Aug-11
Interim Report	(i) Mid-term workshop, and (ii) preliminary study results	Oct-11
Draft Final Report	(i) Final stakeholder workshop, and (ii) draft engineering study, economic analysis, safeguard documents, Design and Monitoring Framework	Dec-11
Final Report	(i) Tripartite meeting, and (ii) final engineering study, economic analysis, safeguard documents, and Design and Monitoring Framework.	Feb-12

Source: ADB

C. Cost Estimate and Proposed Financing Arrangement

4. The TA is estimated to cost \$650,000 equivalent, of which \$600,000 equivalent will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-IV). The

Government will finance the remaining \$50,000 equivalent in-kind contribution. The detailed cost estimates are presented in Table A5.2.

Table A5.2: Cost Estimates and Financing Plan
(\$'000)

Item	Total Cost
A. ADB Financing^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (16 person-months)	360,000.0
ii. National consultants (27 person-months)	80,000.0
b. International and local travel (including vehicle)	60,000.0
c. Reports and communications	2,000.0
2. Equipment (computer, printer, etc.) ^b	4,000.0
3. Workshops, training, seminars, and conferences ^c	
a. Workshops	3,000.0
4. Surveys (topographical, geotechnical, hydrological, social and environmental survey works; including vehicle)	50,000.0
5. Miscellaneous administration and support costs	2,000.0
6. Representative for contract negotiations ^d	6,000.0
7. Contingencies	33,000.0
Subtotal (A)	600,000.0
B. Government Financing	
1. Office accommodation and transport	30,000.0
2. Remuneration and per diem of counterpart staff	20,000.0
Subtotal (B)	50,000.0
Total	650,000.0

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-IV).

^b Equipment

Type	Quantity	Cost
Laptop	1	\$1,000
Desktop	1	\$1,000
Multi-function printer	1	\$2,000

^c Workshops, training, seminars, and conferences

Purpose	Venue
Stakeholder consultation/presentation	Thimphu, Bhutan

^d To ensure technical understanding of the assignment by the Consultant, the government's representatives will attend the negotiation.

Sources: Asian Development Bank

D. Consulting Services

5. For the main portion of the PPTA, a firm of international consultants will be recruited using the quality-and cost-based selection procedure, with a simplified technical proposal and a 80:20 proportion of quality to cost. The services will be implemented over about 7 calendar months and will require about 16 international person-months and 16 national person-months. Table A5.3 shows the summary of consulting services requirements; see Annex 6 for the outline terms of reference. For environmental assessment, one national individual will be recruited using the individual selection procedure to provide about 5 person-months of services. For social and resettlement assessment, one national individual will be recruited using the individual selection procedure to provide about 6 person-months of services (see Appendix 7 for the outline terms of reference).

Table A5.3: Summary of Consulting Services Requirement

International Name of Positions	Person- months	National Name of Positions	Person- months
Team Leader, and Road and Highway, and Pavement Engineer	6.0	Deputy Team Leader and Road/Civil/Structural Engineer	7.0
Road/Transport Economist	3.0	Road/Transport Economist	4.0
Road/Highway Structural and Bridge Engineer	1.0	Geotechnical/Materials Engineer	2.0
Geotechnical/Materials Engineer	3.0	Senior Surveyor	3.0
CAD Technician	3.0	Social Resettlement Specialist	6.0
		Environmental Specialist	5.0

6. The outline terms of references for the project preparatory TA consultants are described in Appendix 6.

E. Implementation Arrangements

8. The Department of Roads (DOR) will be the executing agency for the PPTA. A project management unit is not envisioned. The government's in-kind contribution will be provision of office accommodation, furnishings, and utilities. The government will provide all available reports, maps, and other pertinent data, and facilitate inter-agency coordination and applicable permits as necessary. Disbursements under the TA will be made in accordance with the ADB's Technical Assistance Disbursement Handbook (May 2010, as amended from time to time)

9. The proposed TA processing and implementation schedule is listed in Table A5.4.

Table A5.4: Proposed Technical Assistance Processing and Implementation Schedule

Major Milestones	Expected Completion Date
Concept paper review meeting	December 2010 (completed)
Reconnaissance mission	February 2011 (completed)
Peer review	February 2011 (completed)
Approval of concept paper	April 2011
Recruitment of PPTA Consultant	April 2011
PPTA implementation	August 2011 – February 2012

PPTA = Project Preparatory Technical Assistance

Source: Asian Development Bank