



Technical Assistance Report

Project Number: 41055
November 2007

Nepal: Preparing the West Seti Hydroelectric Project (Financed by the Regional Cooperation and Integration Fund)

CURRENCY EQUIVALENTS

(as 5 November 2007)

Currency Unit	–	Nepalese rupee/s (NRe/NRs)
NRe1.00	=	\$.01589
\$1.00	=	NRs62.90

ABBREVIATIONS

ADB	–	Asian Development Bank
AP	–	affected people
GW	–	gigawatt
MOF	–	Ministry of Finance
MW	–	megawatt
PA	–	project agreement
PMO	–	project management office
PSOD	–	Private Sector Operations Department
RP	–	Resettlement Plan
SARD	–	South Asia Department
TA	–	technical assistance
WSHL	–	West Seti Hydroelectric Limited
WSHP	–	West Seti Hydroelectric Project

TECHNICAL ASSISTANCE CLASSIFICATION

Targeting Classification	–	General intervention
Sector	–	Energy
Subsector	–	Hydropower generation
Theme	–	Sustainable economic growth, governance, environmental sustainability, regional cooperation, and private sector development

NOTE

In this report, "\$" refers to US dollars.

Vice President	L. Jin, Operations 1
Director General	K. Senga, South Asia Department (SARD)
Director	T. Kandiah, Energy Division, SARD
Team leader	N. Tas-Anvaripour, Energy Division, SARD
Team members	I. Caetani, Energy Division, SARD
	A. Jeffries, Energy Division, SARD
	N. Kulichenko, Energy Division, SARD

I. INTRODUCTION

1. During the discussions for the Country Operations Business Plan 2007–2009, the Government of Nepal requested Asian Development Bank (ADB) assistance for the Government's equity investment in the West Seti Hydroelectric Project (WSHP) to promote public-private partnership in the power sector. The WSHP, which is being developed by a private sponsor, will have joint assistance from ADB's Private Sector Operations Department and South Asia Department (SARD). ADB conducted a Fact-Finding Mission on 21–26 September 2007 and reached an understanding with the Government on the objective, scope, cost estimates, financing, implementing arrangements, and the consultants' terms of reference for the technical assistance (TA). The TA framework is in Appendix 1.¹

II. ISSUES

2. The ADB country strategy for Nepal addresses poverty reduction through sustainable economic growth, social development, good governance, environmental management, and private sector development. Development of hydropower for export will play a vital role in achieving ADB's goals to generate employment and support income growth, human resource development, capacity building, and sustainable management of natural resources.

3. Because of its natural resources and physical location, Nepal is well-positioned to develop hydroelectric energy as a major source of growth and it is entering a period of economic growth that will depend on effective management of one of its main natural resources—river water. The revenue generated from hydropower projects will facilitate the implementation of the Government's poverty reduction initiatives and ensure long-term sustainable development. Nepal also needs to consider harnessing its vast hydroelectric power potential in a socially and environmentally sustainable way. The WSHP will give Nepal the opportunity to earn foreign exchange from electricity export to India. Such export will provide the Government with a major increase in fiscal revenue, which is needed to fund service delivery and basic infrastructure in the fields of health, education, and other social sectors. Therefore, the WSHP is an integral part of the Government's development framework, which aims to achieve the country's medium- and-long-term economic growth and poverty reduction objectives.

4. An energy development study for the South Asia Subregional Economic Cooperation countries recommended the implementation of priority subregional hydropower projects to facilitate the expansion of cross-border power trade. The WSHP will utilize Nepal's natural resources and export power to meet India's increasing power demand. Therefore, the WSHP will bring institutional investor confidence in developing hydropower projects in Nepal and set a good example for regional cooperation and private-public partnerships.

5. The WSHP involves the construction and operation of a 750-megawatt (MW) storage-type hydroelectric power generation facility on the Seti River in the far western region of Nepal, one of the most underdeveloped areas in the country, on a build-own-operate-transfer basis. The West Seti Hydro Limited (WSHL), which is promoted by a private sector project sponsor, signed a project agreement (PA) with the Government in June 1997. Under the PA, the Government assured to grant all licenses to WSHL for the development, construction, ownership, and operation of the WSHP, including generation and transmission licenses for a

¹ The TA first appeared in *ADB Business Opportunities* on 12 October 2007.

period of 30 years from the date of issue of the license. The electricity generated will be exported to India. Other project and financial arrangements including the financing structure are being finalized between the project sponsors and the various stakeholders with support from PSOD.

6. The project sponsors have conducted a detailed feasibility study that covered technical and financial viability and the social and environmental safeguards. ADB constituted a team comprising members from PSOD, SARD, and Regional and Sustainable Environment and Social Safeguards Division (RSES). The team is working together with consultants financed by the project sponsors on the environmental and social areas to ensure they are in line with ADB policies and procedures, and a summary environmental impact assessment report has been disclosed on the ADB website since 21 August 2007. Further supplementing studies with respect to financial governance and support for community development are required to prepare the Government's equity investment in the WSHP. The challenge for the Government is to ensure that the social and environmental impact of the WSHP is fully addressed by way of a detailed program of mitigation, compensation, and offsetting measures. ADB's involvement in the WSHP will ensure that the social and environmental inputs are addressed in accordance with ADB's environmental and social policies and procedures. The Government is developing a comprehensive policy framework to ensure that the revenue benefits of the WSHP are properly channeled to the priority areas of the economy that have strong links to its poverty reduction strategy. The Government needs assistance to ensure that its plans are carried out in line with current international best practices.

7. ADB is of the opinion that the best approach for successfully implementing the WSHP is public-private partnership, which includes financial participation of the Government in the WSHP. In this regard, ADB will assist the Government by providing funding from ADB's public sector window for the Government's equity participation in the WSHP. ADB's private sector window is also preparing a combination of equity, loan, and guarantee for the WSHP. ADB's involvement in the WSHP through its public sector window will ensure that (i) social and environmental impacts have been properly identified and mitigated in line with good practice and ADB safeguard policies; and (ii) sufficient project revenues are allocated and properly channeled to poverty reduction initiatives. ADB's involvement will also support the WSHP in obtaining broad support from international funding agencies and civil society for Nepal's development strategy and, more specifically, the development of the hydropower projects.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

8. The TA will assist the Government to participate in a project to develop its large hydropower resources in an environmentally sustainable and socially responsible manner through public-private partnership.

B. Output

9. Specifically, the TA will help the Government prepare a framework for managing revenues generated from the export of power from the WSHP to neighboring countries to comply with the highest standards of governance and accountability and for the proceeds to be properly used for poverty reduction programs, including improved delivery of social services. The TA will also identify the needs of the communities in the project area in terms of area development and livelihood programs.

C. Methodology and Key Activities

10. The TA will conduct the assessments, identify and design appropriate fiscal governance measures, carry out economic and financial due diligence for the Project, and prepare a local area development program to be implemented by the Government and to dovetail with the social development programs undertaken by WSHL.

11. Key activities include:

- (i) assessing the macroeconomic impacts of the proposed WSHP, including external balances, fiscal, and monetary effects;
- (ii) assessing the impact of borrowing and investing in the WSHP on the Government's financial plans and budget;
- (iii) conducting public finance and budget analysis to design a comprehensive framework of governance measures and monitoring mechanisms for the handling of revenues and expenditures from the WSHP in line with best practices;
- (iv) analyzing the potential for economic growth and social development through benefits from projects;
- (v) performing project-related financial, economic, social, poverty reduction, and institutional analyses; and
- (vi) preparing a small-scale local area development program for the project-affected area.

12. No major risks are associated with the TA, and the Government has expressed its strong support for it. Appendix 2 summarizes the initial poverty and social analysis of the Project.

D. Cost and Financing

13. The total cost of the TA is estimated at \$400,000 equivalent. ADB will finance \$300,000 from the Regional Cooperation and Integration Fund. The Government will finance \$100,000 in the form of in-kind contributions. The detailed cost estimates are presented in Appendix 3. The Government has been advised that approval of the TA does not commit ADB to finance any ensuing project.

E. Implementation Arrangements

14. The Executing Agency for the TA will be the Ministry of Finance (MOF), which will appoint a senior staff member as the project director. The TA will finance the services of international and national consultants who will be engaged individually by ADB in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time). International consultants will be engaged for 8 person-months, and national consultants, for another 4 person-months. The TA will start in December 2007 and will be completed by the end of June 2008. A project management office (PMO) will be established in MOF. The PMO will be responsible for the day-to-day management of the TA and will coordinate with all government and non government stakeholders of the proposed TA. The PMO will also oversee consultants' activities and facilitate all ADB activities for TA administration and loan project processing activities.

15. The following experts will be recruited as consultants: (i) a macroeconomist, (ii) a public financial management specialist, (iii) a power sector economist and financial analyst, and (iv) a

social development specialist. The outline terms of reference for the consultants are in Appendix 4.

16. The consultants will submit an inception report 2 weeks after the TA starts and a draft final report 3 months later. The team leader will be responsible for the submission of these reports. The Government and ADB will provide comments after the discussion of the draft final report at a tripartite meeting. At the end of 4 months, the consultants will submit the final report incorporating Government and ADB comments on the draft final report.

IV. THE PRESIDENT'S DECISION

17. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$300,000 to the Government of Nepal to be financed on a grant basis by the Regional Cooperation and Integration Fund under the Regional Cooperation and Integration Financing Partnership Facility for preparing the West Seti Hydroelectric Project, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p>Impact (for the ensuing project) Economic development in Nepal</p> <p>(for the TA) Increased production and use of affordable clean energy in a financially sustainable manner through hydropower generation.</p> <p>Generate revenue for the Government of Nepal through revenue share, royalties, taxes, and dividends from the Project for its poverty reduction programs</p>	<p>Higher economic growth, and improved quality of life and environment in Nepal</p> <ul style="list-style-type: none"> • Construction of a hydroelectric power plant with 750 megawatts (MW) generation capacity including dam, associated tunnels, underground power station, associated civil works, switchyard and transmission line to the Indian border • Production of 3,300 gigawatts (GW) of electricity: 2,970 GW to be exported to India and 330 GW to provide electricity to Nepal consumers by 2012 • Revenue share clearly reflected in annual budget allocations for poverty reduction programs 	<p>Gross domestic data</p> <p>Review missions Progress reports</p> <p>Audit reports Electricity data from utilities</p> <p>Annual budgets and financial statements</p>	<p>Assumption The Government and private entities are willing to form a successful public-private partnership that will construct and operate the required hydropower facilities</p> <p>Risk Project preparation and construction are delayed..</p>
<p>Outcome (for the ensuing project)</p> <p>Increased production and use of affordable clean energy in a financially sustainable manner through hydropower generation</p> <p>Generate revenue for the Government of Nepal through revenue share, royalties, taxes, and dividends from the project for its poverty reduction programs</p>	<ul style="list-style-type: none"> • Construction of a hydroelectric power plant with 750 MW generation capacity, including dam, associated tunnels, underground power station, associated civil works, switchyard and transmission line to the Indian border • Production of 3,300 GW of electricity: 2,970 GW to be exported to India and 330 GW to provide electricity to Nepal consumers by 2012 • Revenue share clearly reflected in annual budget allocations for poverty reduction programs 	<p>Review missions Progress reports</p> <p>Audit reports Electricity data from utilities</p> <p>Annual budgets and financial statements</p>	<p>Assumption The Government and private entities are willing to form a successful public-private partnership that will construct and operate the required hydropower facilities..</p> <p>Risk Project preparation and construction are delayed.</p>

Design Summary	Performance Targets/Indicators	Data Sources/Reporting Mechanisms	Assumptions and Risks
<p><u>TA Outcome</u> Well-defined investment project for hydropower generation facility and transmission line.</p>			
<p>Outputs (TA)</p> <ol style="list-style-type: none"> 1. Assessment of the macroeconomic impacts of the proposed WSHP, including external balances, fiscal and monetary effects 2. Assessment of the impact of borrowing and investment in the WSHP on the Government's financial plans and budget 3. Completed public finance and budget analysis to design governance measures and monitoring mechanisms for the handling of revenues and expenditures from the WSHP 4. Completed analysis of the potential for economic growth and social development through projects benefits 5. Report of project-related financial, economic, social, poverty reduction, and institutional analyses 6. Design of a small-scale local area development program for project affected-areas 	<p>All relevant assessments of the proposed investment completed for processing of the ensuing loan project.</p>	<p>Provision of actual project designs, review missions, and progress reports.</p> <p>Draft RRP, and environment, poverty, and social safeguard reports approved by ADB and the Government of Nepal ; review missions and progress reports</p>	<p>Assumptions The EA will obtain required government clearances in a timely manner.</p> <p>Access to data is not restricted and all reports are made available.</p> <p>Risk Required public consultations and disclosures are not completed on time.</p>

Activities with Milestones	Inputs
<p>1. Assess macroeconomic impacts (including external balances, fiscal and monetary effects) by March 2008.</p> <ul style="list-style-type: none"> • Obtain projections of revenue share, royalty revenue, tax revenue, and equity dividends from the project's financial model, and compare these inflows to outflows (e.g., debt repayment schedule) to determine Government's net cash position. • Obtain macroeconomic information from Government. Conduct consultations as necessary. • Conduct analysis and document/present findings. <p>2. Conduct impact assessment on Governments' financial plans and budget by March 2008.</p> <ul style="list-style-type: none"> • Obtain Government budget projection data. Conduct consultations as necessary. • Take information from 1 above, conduct analysis and document the findings. <p>3. Conduct public finance and budget analysis to design governance measures and monitoring mechanisms for the handling of revenues and expenditures from the WSHP by March 2008.</p> <ul style="list-style-type: none"> • Hold workshops with relevant Government agencies to determine current practices. • Make recommendations/design as appropriate. <p>4. Analyze the potential for economic growth and social development through project benefits by March 2008.</p> <ul style="list-style-type: none"> • Assess the sub regional costs and benefits. • Conduct surveys and hold stakeholder workshops as necessary. <p>5. Perform project-related financial, economic, social, poverty reduction and institutional analyses by March 2008.</p> <p>6. Prepare a small-scale area development program for project-affected areas by March 2008.</p> <ul style="list-style-type: none"> • Conduct stakeholder workshops and surveys as necessary. 	<p>Consulting Services ADB: \$300,000 Government: \$100,000</p>

ADB = Asian Development Bank, EA = Executing Agency, EIA = environmental impact assessment, RRP = report and recommendation of the President, TA = technical assistance, WSHP = West Seti Hydroelectric Project.

INITIAL POVERTY AND SOCIAL ANALYSIS

Country/Project Title:	Nepal: Preparing the West Seti Hydroelectric Project		
Lending/Financing Modality:	Project	Department/ Division:	SARD/SAEN

I. POVERTY ISSUES

A. Linkages to the National Poverty Reduction Strategy and Country Partnership Strategy

Despite significant progress in reducing poverty from 42% to 31%, Nepal with a per capita income of \$292 per annum continues to be one of the poorest countries in the world. The country's economic growth of 2% barely exceeded the population growth rate of 1.9% in 2003. Nepal ranks 106th out of 177 countries, with a human development index value of 0.53, which is lower than the weighted average for South Asia. While 39.8% of the population have a connection to electricity, there are marked regional and urban/rural disparities with the mid and far west having the lowest electrification rates at 25.4% and 23.2%, respectively, severely impeding those regions' ability to stimulate rural economic activities.

The Government aims to achieve the Millennium Development Goal (MDG) of halving extreme poverty and hunger by 2015, and to speed the rate of broad-based economic growth to an average 6.2% per annum.

The project is envisaged to benefit the development of the West Seti Region, which is one of the poorest in the country. Benefits are expected to come from royalties, levies, duties and taxes, part of which the Government will spend locally in directly affected areas.

In addition, the project will design ad hoc interventions to address the needs of the affected people.

Finally, the project is also expected to create jobs both directly, employing unskilled and semi-skilled workers for the civil works, and indirectly through the economic impulse created by incoming workers.

B. Targeting Classification

1. Select the targeting classification of the project:

General Intervention Individual or Household (TI-H); Geographic (TI-G); Non-Income MDGs (TI-M1, M2, etc.)

2. Explain the basis for the targeting classification: Although particular attention will be given to poverty reduction in the affected areas, the project will not have poverty reduction as its primary focus.

C. Poverty Analysis

1. If the project is classified as TI-H, or if it is policy-based, what type of poverty impact analysis is needed?

2. What resources are allocated in the PPTA/due diligence? A social development specialist, a macro economist and a rural development specialist.

3. If general intervention, is there any opportunity for pro-poor design (e.g., social inclusion subcomponents, cross subsidy, pro-poor governance, and pro-poor growth)? Absolute poverty continues to be high in Nepal with about 8 million people living below the poverty line, and inequality between different income groups, ethnic groups, and geographical regions have widened in the past decade. About 88% of the population live in rural areas, where the incidence of poverty is more acute (44%) than it is in urban areas, estimated at 23% (UNDP 2002). Large segments of the poor are hard-core poor. They barely eke out a living in fragile, vulnerable ecosystems, where large areas lack even the most basic infrastructure as reflected by low socioeconomic indicators at the district level. The project will support schemes on the basis of Nepal's composite development rank comprising indicators such as infrastructure, health, gender, education, employment, urban/rural, agriculture, among others; access to electricity; ethnic composition (% of ethnic minorities, disadvantaged castes); and income. The technical assistance (TA) will also design rural development interventions to be implemented during the implementation of the project.

II. SOCIAL DEVELOPMENT ISSUES

A. Initial Social Analysis

Based on existing information:

1. Who are the potential primary beneficiaries of the project? How do the poor and the socially excluded benefit from the project? Consultations with the affected communities identified a list of interventions that will be designed to improve the standards of life of the communities in the affected areas and increase income opportunities. Moreover, the project is expected to have positive effects on income: work opportunities for unskilled labor and commercial opportunities for restaurants, guest houses, and shops.
2. What are the potential needs of beneficiaries in relation to the proposed project? Most of the needs are related to resettlement. Nonetheless, the affected communities have specifically asked for improvements in the health centers and education infrastructure, training programs, water, and irrigation.
3. What are the potential constraints in accessing the proposed benefits and services, and how will the project address them? Constraints, if any, will be identified and minimized during the PPTA.

B. Consultation and Participation

1. Indicate the potential initial stakeholders.
2. What type of consultation and participation (C&P) is required during the TA or project processing (e.g., workshops, community mobilization, involvement of nongovernment organizations and community-based organizations, etc.)? Resettlement plans (RPs) were prepared during the past 10 years with extended consultations with local communities. It is envisaged that the RPs will be implemented in close consultation with the concerned communities and affected persons (APs). There is provision to include APs in (i) the Compensation Fixation Committee, (ii) community meetings for proper dissemination of project information, (iii) capacity-building activities for APs and vulnerable groups to ensure their effective participation in preparing, managing, and implementing RPs. The project's RP includes a community participation and implementation framework with a time-bound schedule of RP activities and delineation of responsibilities.
3. What level of participation is envisaged for project design?
 Information sharing Consultation Collaborative decision making Empowerment
4. Will a C&P plan be prepared? Yes No Please explain. The first part of the consultations was already carried out in the past 10 years. The participatory strategy during the implementation of the project is embedded in the RP.

C. Gender and Development

1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project/program?
2. Does the proposed project/program have the potential to promote gender equality and/or women's empowerment by improving women's access to and use of opportunities, services, resources, assets, and participation in decision making?
 Yes No Please explain. Women's control over financial resources is severely limited as shown by the low land (10%) and home ownership rates (6%) for women and these impacts negatively on their decision making role in strategic areas related to development. The country's gender development index of 0.51 has improved vis-à-vis the human development index of 0.53. However, the magnitude of gender inequality in HDI indicators is acute in the rural areas. Gender analysis conducted in conjunction with project preparation shows that (i) the majority of the women are illiterate, (ii) women have a higher level of food vulnerability, (iii) incomes for female heads of households were on average 30% those of male heads, (iv) women's daily wage rate was 70% that of men, and (v) none of the households with female heads had grid electricity. The lack of female field staff and the lack of awareness among staff of the Executing Agency about gender-differentiated roles have resulted in limited outreach to women. Increased population mobility in search of employment has correspondingly increased the risk to women of both trafficking and HIV/AIDS.
3. Could the proposed project have an adverse impact on women and/or girls or to widen gender inequality?
 Yes No Please explain. Women are more likely to be exposed to HIV/AIDS. The team is preparing an ad hoc project to address the issue.

III. SOCIAL SAFEGUARD ISSUES AND OTHER SOCIAL RISKS			
Issue	Nature of Social Issue	Significant/Limited/ No Impact/Not Known	Plan or Other Action Required
Involuntary Resettlement	Impacts are going to be significant in terms of the number of APs and in terms of affected resources. A full RP was prepared in 1999 and was updated this year. A draft was submitted to the Asian Development Bank for review.	Significant	<input checked="" type="checkbox"/> Full Plan <input type="checkbox"/> Short Plan <input type="checkbox"/> Resettlement Framework <input type="checkbox"/> No Action <input type="checkbox"/> Uncertain
Indigenous Peoples	Vulnerability analysis of the sampled population using parameters such as income poverty, food vulnerability, and social exclusion shows that ethnic groups are not vulnerable in any of those three categories. Indigenous peoples (IPs) were identified as vulnerable when accessing a particular good such as medicine, particularly when seeking financial support to access those goods. Project impacts on IPs, if any, will arise from land acquisition and loss of livelihood. In addition, given the extensiveness of the impacts on communities as a whole, IP communities are also to be considered particularly vulnerable.	Significant	<input checked="" type="checkbox"/> Plan <input type="checkbox"/> Other Action <input type="checkbox"/> Indigenous Peoples Framework <input type="checkbox"/> No Action <input type="checkbox"/> Uncertain
Labor <input checked="" type="checkbox"/> Employment Opportunities <input type="checkbox"/> Labor Retrenchment <input checked="" type="checkbox"/> Core Labor Standards	The project will provide short- and long-term employment opportunities. Contractors will be urged to use labor-intensive technology where possible. Equal opportunities and wages will be given to men and women, with priority to those affected by land acquisition, and other vulnerable groups (female heads of households, and disadvantaged ethnic groups and castes). The Project will monitor child labor and compliance with the international core labor standards. Specific clauses in RP, and contractors' bid documents to favor APs and vulnerable groups.	Limited. Positive	<input type="checkbox"/> Plan <input type="checkbox"/> Other Action <input checked="" type="checkbox"/> No Action <input type="checkbox"/> Uncertain

Issue	Nature of Social Issue	Significant/Limited/ No Impact/Not Known	Plan or Other Action Required
Affordability		None	<input type="checkbox"/> Action <input checked="" type="checkbox"/> No Action <input type="checkbox"/> Uncertain
Other Risks and/or Vulnerabilities <input checked="" type="checkbox"/> HIV/AIDS <input type="checkbox"/> Human trafficking <input type="checkbox"/> Others (conflict, political instability, etc.), please specify	<p>HIV infection has been noted in all regions of the country, but it is concentrated in urbanized areas and districts with high labor migration. Areas supplying more migrants such as the mid west and far west regions are more vulnerable. Internal trafficking is on the rise as rural women seek employment in urban centers. Since this project deals with rural areas, the communities can be considered vulnerable to the risks of HIV/AIDs and human trafficking. Programs raising awareness about HIV/AIDs and anti-trafficking have been developed and budgets allocated for their implementation. Possible delays at the implementation phase may be due to the current insurgency. A project security plan is part of project risk management and the budget includes a buffer for construction delays.</p>	Limited	<input checked="" type="checkbox"/> Plan (Grant to be submitted for financing) <input type="checkbox"/> Other Action <input type="checkbox"/> No Action <input type="checkbox"/> Uncertain

IV. PPTA/DUE DILIGENCE RESOURCE REQUIREMENT

1. Do the terms of reference for the TA (or other due diligence) include poverty, social and gender analysis, and the relevant specialist/s?
 Yes No If no, please explain why.
2. Are resources (consultants, survey budget, and workshop) allocated for conducting poverty, social and/or gender analysis, and C&P during the PPTA/due diligence? Yes No If no, please explain why.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Total Cost
A. Asian Development Bank Financing^a	
1. Consultants	
a. Remuneration and Per Diem	
i. International Consultants	170.0
ii. National Consultants	20.0
b. International and Local Travel	50.0
c. Reports and Communications	2.0
2. Equipment	0.0
3. Training, Seminars, and Conferences	
a. Facilitators	0.0
b. Seminars	5.0
4. Surveys	5.0
5. Miscellaneous Administration and Support Costs	0.0
6. Representative for Contract Negotiations	0.0
7. Contingencies	48.0
Subtotal (A)	300.0
B. Government Financing^b	
1. Office Accommodation and Transport	60.0
2. Remuneration and Per Diem of Counterpart Staff	30.0
3. Others	10.0
Subtotal (B)	100.0
Total	400.0

a. Financed by the Regional Cooperation and Integration Fund.

b. Government financing will be in kind.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

A. Background

1. The Asian Development Bank (ADB) is considering funding for the Government of Nepal to finance its equity stake in the West Seti Hydroelectric Project (WSHP). The WSHP will generate significant revenue for the Government in the form of dividends, royalties, and taxes, which should be used by the Government for poverty reduction efforts. As part of its loan processing, ADB will assess the macroeconomic and poverty impacts of the WSHP in the report and recommendation to the President (RRP). ADB seeks to engage individual consultants to support the project processing team in documenting the project. Consulting services will comprise 4 person-months from a power sector economist with financial analysis skills, 2 from a macroeconomist, 2 from a public financial management specialist, and 4 from a social development specialist. Of these inputs, 2 weeks will be allocated for the home office for each consultant. The power sector economist will carry out the responsibilities of a team leader.

1. Team Leader- Power Sector Economist (international, 4 person-months)

2. In accordance with ADB's *Guidelines for Integrating Risk Analysis in the Economic Analysis of Projects* (2002), the consultant will undertake the following tasks:

- (i) Carry out the responsibilities of a team leader by consolidating and submitting reports prepared by team members.
- (ii) Review the load profiles of the sub power grid system of India that is connected with this hydro plant.
- (iii) Review the Power Sector Development Plan for least-cost alternatives for Nepal, in terms of earnings from power for export and for domestic purposes. Prepare a least-cost justification for the WSHP from the perspective of Nepal, India, and the sub region.
- (iv) Assess investment requirements in distribution and transmission for the load from the WSHP. Identify possible sector and institutional constraints. Prepare a summary review of the sector and institutional issues, including tariffs and subsidies.
- (v) Calculate the shadow exchange rate for Nepal and India.
- (vi) Update data and revise the existing economic and financial model for the WSHP to analyze the economic viability and distribution of net project benefits. Identify stakeholders in Nepal to conduct the distributional analysis of net project benefits in line with ADB guidelines. Analyze the distribution of benefits between Nepal and India. Conduct sensitivity analysis with respect to key risks on the economic internal rate of return, net present values, and distribution of project benefits.
- (vii) Analyze the key risks and assumptions in the economic model and conditions in the concession and power purchase agreements in accordance with ADB's *Guidelines for Integrating Risk Analysis in the Economic Analysis of Projects*. (2002)

- (viii) Assess the institutional implications and sustainability of the project.
- (ix) Identify any additional costs associated with possible externalities, in particular with respect to power generation, for inclusion in the economic model.
- (x) Analyze the financial viability of the project and each of its components in accordance with ADB's *Financial Management and Analysis of Projects, 2005*, using the financial internal rate of return (FIRR) and comparing it with the relevant weighted average cost of capital (WACC). The FIRR and the WACC should be computed on an after-tax basis in real terms using constant 2004 prices.
- (xi) Prepare a project framework, according to ADB standards, that clearly identifies goals, objectives, and justification of the proposed project components, the overall project, required inputs, targets or benchmarks, monitoring mechanisms, sustainability, and potential risks and assumptions with mitigation measures.
- (xii) Prepare cost estimates, a financing plan, and financial projections in domestic currency units and take into account possible effects of inflation and potential exchange rate fluctuations.¹
- (xiii) Prepare background documents as supplementary appendixes, and an appendix of project economic and financial analyses.

2. Macroeconomist (international, 2 person-months)

3. The consultant will complete the following tasks:

- (i) Assess the macroeconomic impacts of the proposed WSHP, including external balances, and fiscal and monetary effects.
- (ii) Analyze the potential for economic growth and social development through the project benefits.
- (iii) Identify and examine key channels (including direct, indirect, and macroeconomic channels) through which poverty would be affected by the WSHP.
- (iv) Identify risks and assess their implications for economic growth and poverty reduction.
- (v) Develop a methodology for assessing the impact of this project on growth, income distribution, and poverty.
- (vi) Propose mitigation measures to address identified risks.

3. Public Finance (international, 2 person-months)

4. The consultant will complete the following tasks:

¹ The project cost estimates and financial projections in nominal terms should be converted to real terms by removing the projected effects of foreign and domestic inflation and currency fluctuations. Incremental costs and benefits should form the basis for the financial evaluation.

- (i) Assess the impact of borrowing and investing in the WSHP on the Government's financial plans and budget.
- (ii) Conduct a public finance and budget analysis to design governance measures and monitoring mechanisms for handling revenues and expenditures from the WSHP.
- (iii) Review relevant Nepal laws and regulations that may impact the revenue management arrangements under consideration.
- (iv) Evaluate the performance of the existing statutory funds in Nepal and their effect on central budget planning and expenditures.
- (v) Develop revenue management mechanisms in which project generated revenues are channeled into program-specific uses.
- (vi) Prepare a political risk assessment to identify and mitigate political risks for the project.

4. Social Development Specialist (national, 4 person-months)

5. The consultant will carry out the following tasks:

- (i) Develop/design small-scale community development project concepts as agreed upon with the project sponsor (such as the 100 beds hospital, water distribution per village, irrigation infrastructure, and school/training centers improvement/development). Prepare project cost, implementation arrangements, and a monitoring mechanism.
- (ii) Design strategies for improving livelihood strategies with focus on disadvantaged groups in host communities, which have not been identified at present, but will be identified prior to or during the implementation of the project preparatory technical assistance.
- (iii) Identify training institutions, vocational training centers, adult literacy programs, and local development organizations, including the advocacy groups of ethnic minorities, castes, and women's organizations in the project area; assess their ability to carry out capacity-building programs; and, with their input, design an appropriate training program for project-affected people.
- (iv) Collect relevant socioeconomic information on the downstream communities; analyze the data to assess the poverty impacts of the project in the affected areas.

B. Duration

6. The consultants' assignment is scheduled to begin in December 2007 and will be completed by June 2008.

C. Deliverables

7. The consultants will be expected to produce reports and summary excerpts in a form suitable for inclusion in ADB's draft RRP. Summary excerpts will include poverty analysis, financial revenue management, economic analysis, financial analysis, local area development. The reports and excerpts will be provided in hard copy and workable electronic format. The first draft of these documents will be required by early January 2008.