



Technical Assistance Report

Project Number: 47164-001
Capacity Development Technical Assistance (CDTA)
November 2014

Kingdom of Cambodia: Capacity Development for Public–Private Partnerships (Financed by the Japan Fund for Poverty Reduction)

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 16 October 2014)

Currency unit	–	riel/s (KR)
KR1.00	=	\$0.00025
\$1.00	=	KR4,080

ABBREVIATIONS

ADB	–	Asian Development Bank
GCA	–	government contracting agency
PPP	–	public–private partnership
TA	–	technical assistance

NOTE

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

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CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Number: 47164-001	
Project Name	Capacity Development for Public–Private Partnerships	Department /Division	SERD/CARM
Country Borrower	Cambodia Royal Government of Cambodia	Executing Agency	Ministry of Economy and Finance
2. Sector		Financing (\$ million)	
✓ Transport	Transport policies and institutional development		0.60
Energy	Energy sector development and institutional reform		0.40
		Total	1.00
3. Strategic Agenda		Climate Change Information	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Low
4. Drivers of Change		Gender Equity and Mainstreaming	
Governance and capacity development (GCD)	Institutional development Organizational development	Some gender elements (SGE)	✓
Knowledge solutions (KNS)	Knowledge sharing activities		
Partnerships (PAR)	Bilateral institutions (not client government) Official cofinancing		
Private sector development (PSD)	Conducive policy and institutional environment Promotion of private sector investment Public sector goods and services essential for private sector development		
5. Poverty Targeting		Location Impact	
Project directly targets poverty	No	Not Applicable	
6. TA Category:	B		
7. Safeguard Categorization	Not Applicable		
8. Financing			
Modality and Sources		Amount (\$ million)	
ADB		0.00	
None		0.00	
Cofinancing		1.00	
Japan Fund for Poverty Reduction		1.00	
Counterpart		0.00	
None		0.00	
Total		1.00	
9. Effective Development Cooperation			
Use of country procurement systems		No	
Use of country public financial management systems		No	

I. INTRODUCTION

1. The importance of capacity building for Public-Private Partnerships (PPPs) was confirmed during the interministerial workshop on enabling PPPs in Cambodia, held on 6 June 2013, and was agreed to in a memorandum of understanding of an ongoing TA on PPP.¹ The Asian Development Bank (ADB) Cambodia Resident Mission conducted a fact-finding mission in September 2013 for the capacity development technical assistance (TA) for PPPs. During the mission, the Government of Cambodia emphasized that the TA is fundamental to the government's overall PPP activities and is required to develop institutional capacity of the government contracting agencies (GCAs) as they engage in PPP projects. The government and the resident mission discussed and agreed on the objective, scope, main components, implementation arrangements, cost, and financing arrangements for the proposed TA, which is designed to provide capacity development support to the GCAs involved in the preparation, transaction, and management of PPP contracts. The proposed TA is in line with ADB's country partnership strategy, 2011–2013 which was extended to 2014 and ADB's mid-term review of Strategy 2020 to expand private sector support to 50% of annual operations by 2020. The design and monitoring framework is presented in Appendix 1.²

II. ISSUES

2. Cambodia faces substantial challenges in providing new and improved infrastructure for its growing economy. Rapid urbanization and increasing connectivity with neighboring countries are driving demands for new and improved infrastructure and related services. The unmet demand is reducing the country's competitiveness and ability to achieve high levels of economic growth, reduce poverty, and meet Millennium Development Goal targets. Weaknesses in infrastructure, particularly in areas such as electricity³ and transport logistics, are consistently cited by businesses as principal constraints to private investment and productivity growth in Cambodia.⁴ Total investment in infrastructure in Cambodia is estimated to range from \$12 billion to \$16 billion from 2013 to 2022, although the actual figure might be much higher given estimated investment needs in these sectors. Infrastructure investment is state led, and the public sector capital investment rate as a percentage of gross domestic product averaged 7.5% from 2004 to 2013. PPPs can help the government meet a financing gap by stimulating private sector investment and financing for infrastructure. PPPs provide a means to increase efficiency, gain access to new expertise and technology and improve service delivery to users, reducing annual costs of infrastructure for the government, and freeing up fiscal space.

3. The government has been taking steps to improve the investment climate and levels of investment in infrastructure, which are defined in comprehensive sector development plans. These plans are coordinated under the overarching development program defined in the

¹ ADB. 2011. *Technical Assistance to the Kingdom of Cambodia for Support for Public–Private Partnerships in Cambodia*. Manila (TA 8013-CAM, \$225,000, approved on 16 December). The TA aims to assess the current regulatory framework for private sector participation along with the gaps to be addressed to enable a conducive environment for PPP operations in Cambodia.

² The TA first appeared in the business opportunities section of ADB's website on 5 February 2014.

³ According to the Electricity Authority of Cambodia, electricity supply in Cambodia totaled 598 megawatts at the end of 2013 compared with peak demand at 646 megawatts.

⁴ Under the National Strategic Development Plan, 2014–2018, transport sector and energy sector investments using both public and private resources were planned at \$910.4 million (12% of the plan's budget) and \$303.5 million (4% of the plan's budget).

Rectangular Strategy.⁵ Since 2011, with assistance from ADB, the government has been undertaking a set of activities to strengthen the legal, regulatory, and institutional framework for PPPs in Cambodia. Implementation of PPP activities has been constrained by low institutional capacity in areas such as preparing, evaluating, transacting, and managing projects suitable for private investment, and limited borrowing capacity. Creating greater awareness of PPPs and their potential would allow the government to address these issues and help reduce the need for public debt, leverage limited public revenues, and bring in private sector skills and finance.

4. The government defines a PPP as a contractual agreement between a GCA and a private entity whereby (i) the private entity provides in full or in part a public infrastructure and/or service; (ii) the needed infrastructure or services are defined on an output basis, allowing the private entity to define the best manner of provision; (iii) substantial and appropriate risks related to the provision of the infrastructure or services are transferred to the private entity; (iv) income to be derived by the private entity related to the infrastructure or service is directly or indirectly dependent on the performance of the private entity; (v) the contractual agreement and associated risk transfers and performance-based payment requirements extend over the project life cycle, or a substantial time period (i.e., more than 1 year); (vi) the GCA plays a significant role as either the purchaser of the infrastructure or service from the private entity, or as the enabler and regulator; and (vii) direct or indirect competition is utilized in the appointment of the private entity.

5. To date, the government has lacked the institutional capacity to identify and develop bankable PPP projects and ensure they are managed in accordance with contractual terms. As a result, the development of the government's technical and management capacity is a clear prerequisite for an effective PPP program in Cambodia. In discussions by ADB with representatives of the Council for the Development of Cambodia, Ministry of Economy and Finance, and line ministries such as the Ministry of Industry, Mines and Energy and Ministry of Public Works and Transport, it was apparent there is great interest in capacity development assistance in the areas of structuring, transacting, and managing PPPs.⁶ All of these agencies are engaged in the evaluation of bids for PPPs, which are primarily being developed by the private sector on an unsolicited basis due to a lack of resources within GCAs to proactively prepare projects. These agencies—in particular the line ministries—indicated they had identified projects in their sector development plans that might be suitable for development by the government as PPP projects.

III. THE CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE

6. In line with ADB's commitment to advancing PPPs in Cambodia, and as an effort to improve the PPP institutional capacity, the TA will build the capacity of senior and mid-career officials of the government to develop and manage PPP projects through well-designed and targeted capacity-building activities in areas with potential for enhanced PPP initiatives. It also aims at creating awareness on international best practices in developing PPPs among the government's officials and other PPP stakeholders, which will help constitute a critical mass for PPP support.

7. The TA will assist the government to boost the levels of sector investment through building technical and management capacity of relevant institutions to identify, prepare,

⁵ The Rectangular Strategy, Phase III for the fifth legislature (2013–2018), places greater emphasis on human capital development through increasing infrastructure investments, encouraging private sector investment, and strengthening capacity of public institutions, among others.

⁶ Under the new government (2013–2018), the Ministry of Industry, Mines and Energy was separated into two ministries, the Ministry of Mines and Energy, and Ministry of Industry and Handicrafts.

implement, and monitor PPP projects. ADB's country partnership strategy, 2011–2013 calls for PPPs to be “actively sought in all areas of operations” in Cambodia. Under the strategy, ADB undertook a PPP assessment in 2011 to identify the potential for PPPs in Cambodia.

8. ADB is currently implementing Technical Assistance to the Kingdom of Cambodia for Support for Public-Private Partnerships in Cambodia (footnote 1), which assists the government to (i) review existing policies, laws, regulations, and institutional arrangements for PPPs; and (ii) develop a strategic framework for PPPs through a policy paper on enabling PPPs in Cambodia and proposed changes to the law on concessions required to make the PPP process effective. An approved project preparatory TA for the PPP development project, which is to be implemented, will identify viable projects expected to facilitate PPPs and enable greater private sector investment in infrastructure in Cambodia.⁷ This TA on capacity development for PPPs will focus on building staff capacity of selected GCAs in developing and managing PPPs through training sessions and specific hands-on work, including preparation of case studies or outline business cases. The TA will complement the ongoing TA activities and fit into a sequenced, comprehensive PPP roadmap designed to progress the PPP landscape through the four pillars in ADB's PPP Operational Framework.⁸

A. Impact and Outcome

9. The impact of the TA will be trained GCAs able to apply the capacity and PPP guidelines. The outcome will be an improved standard of GCA staff's capacity to develop infrastructure PPP projects under various forms of government support. The staff capacity improvement will support the government's objective of increasing the number and value of commercially attractive and sustainable PPP projects offered by GCAs to the private sector.

B. Methodology and Key Activities

10. **Technical assistance preparation.** The TA consultants will review PPP projects in Cambodia and liaise with PPP-related stakeholders such as GCAs, private sector investors, and legal firms to identify a list of existing PPP projects. The TA will target the priority subsectors such as transport, power, and other infrastructure services, and select two existing projects for case studies. The consultants will apply the following list of criteria to select the two projects: (i) the extent that the PPP project facilitates policy and institutional reform, (ii) whether it reflects the government's planning requirements, (iii) GCA commitment and readiness, (iv) project replication potential, and (v) potential for catalyzing private sector interest and commercial financing. The consultants will then prepare an implementation plan to develop institutional capacity within the selected GCAs and submit the findings in an inception report.

11. Key TA outputs are:

- (i) GCA staff trained in identifying, preparing, evaluating, transacting, and managing viable PPP projects;
- (ii) outline business cases (including a simple financial model) on PPP structures and implementation processes developed; and

⁷ ADB. 2012. *Technical Assistance to the Kingdom of Cambodia for Preparing the Public-Private Partnership Development Project*. Manila (TA 8317-CAM, \$900,000, approved on 19 December). The ensuing PPP loan is programmed for 2017. The TA will develop (i) proposals for strengthening the enabling environment for PPPs, with particular reference to the development of the PPP Unit, Risk Management Unit, Project Development Facility, and Viability Gap Fund; (ii) a method to identify viable PPP projects; and (iii) a framework for preparing, transacting, and managing PPP projects.

⁸ The four pillars are advocacy and capacity development, enabling environment, project development, and project financing.

- (iii) a critical mass for PPP support established.

12. **Output 1: Government contracting agency staff trained in identifying, preparing, evaluating, transacting, and managing viable PPP projects.** The consultants will work with selected GCAs to develop good governance institutional structures for project preparation, implementation, and management. The consultants will (i) help the selected GCAs identify and select relevant staff responsible for PPP activities (including the design, preparation, transaction, and management of the PPP projects); (ii) examine their capacity-building needs; and (iii) provide training in project preparation and contract management. The arrangements will be detailed in an institutional capacity-building report.

13. **Output 2: Outline business cases (including a simple financial model) on public–private partnership structures and implementation processes developed.** The TA consultants will use the two PPP projects selected for case studies (paragraph 10) to work with the GCAs' project preparation team. The consultants will assist the GCA staff to develop best practice PPP structures and implementation processes as outline business cases that address the following three interlinked activities of PPP projects:

- (i) **Technical analysis.** This involves (a) the assessment of project rationale, (b) market analysis, (c) output specification, (d) viability and validity of feasibility and/or prefeasibility reports, (e) estimates of project costs and benefits, (f) site enablement analysis, (g) social and environmental safeguards assessments, (h) legal review of assets and functions, (i) procurement strategy, (j) economic analysis, and (k) stakeholder review to confirm project attractiveness.⁹
- (ii) **Procurement analysis.** This includes (a) the development of a financial model; (b) assessment of procurement and financial options based on criteria of value for money, bankability, and affordability; (c) determination of the adequate revenues structure; (d) government support analysis, including form of support; (e) viability gap fund sizing, if required; and (f) identification of a proposed risk allocation structure. Market sounding should be initiated to confirm the project's financial parameters and evaluate legal and institutional requirements to establish a proposed PPP structure.
- (iii) **Project implementation requirements.** These involve the development of a project preparation plan to address site enablement issues and confirmation of the government's willingness and capacity to provide support to the projects. These also involve preparations of (a) bid documents (request for pre-qualification and request for proposal) and draft contractual terms; (b) project pre-bid consultations; (c) bidder prequalification and bid evaluation criteria; (d) detailed output specification, performance indicators, and monitoring and evaluation frameworks; (e) required due diligence documents; (f) assistance required for the procurement and bid process, bid evaluation, and contract negotiation; (g) terms of reference for transaction advisors; and (h) institutional requirements within GCAs to implement the transaction and manage the PPP contract.

14. **Output 3: A critical mass for public–private partnership support established.** The outline business cases and supporting materials will provide the GCAs with manuals for PPP identification, transaction, and management along with a set of project evaluation tools, a methodology, checklists, and an implementation process that will allow them to develop PPP

⁹ A site enablement analysis will also look into any potential issues related to land acquisition, as this could be a major cause of PPP delays. These issues include the ability of the government to (i) provide land free of any encumbrances and (ii) fund land acquisition in advance of project inception.

capacity within the respective GCAs. The need for guidelines for bidder selection (including how to deal with unsolicited bids) and the need for clarity and transparency in procurement are especially important. The materials will be disseminated to GCA staff and other PPP stakeholders through a series of workshops establishing a critical mass for PPP support and awareness. These documents will be prepared according to international best practice standards that can be adapted to suit the requirements of the government and the stage of development of the PPPs in Cambodia.

15. The design of the TA is based on the assumptions that (i) the government continues its commitment to PPP activities and improving the enabling environment for PPPs, (ii) sustained fiscal resources are available for project support, and (iii) trained GCA staff are retained and remain responsible for their PPP work following capacity development. Critical risks include (i) lack of political will to promote and invite private sector participation through PPPs; (ii) slow economic growth, which affects business confidence and private sector interest in PPP; and (iii) reduced buy-in by GCAs in PPPs during the TA implementation.

C. Cost and Financing

16. The TA is estimated to cost \$1,100,000, of which \$1,000,000 will be financed on a grant basis by the Japan Fund for Poverty Reduction and administered by ADB. The government will provide counterpart support in the form of counterpart staff, office space, furniture, logistical and administrative assistance, and other in-kind contributions. The cost estimates and financing plan are in Appendix 2.

D. Implementation Arrangements

17. The Ministry of Economy and Finance will be the executing agency.

18. The TA will be implemented over 24 months from 1 January 2015 to 31 December 2016. The consultants will be engaged by ADB through a firm in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time). The firm will be led by an international team leader and PPP financial and commercial specialist, and comprise a technical (engineering) specialist, an economist, an environmental and social safeguard specialist, and a legal and procurement specialist. National consultants will be recruited to provide support to the international experts. The firm will be selected by the quality- and cost-based selection method using the simplified technical proposal with a 90:10 technical–financial ratio, as technical factors are critical under the TA. Consultants' qualifications and person-months required are provided in Appendix 3. The procurement and disbursement will be done in accordance with ADB's Procurement Guidelines (2013, as amended from time to time) and ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

IV. THE PRESIDENT'S DECISION

19. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$1,000,000 to the Government of Cambodia to be financed on a grant basis by the Japan Fund for Poverty Reduction for Capacity Development for Public–Private Partnerships, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p>Impact Trained GCAs able to apply the capacity and PPP guidelines</p>	<p>By 2019: At minimum two PPP projects formulated or bid out by trained GCAs</p> <p>At least one new PPP project transacted by trained GCAs</p>	<p>Review reports and statistics from the government agencies, in particular the Ministry of Economy and Finance and selected GCAs</p>	<p>Assumption The government is committed to PPP activities and improving the enabling environment for PPPs</p> <p>Risk Lack of political will to promote and invite private sector participation through PPPs</p>
<p>Outcome Improved standard of GCA staff's capacity to develop infrastructure PPP projects under various forms of government support</p>	<p>By 2016: Core PPP staff capacity raised in three to five GCAs by TA completion (none in 2013)</p> <p>At least 70% of trained staff involved in PPP infrastructure project development by TA completion (none in 2013)</p>	<p>Annual PPP and/or budget reports of the government agencies</p>	<p>Assumption Sustained fiscal resources for project development support</p> <p>Risk Slow economic growth affects business confidence and private sector interest in PPP</p>
<p>Outputs</p> <p>1. GCA staff trained in identifying, preparing, evaluating, transacting, and managing viable PPP projects</p> <p>2. OBCs (including a simple financial model) on PPP structures and implementation processes developed</p> <p>3. A critical mass for PPP support established</p>	<p>By 2016: At least 20 core GCA staff trained in PPP project design and transactions by TA completion (none in 2013)</p> <p>GCA staff assisted in developing two OBCs (for two existing PPP projects selected for case studies) meeting technical, procurement, and implementation requirements of international best practice by TA completion (none in 2013)</p> <p>Manuals for PPP identification, transaction, and management developed, along with the</p>	<p>TA reports from the selected GCAs, and capacity building report from consultants</p> <p>TA review of OBC reports from GCAs and/or consultants</p> <p>PPP manuals</p> <p>TA reports from the selected GCAs, and</p>	<p>Assumption Trained GCA staff are retained and remain responsible for their respective PPP work after training</p> <p>Risks Reduced GCA buy-in during TA implementation</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	<p>necessary tools and supporting materials as well as guidelines that emphasize clarity and transparency in the procurement process, by TA completion (none in 2013)</p> <p>Awareness and knowledge of PPP issues and processes acquired by at least 150 GCA staff and other PPP stakeholders by TA completion (none in 2013)</p>	<p>capacity building report from consultants</p>	

Activities with Milestones	Inputs
<p>1. GCA staff trained in identifying, preparing, evaluating, transacting, and managing viable PPP projects</p> <p>1.1 Develop good governance institutional structures for project preparation and procurement (including clear, fair, and transparent procedures).</p> <p>1.2 Assist selected GCAs in identifying and selecting relevant staff to be responsible for PPP activities, and examine their capacity-building needs.</p> <p>1.3 Prepare an institutional capacity building report.</p> <p>1.4 Design and implement a training program that reflects international best practices for the identified GCA staff on (i) PPP-enabling strategy, policies, laws and regulations; (ii) potential PPP structures and implementation processes; (iii) methodologies for the identification, development, appraisal, and implementation of PPP projects; (iv) procurement requirements; and (v) development of management and monitoring mechanisms and parameters for PPP projects on a continuous basis over the TA implementation period.</p> <p>2. OBCs (including a simple financial model) on PPP structures and implementation processes developed</p>	<p>Japan Fund for Poverty Reduction: \$1,000,000</p> <p>Note: The government will provide counterpart support in the form of counterpart staff, office space, furniture, logistical and administrative assistance, and other in-kind contributions.</p>

Activities with Milestones	Inputs
<p>2.1 Prepare OBCs for two existing PPP projects selected as case studies. The OBCs address three interconnected activities, technical analysis, procurement analysis, and project implementation requirements.</p> <p>2.2 Conduct training workshops to discuss and disseminate information generated on OBCs.</p> <p>3. A critical mass for PPP support established</p> <p>3.1 Consult the executing and implementing agencies and develop a communications framework for disseminating the derived PPP toolkit, to be completed at least 2 months before TA completion.</p> <p>3.2 Disseminate the developed toolkit through (i) two workshops in Phnom Penh to the executing and implementing agencies, the private sector, and civil society; and (ii) two workshops in provinces to relevant stakeholders. Each workshop will target around 50 participants and should be held by TA completion.</p>	

GCA = government contracting agency; OBC = outline business case; PPP = public-private partnership; TA = technical assistance.

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Amount
Japan Fund for Poverty Reduction^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	612.0
ii. National consultants	94.0
b. International and local travel	109.0
c. Reports and communications	5.0
2. Training, seminars, and workshops	60.0
3. Miscellaneous administration and support costs	30.0
4. Contingencies	90.0
Total	1,000.0

Note: The technical assistance (TA) is estimated to cost \$1,100,000, of which contributions from the Japan Fund for Poverty Reduction are presented in the table above. The government will provide counterpart support in the form of counterpart staff, office space, furniture, logistical and administrative assistance, and other in-kind contributions. The value of government in-kind contributions is estimated to account for 10.0% of the total TA cost.

^a Administered by the Asian Development Bank.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The technical assistance (TA) will develop the government's ability to manage the public–private partnership (PPP) process to achieve long-term project sustainability and viability by preparing and executing PPP projects that achieve value for money, and are bankable and affordable by the government. In addition to direct capacity building and preparation of case studies of bankable PPP projects, resources will be used to develop examples of the PPP preparation process, procedures, and templates, and to disseminate these findings to government contracting agencies (GCAs) and other key stakeholders.

2. The TA will require consultancy inputs of a firm to be recruited by the Asian Development Bank (ADB).¹ The TA activities will be led by an international team leader and PPP financial and commercial specialist (9 person-months), with the support of a technical (engineering) specialist (3 person-months), a legal specialist (2 person-months), a procurement specialist (2 person-months), an economist (2 person-months), and an environmental and social safeguard specialist (2 person-months). Five national consultants will be recruited to assist the international experts. The national consultants will comprise a project coordination specialist assisting the team leader (16 person-months), a technical engineering specialist (4 person-months), a legal and procurement specialist (4 person-months), an (infrastructure) economist (3 person-months), and an environmental and social safeguard specialist (3 person-months).

3. The firm will provide capacity-building services to selected GCAs covering (i) financial and commercial structuring, (ii) technical (engineering) analysis, (iii) legal and procurement aspects, (iv) economic and market analysis, and (v) environmental and social safeguards. The firm will be remunerated based on achievement of milestones. The assignment is expected to be completed over 24 months and will be benchmarked according to the milestones in the table. Consultants will be fielded on an intermittent basis.

Table A3: Work Program Table

Milestones	Proposed Lump Sum Payment
1. Project preparation and submission of inception report	10%
2. Institutional capacity building report	15%
3. Preparation of outline business cases (including a simple financial model)	
First outline business case	20%
Second outline business case	20%
5. a Public–private partnership manuals, toolkits, and draft final report	25%
5. b Dissemination of findings and approval of final report	10%

Source: Asian Development Bank.

4. **Deliverables.** The expertise and experience of the specialists within the TA will be utilized at different points in the engagement compatible with the work scope and deliverables from each specialist as specified below.

5. **International public–private partnership financial and commercial structuring specialist and team leader** (9 person-months). The TA team leader shall possess a graduate degree in finance or a relevant discipline, and have at least 10 years of financial or PPP

¹ Individual consultants will be engaged in case firm engagement is not possible due to market conditions.

transaction advisory and relevant capacity building experience. She or he will be responsible for coordinating all inputs and activities of the TA; submitting reports to ADB and participating GCAs; facilitating meetings and stakeholder consultations as required; and liaising with ADB and the GCAs as needed. The consultant is to work closely with the GCAs and will also be responsible for providing capacity building on the rationale for PPPs. Additionally, the consultant will conduct financial analyses, such as review of projected revenues and expenditure (capital, operations, and depreciation), for reasonableness and completeness with regard to project objectives, accuracy of financial models, and appropriateness of risk allocation structures. Specific tasks include the following:

- (i) undertake an analysis of relevant infrastructure subsectors to assess their readiness for PPPs;
- (ii) review existing PPP project proposals and financial and commercial structures across the country to draw lessons from the various structures;
- (iii) help selected prospective GCAs to scope projects, examine their capacity gaps and resource constraints, and assist in the selection of relevant staff who will be responsible for PPP financial and commercial structuring activities and the preparation of guidelines on designing and managing PPPs;
- (iv) provide hands-on training with selected GCA staff responsible for project preparation in the development of simple financial models and potential risk allocation structures;
- (v) review, identify, design, and provide training on bankable financing models for recommended PPP structures, including appropriate off-take arrangements, debt–equity ratios, loan tenures, financing costs, term sheet requirements to ensure project viability, and financial closure;
- (vi) provide training in assessing alternative financing and tariff structures and appraising various forms of government support, and perform project risk analysis with suitable mitigation strategies;
- (vii) provide training on procurement and funding options (including the role of available public funds and their incorporation into the financial analysis) along with commercial borrowing, based on likely terms and conditions, and review the application process;
- (viii) assess and provide training on relevant commercial issues (such as project requirements for concession contracts), tariff structures and payment mechanisms, and institutional development in promoting recommended PPP structures to investors and potential lenders;
- (ix) help prepare outline business cases for at least two PPP projects in priority sectors (such as transport, power, and other infrastructure services) that are bankable and support project structuring;
- (x) develop relevant PPP preparation processes, procedures, output specifications, key performance indicators, financial models, and report templates required to design and implement PPP projects that generate value for money, are bankable, and are affordable to government;
- (xi) work with GCAs and regulatory officials and provide training on measuring project performance after implementation as well as enforcing contract terms; and
- (xii) train GCA staff on developing all required due diligence documents for potential investors and lenders.

6. **International technical (engineering) specialist** (3 person-months). The consultant shall have a graduate degree in engineering or a related field. She or he must have at least 7 years of project and capacity-building experience and familiarity with the country and/or the

region. The consultant will review and/or prepare the technical validation for project design and cost estimates, and support capacity development in prospective GCAs to:

- (i) identify relevant staff in selected GCAs who will be responsible for PPP technical activities, and identify capacity gaps and resource constraints;
- (ii) review, identify, design, and provide training on prefeasibility studies on verification of assumptions, population coverage, losses, current and projected demand for project outputs, the projected construction program, technical viability of the project design criteria and standards, capacity, whole-of-life costs (inclusive of project preparation, regular and periodic maintenance, and decommissioning costs), site requirements, and other conditions;
- (iii) support PPP project development for the outline business cases, providing inputs on technical options analyses, identifying resource requirements (land, raw materials, supporting infrastructure), identifying project revenues and costs (land acquisition and resettlement costs, capital expenditures, operation and maintenance), required contingency, and other information as requested;
- (iv) support project technical analysis by developing relevant processes, procedures, templates, case studies, and model projects to support PPP development;
- (v) provide training on technical issues impacting on proposed PPP project structures such as project costs and preconditions for a private operator to fulfill service obligations;
- (vi) provide forums to disseminate information from comprehensive technical reviews, including details on projected operation and maintenance costs and their economic costs and benefits;
- (vii) confirm the project design on a least-cost and whole-of-life cost basis in financial and economic terms;
- (viii) provide training on such subjects as quantity and rates for major civil works, equipment, construction and supervision consulting, and other input items; and
- (ix) provide any other training and project development support as deemed necessary by ADB.

7. **International legal expert** (2 person-months). The expert shall have a graduate degree in law with at least 7 years of legal and regulatory-related and capacity-building experience. She or he is to work closely with participating GCAs on bid processes, tender guidelines, risk allocation structures, and project documentation. Activities include the following:

- (i) review institutional requirements for implementing PPPs from a legal perspective;
- (ii) assess capacity in prospective GCAs to address legal and regulatory issues (including transparency of process in bidder evaluation and selection) as well as specific situations such as unsolicited bids;
- (iii) help selected GCAs identify staff to be responsible for PPP-related contract design and contract management activities, and examine capacity gaps and resource constraints;
- (iv) explain key risk allocation issues in PPP contracts in various key sectors;
- (v) review, identify, design, and provide training on legal aspects related to PPP infrastructure project development and contract management; and
- (vi) provide any other training and project development support as considered necessary by ADB.

8. **International procurement expert** (2 person-months). The expert shall have a graduate degree in civil or electrical engineering, public finance, or a related field with at least 7 years of procurement-related and capacity-building experience. She or he is to work closely with participating GCAs on design bid processes, tender guidelines, project documentation, and bid evaluation procedures. Activities include the following:

- (i) review institutional requirements for implementing PPPs from a procurement perspective;
- (ii) assess capacity in prospective GCAs to address procurement issues (including transparency of process in bidder evaluation and selection) as well as specific situations such as unsolicited bids;
- (iii) help selected GCAs identify staff to be responsible for PPP-related contract design, procurement, and contract management activities, and examine capacity gaps and resource constraints;
- (iv) review, identify, design, and provide training on (a) bid documents (requests for pre-qualification and for proposal) and contractual agreements; (b) project marketing and pre-bid consultations; (c) bidder prequalification and bid evaluation criteria; (d) monitoring and evaluation frameworks; (e) required due diligence documents for potential financiers; (f) bid process, bid evaluations, and contract negotiations; and (g) contract management; and
- (v) provide any other training and project development support as considered necessary by ADB.

9. **International infrastructure economist** (2 person-months). The consultant shall possess a graduate degree in economics with at least 7 years of analytical experience in PPP infrastructure projects and experience in capacity-building activities. She or he is to work closely with participating GCAs to review and/or prepare the economic analysis of selected PPP projects, and support capacity development. Activities include the following:

- (i) undertake an analysis of relevant infrastructure sectors and subsectors to assess their readiness for PPPs;
- (ii) identify relevant staff in selected GCAs who will be responsible for PPP economic analysis activities, and identify capacity gaps and resource constraints;
- (iii) review, identify, design, and provide training on identifying economic costs and benefits for PPP projects, determining project rationales, defining market structures, preparing demand, and willingness to pay assessments using techniques such as market surveys, focus group discussions, and pilot marketing initiatives;
- (iv) support PPP project development for two outline business cases, providing inputs on project costs, benefits, key performance indicators, and any other information as requested;
- (v) support project economic analysis by developing relevant processes, procedures, templates, case studies, and model projects that can be used to support PPP development;
- (vi) provide training on economic issues impacting on proposed PPP project structures;
- (vii) participate in forums to disseminate information on economic analyses, including details on projected costs and benefits from a project;
- (viii) confirm the project design on a least-cost and whole-of-life cost basis in economic terms; and
- (ix) provide any other training and project development support as deemed necessary by ADB.

10. **International environmental and social safeguards specialist** (2 person-months). The specialist shall possess a graduate degree in environmental science, environmental engineering, or a related field and at least 7 years of relevant experience in environmental and social safeguards analysis, compliance, and capacity-building activities. She or he is to work closely with participating GCAs to support capacity building in project environmental and social safeguards and impact assessment in compliance with ADB's Safeguard Policy Statement

(2009) and government guidelines. Such work will cover the following:

- (i) help selected GCAs identify staff to be responsible for environmental and social safeguard activities of selected projects, and identify capacity gaps and resource constraints;
- (ii) review the environmental safeguard capacity of staff identified in GCAs to manage the environmental safeguards; assess their capacity-building needs; and design and provide training on (a) relevant social analysis (e.g., gender action plans, resettlement plans, indigenous peoples development plans), (b) involuntary resettlement, (c) gender safeguards, and (d) other basic training in compliance with ADB's safeguards policies;
- (iii) help prepare two to three examples of outline business cases for bankable PPP projects in selected priority areas and support project environmental and social safeguard issues to develop relevant processes, procedures, and templates that can be used to support PPP development;
- (iv) based on the environmental safeguard review procedure and the guidelines, templates, and case studies developed, train safeguard staff of GCAs on how to screen and categorize projects; conduct environmental assessments (if required); and conduct environmental due diligence, compliance monitoring, and reporting based on the safeguard requirements of ADB's Safeguard Policy Statement and applicable government environmental requirements;
- (v) develop project environmental management plans (following ADB and government requirements) included in bid documents; provide training (including how to comply with mitigation measures, how to incorporate the environmental management plan in tender and contract documents, and how to supervise the preparation of or review of contractors' environmental management action plans); and conduct compliance monitoring and reporting;
- (vi) develop project poverty and social analysis frameworks for social impacts, impact monitoring, and mitigation measures for design and implementation (such as resettlement implementation) to maximize project social benefits and minimize and/or avoid social risks;
- (vii) review the capacity of GCAs to implement social safeguard impact mitigation measures; and
- (viii) provide any other training and project development support deemed necessary by ADB.

11. **National consultants.** The five national consultants will comprise a (i) project coordination specialist and deputy team leader (16 person-months), (ii) technical (engineering) specialist (4 person-months), (iii) legal and procurement expert (4 person-months), (iv) infrastructure economist (3 person-months), and (v) environmental and social safeguards specialist (3 person-months).