



# Technical Assistance Report

---

Project Number: 50279-001  
Regional—Capacity Development Technical Assistance (R-CDTA)  
November 2016

## Strengthening the Conduct of Economic Analysis of Project and Program Investments in Developing Member Countries

This document is being disclosed to the public in accordance with ADB's Public Communications Policy 2011.

Asian Development Bank

## ABBREVIATIONS

ADB	–	Asian Development Bank
COE	–	center of excellence
DMC	–	developing member country
EREA	–	Economic Analysis and Operational Support Division
STG	–	sector and thematic group
TA	–	technical assistance

## NOTE

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

<b>Vice-President</b>	B. Susantono, Knowledge Management and Sustainable Development
<b>Director General</b>	J. Zhuang, Economic Research and Regional Cooperation Department (ERCD)
<b>Director</b>	E. Ginting, Economic Analysis and Operational Support Division, ERCD
<b>Team leader</b>	K. Y. Nam, Principal Economist, ERCD
<b>Team members</b>	M.R.M. Cham, Senior Economics Officer, ERCD K. Naqvi, Economist, ERCD R. Perez, Senior Operations Assistant, ERCD D. Raitzer, Economist, ERCD J. Samson, Senior Economics Officer, ERCD K. Taniguchi, Senior Economist, ERCD

In preparing any country program or strategy, financing any project, or by making any designation of or reference to a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgments as to the legal or other status of any territory or area.

## CONTENTS

	<b>Page</b>
CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE	
I. INTRODUCTION	1
II. ISSUES	1
III. THE CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE	2
A. Impact and Outcome	2
B. Methodology and Key Activities	2
C. Cost and Financing	3
D. Implementation Arrangements	4
IV. THE PRESIDENT'S DECISION	5
APPENDIXES	
1. Design and Monitoring Framework	6
2. Cost Estimates and Financing Plan	8
3. Outline Terms of Reference for Consultants	9
4. Indicative Outline of Analytical Reports	13

## CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE AT A GLANCE

<b>1. Basic Data</b>		<b>Project Number: 50279-001</b>	
<b>Project Name</b>	Strengthening Conduct of Economic Analysis of Project and Program Investments in Developing Member Countries	<b>Department /Division</b>	ERCDC/EREA
<b>Country</b>	REG	<b>Executing Agency</b>	Asian Development Bank
<b>2. Sector</b>		<b>ADB Financing (\$ million)</b>	
✓ Public sector management	Economic affairs management		1.00
		<b>Total</b>	<b>1.00</b>
<b>3. Strategic Agenda</b>		<b>Climate Change Information</b>	
Inclusive economic growth (IEG)	Pillar 1: Economic opportunities, including jobs, created and expanded	Climate Change impact on the Project	Low
Environmentally sustainable growth (ESG)	Eco-efficiency		
<b>4. Drivers of Change</b>		<b>Gender Equity and Mainstreaming</b>	
Governance and capacity development (GCD)	Public financial governance	Some gender elements (SGE)	✓
Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas		
<b>5. Poverty and SDG Targeting</b>		<b>Location Impact</b>	
Geographic Targeting	No	Regional	High
Household Targeting	No		
SDG Targeting	Yes		
SDG Goals	SDG8		
<b>6. TA Category:</b>	B		
<b>7. Safeguard Categorization</b>	Not Applicable		
<b>8. Financing</b>			
<b>Modality and Sources</b>		<b>Amount (\$ million)</b>	
<b>ADB</b>		<b>1.00</b>	
Capacity development technical assistance: Technical Assistance Special Fund		1.00	
<b>Cofinancing</b>		<b>0.00</b>	
None		0.00	
<b>Counterpart</b>		<b>0.00</b>	
None		0.00	
<b>Total</b>		<b>1.00</b>	
<b>9. Effective Development Cooperation</b>			
Use of country procurement systems			No
Use of country public financial management systems			No

## I. INTRODUCTION

1. The Asian Development Bank (ADB) Charter requires staff to “take the necessary measures to ensure that the proceeds of any loan made, guaranteed or participated in by the Bank are used ... with due attention to considerations of economy and efficiency.” It also states that “only economic considerations shall be relevant to their decisions.”<sup>1</sup> At the same time, ADB financing is shifting to more complex development challenges as developing member countries (DMCs) move toward upper middle-income status. Many of these challenges will require innovative and catalytic investments that span multiple sectors, or that generate nonmarket benefits, which will make quantification for economic analysis more difficult. Meanwhile, project preparation is expected to be faster and leaner, putting pressure on those undertaking economic analysis to deliver timely information to support investment decisions. In this context, it is critical to strengthen the capacity of DMC executing agencies to deliver appropriate and rigorous economic analyses. The proposed regional capacity development technical assistance (TA) aims to overcome this constraint by providing focused capacity building to relevant officials in DMCs and jointly developing economic analyses of selected innovative projects in collaboration with regional departments. The TA will also formulate and/or update economic analysis methodologies for new and more complex projects that DMCs plan to implement. A concept paper prepared for the TA was approved by the vice-president (knowledge management and sustainable development) on 29 September 2016. The design and monitoring framework is in Appendix 1.<sup>2</sup>

## II. ISSUES

2. Recent trends show that ADB has been receiving more demand for financing for innovative and catalytic projects from its DMCs. The Midterm Review of Strategy 2020 reaffirms that knowledge and capacity building are the key pillars in ADB’s strategy of engaging its DMCs.<sup>3</sup> This trend is expected to intensify as more ADB DMCs move toward upper middle-income status, and the nature of ADB project financing will shift toward tackling more complex development challenges faced by its DMCs, including projects associated with urbanization, climate change, regional integration, and value chain development. Anticipating this trend, the President, on 21 April 2016, issued guidance on the inclusion of high-level technology in the design of ADB projects to help meet the DMC challenges.<sup>4</sup>

3. At the same time, a strong effort was made to introduce greater flexibility in ADB’s lending modalities, including the use of results-based lending whereby the assistance is assessed and processed following the DMC’s own system for processing and implementation.<sup>5</sup> Using this modality, the DMC will increasingly conduct most of the design activities of the project and undertake the required due diligence such as safeguards, governance, and financial and economic viability. Development partners will assist in the implementation of a DMC’s sector strategy and investment plan, with financial assistance contingent upon the achievement of predetermined results. This approach reduces transaction costs and introduces greater flexibility,

---

<sup>1</sup> ADB. 1965. *Agreement Establishing the Asian Development Bank*. Manila (Articles 14.11 and 36.2).

<sup>2</sup> The TA first appeared in the business opportunities section of ADB’s website on 10 October 2016.

<sup>3</sup> ADB. 2014. *Midterm Review of Strategy 2020: Meeting the Challenges of a Transforming Asia and Pacific*. Manila.

<sup>4</sup> Memo dated 21 April 2016 issued by the President to the Vice Presidents on Use of High Level Technology in Projects.

<sup>5</sup> Results-based lending is an ADB financing modality that was approved in March 2013 on a pilot basis for an initial 6 years. Results-based lending is a performance-based form of financing, in which disbursements are linked to the achievement of results rather than to up-front expenditures, as is the case with traditional investment lending.

but for it to function effectively, recipient countries must have the capacity to conduct a rigorous assessment of the viability of the proposed projects and other interventions. In addition, preparatory activities for some of the mainstreamed modalities—e.g., sector projects and multitranche financing facilities—often include due diligence only for a sample of investments and subprojects, and due diligence for the remaining investments and subprojects is expected to be undertaken by the executing or implementing agencies during implementation.

4. While ADB's new financing modalities imply greater reliance on DMCs' capacities for project preparation, the capacities for the conduct of due diligence, particularly for economic and financial analysis, vary greatly among the DMCs. An informal survey by ADB during the update of the Guidelines for the Economic Analysis of Projects found that only a handful of DMCs have established processes and capacities for the conduct of economic due diligence.<sup>6</sup> In most DMCs, the methodology applied is limited and needs to be updated and further developed. In particular, recent development issues such as the impacts of high-level technology, climate change, and other externalities, and the need to include these in the project design are rarely considered in the economic analysis of the proposed investments. The survey also found that a large number of DMCs mostly rely on ADB and other development partners' project preparatory processes for the assessment of economic and financial due diligence. DMCs' weak capacities for conducting rigorous economic and financial assessments in their planning limit the potential benefits from the new development assistance modalities, and can offset the gains from lower transaction costs associated with processing and implementing investment projects.

5. Increasing DMCs' demand for innovative and catalytic projects will require continued refinement of the techniques used in the economic analysis of ADB projects. While the main principles of economic analysis remain valid, their application to innovative and multisector projects, and projects with nonmarket benefits will require continued methodological adjustment and refinement to ensure relevance and practicality. At the same time, continued research is needed to update the key parameters now used in conducting project-related economic analysis so as to improve its efficiency and ensure consistency of its application.

### III. THE CAPACITY DEVELOPMENT TECHNICAL ASSISTANCE

#### A. Impact and Outcome

6. The impact will be more efficient resource allocation by DMC governments achieved. The outcome will be the increased use of economic analysis in investment selection and design by DMC officials.

#### B. Methodology and Key Activities

7. The TA will have two main outputs:

- (i) **Output 1: Capacity development.** This output will focus on building the capacity of DMC officials and institutions responsible for the conduct of economic due diligence to support their investment planning. Key activities are as follows: (a) training or capacity building in the general principles of economic analysis; and (b) demonstration of good-practice economic analyses for selected innovative and complex investment projects in collaboration with DMCs, regional departments,

---

<sup>6</sup> ADB. 1997. *Guidelines for the Economic Analysis of Projects*. Manila.

and sector and thematic groups (STGs). Output 1a will provide basic training on economic analysis to relevant DMC officials. Output 1b will deepen their understanding through the application of economic analysis in innovative ADB investments. Where possible, the TA will forge partnerships with universities, think tanks, and centers of excellence (COEs) in the DMCs in imparting capacity-building activities. Such partnerships will expand the current thin skill pool in the field and support the sustainability of the TA output in the medium term.

- (ii) **Output 2: Guidance materials for improved economic analysis.** Activities will cover research on special topics to improve the analytical rigor and quality of economic analysis in various sectors, including (a) a practical and user-friendly guidance note on analytical techniques not yet applied at ADB, such as valuation of greenhouse gas emissions in collaboration with ADB's Sustainable Development and Climate Change Department, new nonmarket valuation techniques, welfare modeling, and other topics relating to economic analysis, as requested by DMC governments through the regional departments or STGs; (b) an economic analysis of other lending modalities, such as policy-based and/or results-based lending; and (c) the development of economic analysis guidance materials for specific sectors, which can be readily used by the DMC officials and may draw on demonstration cases from output 1. The practical guidance notes will supplement the Revised Guidelines on Economic Analysis of Investment Projects, expected to be approved by December 2016.<sup>7</sup> In some cases, they will be developed in conjunction with the preparation of demonstration economic analyses under output 1a. In other cases, they can be developed separately in collaboration with regional departments and STGs. As regards the economic analysis of policy-based and/or results-based lending, the practice currently varies across regional departments. The guidance notes for the economic analysis of policy-based and/or results-based lending will synthesize the current good practice in ADB and supplement it with other good practice in other multilateral development banks such as the World Bank and the Inter-American Development Bank. Selected guidance notes will be prepared in collaboration with regional departments to strengthen DMCs' capacity in formulating and evaluating their key policy reforms. Appendix 4 presents an indicative outline of the tentative topics under output 2.

8. Key risks identified for the project include (i) high turnover of DMC officials in the planning ministries or executing and/or implementing agencies, which may affect ownership and continuation of TA-supported activities after TA completion; and (ii) lack of sufficient funds for DMC governments to implement and continue the conduct of economic analysis after TA completion. Mitigation measures will include capacity-building activities that will target DMC officials in both planning and key executing and implementing agencies, and relevant think tanks and COEs to help build critical mass. The TA will also provide easier access to economic assessment guidelines and guidance notes for DMC officials, including by making them available in selected local languages.

### C. Cost and Financing

9. The TA is estimated to cost \$1,000,000, which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V). Appendix 2 presents the cost estimates and financing plan.

<sup>7</sup> ADB. Forthcoming. *Revised Guidelines on Economic Analysis of Investment Projects*. Manila.

## D. Implementation Arrangements

10. The TA will have a 2-year implementation period starting in December 2016. The counterpart agencies in the respective DMCs will be the planning and sector agencies that are tasked with planning, designing, and assessing individual investment proposals or investment plans that comprise competing or complementing investment proposals. However, counterpart agencies will not be required to provide any material support to the implementation of the TA activities.

11. ADB will be the executing agency, and the Economic Analysis and Operations Support Division (EREA) of the Economic Research and Regional Cooperation Department will be the focal point. EREA will coordinate closely with the DMCs, regional departments, and STGs in delivering capacity-building activities. ADB will obtain a written confirmation of no objection before commencing and financing the proposed activities in the selected DMCs. The selection of the projects to be included in output 1b for the demonstration of good-practice economic analyses of projects will be based on (i) the relevance of particular projects for the application of new economic analysis techniques, (ii) the replicability of the project examples for other future economic analyses, and (iii) balance across the ADB region and sector portfolio. Potential assistance will be assessed on a first-come first-served basis, considering the distributional balance across regional departments. The Economic Research and Regional Cooperation Department will regularly conduct consultation meetings with regional departments and STGs to discuss and agree on the topics to be undertaken for the methodological research. Similarly, EREA will plan with the regional departments the schedule, location, and content of the training workshops based on the needs of their respective DMCs. EREA also plans to coordinate with COEs or selected research institutions in DMCs the implementation of TA components where possible. The draft studies and/or reports will be discussed and peer-reviewed internally and externally (as needed) and workshops will be organized as needed to finalize them. EREA will also coordinate with respective ADB departments and DMC planning and sector agencies on the dissemination of TA outputs.

12. The TA will require the services of international and national experts, including project economists, sector economists, and publication and research assistants. Since the actual required type of expertise and length of inputs will become clear only during the implementation of the TA outputs, it is not possible to quantify them exactly at this time, although an estimate for some of the experts is provided (Appendix 3). Any planned collaboration with COEs and DMC research institutions through knowledge partnerships will be coordinated with the Knowledge Sharing and Services Center of the Sustainable Development and Climate Change Department. Since the TA will require rapid mobilization of consultants where the consultants' experience and qualifications are the primary consideration, engagement of individual consultants will be done in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) and with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).<sup>8</sup> In addition, procurement of equipment will be done in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).<sup>9</sup>

---

<sup>8</sup> To the extent possible, lumpsum payments and/or output-based contracts will be considered for consulting services in line with ADB. 2014. *Midterm Review of Strategy 2020: Action Plan*. Manila (Actions 2.9.2 and 2.10.2).

<sup>9</sup> Procurement of any equipment will be done in accordance with ADB's Procurement Guidelines (2015, as amended from time to time) and with ADB. 2013. *Administering Grant-Financed Technical Assistance Projects*. *Project Administration Instructions*. PAI 5.09. Manila (para. 27).



13. The TA will conduct several national and regional capacity-building and dissemination workshops. Major reports, training materials, and case studies will also be disseminated through the ADB website. Partnerships with universities, research institutions, and COEs will be another key channel of dissemination.

#### **IV. THE PRESIDENT'S DECISION**

14. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$1,000,000 on a grant basis for Strengthening the Conduct of Economic Analysis of Project and Program Investments in Developing Member Countries, and hereby reports this action to the Board.

## DESIGN AND MONITORING FRAMEWORK

<b>Impact the TA is aligned with</b>			
Achievement of more efficient resource allocation by DMC governments			
<b>Results Chain</b>	<b>Performance Indicators with Targets and Baselines</b>	<b>Data Sources and Reporting</b>	<b>Risks</b>
<p><b>Outcome</b> Use of economic analysis in investment selection and design increased</p>	<p>a. Improved design and quality of projects through more rigorous conduct of economic analysis based on evaluation or similar quality-at-entry assessments</p> <p>b. Increase in the number of DMC officials who conduct economic efficiency assessments for investment projects</p>	<p>Reports of assessments or evaluations undertaken by DMCs, ADB, and other development partners on the quality of economic analysis of projects undertaken</p> <p>Assessment reports indicating the increase in the number of people with better skills in economic analysis</p>	<p>High turnover of DMC officials in the planning ministries, and executing and implementing agencies</p> <p>Lack of sufficient funds to implement and continue the conduct of economic analysis after TA completion</p>
<p><b>Outputs</b> 1. DMC officials' capacity for economic analysis developed and/or improved</p> <p>2. Guidance materials for improved economic analysis published and disseminated</p>	<p>At least 5 regional and/or national training workshops for 25 to 30 DMC officials conducted</p> <p>At least 4 publications covering economic analysis methodologies, sector-specific techniques, and/or new lending modalities</p> <p>At least 4 demonstration good-practice economic analyses using innovative methods</p>	<p>Progress reports on TA implementation submitted to ADB management, and updates provided in the eOperations<sup>a</sup></p> <p>Published study reports, sector handbooks, practical guide book, and guidelines</p> <p>Papers on economic analyses</p>	
<p><b>Key Activities with Milestones</b></p> <p><b>1. Output 1: Capacity development in conduct of economic analysis</b></p> <p>1.1 Design and preparation of the training programs, including materials for introductory and sector-specific courses (Q4 2016–Q1 2017, Q4, 2017–Q1 2018)</p> <p>1.2 Conduct of economic analysis training workshops (Q2 2017–Q3 2018)</p> <p>1.3 Conduct of demonstration good-practice economic analyses using innovative methods (Q1 2017–Q3 2018)</p>			

**2. Output 2: Guidance materials for improved economic analysis published and disseminated**

2.1 Identification of at least 4 methodological studies, guidelines, and sector handbooks to be undertaken (Q1 2017, Q2 2017, and Q3 2017)

2.2 Conduct of workshop for the draft publications (as needed)

2.3 Publication of the final reports (Q4 2017, Q1 2018, and Q2 2018)

2.4 Dissemination (regional or in-country) of published reports (Q1 2018, Q2 2018, and Q3 2018)

**TA Management Activities**

EREA establishes a working group with regional departments and STGs to discuss and identify potential topics to be included in output 2 (December 2016–January 2017)

Consultants are mobilized to design the training program and initiate the conduct of the economic analysis training (December 2016–March 2017)

Consultants are mobilized for the studies, guidebook, or manual identified in collaboration with regional departments and STGs for output 1 (December 2016–September 2017)

Collection of survey data, procurement of information technology equipment, survey data, and reports or publications, are to be undertaken as needed (schedule to be determined during TA implementation)<sup>b</sup>

**Inputs**

ADB: \$1,000,000

Note: If needed, the participating DMC governments, may provide counterpart support in the form of counterpart staff, office supplies, secretarial assistance, domestic transportation, and other in-kind contributions.

**Assumptions for Partner Financing**

Not applicable.

ADB = Asian Development Bank, DMC = developing member country, EREA = Economic Analysis and Operational Support Division, Q = quarter, STG = sector and thematic group, TA = technical assistance.

<sup>a</sup> The eOperations (eOps) application has been developed to provide pipeline and portfolio management support for ADB operations.

<sup>b</sup> Procurement of information technology equipment shall be conducted in accordance with ADB's Procurement Guidelines (2015, as amended from time to time).

Source: Asian Development Bank.

**COST ESTIMATES AND FINANCING PLAN**  
(\$'000)

Item	Amount
<b>Asian Development Bank<sup>a</sup></b>	
1. Consultants <sup>b</sup>	
a. Remuneration and per diem	350.0
b. International and local travel	50.0
2. Equipment <sup>c</sup>	10.0
3. Workshops, training, and seminars <sup>d</sup>	450.0
4. Surveys <sup>e</sup>	60.0
5. Miscellaneous administration and support costs <sup>f</sup>	30.0
6. Contingencies	50.0
<b>Total</b>	<b>1,000.0</b>

<sup>a</sup> Financed by the Technical Assistance Special Fund (TASF-V) of the Asian Development Bank (ADB).

<sup>b</sup> Includes remuneration for international and national consultants and research assistants.

<sup>c</sup> Includes information technology equipment and software. Disposal and turnover of procured information technology equipment and software will be done following ADB guidelines and procedures, e.g., ADB's Handbook on Project Implementation.

<sup>d</sup> Includes travel-related costs (airfare, per diem, visa, and other miscellaneous travel cost) of developing member countries' participants in the training workshops, honoraria for resource persons in workshops and conferences, and travel expenses of ADB's Economic Research and Regional Cooperation Department and regional department staff serving as resource persons in the training and dissemination activities. This cost item also includes costs of venue, meals, and snacks served during the training, workshop, and conference, and other related costs such as purchase of materials, rental of equipment, and photocopying of presentations. Other relevant costs will include representation expenses in accordance with ADB (Budget, Personnel, and Management Systems Department; and Strategy and Policy Department). 2013. Use of Bank Resources: Regional Technical Assistance and Technical Assistance vs. Internal Administrative Expenses Budget. Memorandum. 26 June (internal).

<sup>e</sup> Includes conduct of survey and purchase of survey or study data or data products, and subscription to data and information services.

<sup>f</sup> Publications-related costs, mailing and shipping of documents, and translation costs.

Source: Asian Development Bank estimates.

## OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

### A. Development Economists with Sector Specialization (2–3 international, 6 person-months total)

1. The consultants will prepare methodological studies, sector-specific handbooks and case studies, and other publications to supplement the Revised Guidelines on Economic Analysis of Projects.<sup>1</sup> Specifically, the consultants, in coordination with Asian Development Bank (ADB) staff, will undertake methodological research and/or studies to address the current and/or emerging issues encountered by developing member countries (DMCs) and conveyed through regional departments and sector and thematic groups in the conduct of project economic analysis in the various sectors. The consultants should also be knowledgeable in conducting economic analyses and how sector-specific issues and microeconomic theories can be applied to project-related economic analysis. The consultants should have a strong background in microeconomics and development economics, be familiar with the practical application of economic analysis, and have good knowledge of the economies of ADB's DMCs. Under the direct supervision of Economic Analysis and Operational Support (EREA) staff, the consultants will

- (i) prepare methodological studies, handbooks, and other reference materials on economic analysis as determined by the EREA director;
- (ii) participate in workshops and/or conferences organized as may be required;
- (iii) work with the manuscript editor to ensure consistency and coherence of the output;
- (iv) deliver the draft, revised, and final report; and
- (v) perform all other functions and responsibilities as may be assigned by the EREA director.

### B. Project Economists (2–3 international, 6 person-months total)

2. The consultants should have a background in development economics and microeconomics. They should have expertise in the economic analysis of projects and have conducted training in economic analysis in the past. The consultants, in close collaboration with EREA staff, will

- (i) conduct a planning session with EREA and concerned ADB staff prior to the training workshops;
- (ii) design a training program (both for introductory and intermediate levels) for the economic analysis of projects based on ADB's updated guidelines for the economic analysis of projects;
- (iii) prepare the training materials on the basis of ADB projects;
- (iv) coordinate with and supervise the national consultants for the training workshops;
- (v) deliver the training workshops in coordination with EREA staff, regional department staff, and resource persons; and
- (vi) prepare a report for ADB to help assess the conduct of the workshop based on observations as well as on the evaluation or feedback provided by the participants.

---

<sup>1</sup> ADB. Forthcoming. *Revised Guidelines on Economic Analysis of Investment Projects*. Manila.

**C. Climate Change Specialist** (1 international, 2 person-months)

3. The consultant should have a background in greenhouse gas accounting and valuation. The consultant should be familiar with the economic analysis of projects, particularly in the energy and transport sectors. In close collaboration with EREA and Sustainable Development and Climate Change staff, the consultant will

- (i) review existing ADB guidance on accounting and reporting of greenhouse gas emission effects of projects;
- (ii) propose an updated set of procedures for estimating the effect of ADB projects on greenhouse gas emissions, with particular attention to the energy and transport sectors; and consult relevant ADB and DMC stakeholders on proposed procedures;
- (iii) prepare and finalize guidance materials on greenhouse gas valuation in ADB projects;
- (iv) provide training on greenhouse gas accounting and valuation techniques; and
- (v) demonstrate the application of greenhouse gas accounting and valuation in at least one project economic analysis.

**D. Economics Editors** (1–2 international, 3 person-months total)

4. Under the direct supervision of the EREA director and in consultation with other ADB staff in the Economic Research and Regional Cooperation Department involved in preparing and reviewing the assigned report, the economics editor(s) will edit the output for consistency and economic content. In particular, the economic editor(s) will

- (i) rewrite, reorganize, or shorten the text to improve its logical structure;
- (ii) suggest different ways to present material, e.g., suggest deleting or adding tables, figures, or text boxes to make the author's case more forcefully; and
- (iii) simplify technical language, eliminate jargon, and introduce definitions so that the chapter can be understood by an educated nonspecialist.

5. The economics editors will also perform general editing, including

- (i) simplifying long, complicated sentences;
- (ii) eliminating excess words and redundancy;
- (iii) ensuring consistency of the report with the updated economic analysis guidelines;
- (iv) reviewing the validity, necessity, and accuracy of information, tables, and charts;
- (v) conferring with EREA and regional department staff on gaps in the manuscript and the needed revisions;
- (vi) delivering the final edited draft; and
- (vii) performing all other functions and responsibilities as may be assigned by the EREA director.

**E. Manuscript Editor** (1 international, 4 person-months)

6. Under the direct supervision of the EREA director, and in coordination with the relevant EREA staff, the manuscript editor will

- (i) check the manuscript for consistency and accuracy, including checking for factual errors (e.g., ensuring that the correct names of institutions and other entities are used and checking major statements of fact on leading websites, where practical), and highlighting data inconsistencies;
- (ii) copyedit all parts of the report in conformity with ADB editorial style and usage;

- (iii) smooth out the entire structure of the publications to make them readable with a consistent logical flow;
- (iv) ensure, to the degree possible, consistency of language style in all parts of the publication;
- (v) edit tables and figures;
- (vi) ensure that subheads are consistent and logical;
- (vii) check references to tables, figures, appendixes, bibliographies, and parts of the text;
- (viii) edit notes and footnotes to make sure that the text references are correct;
- (ix) supervise the encoding of corrections as well as the incorporation of tables, charts, and boxes;
- (x) ensure accuracy of table of contents, definition of terms, list of abbreviations, and references;
- (xi) edit all other dissemination materials such as press releases and speeches as needed;
- (xii) liaise with the typesetter designated by EREA to ensure that all editorial marks and comments, as well as tables, charts, and boxes are incorporated in the typeset manuscript, and that the manuscript is ready for printing;
- (xiii) deliver the edited manuscript; and
- (xiv) perform all other functions as may be assigned by EREA director.

**F. Resource Persons (as needed)**

7. Resource persons will be engaged to conduct training on project economic analysis and act as discussants during the presentation of studies and/or reports prepared in conferences and workshops.

**G. Desktop Publishing Specialist and/or Graphic Designer (1 national, 4 person-months)**

8. The consultant must be skilled in working with Adobe InDesign, Adobe Illustrator, Adobe Photoshop, Microsoft Word, and Microsoft Excel. The consultant will typeset and proofread the text, tables, charts, and all graphic elements of the publication from the preliminary draft to the final copy, and produce the high-resolution PDF file before forwarding to the external printer (including refining its web version). In particular, the consultant will

- (i) assist in designing of the report cover,
- (ii) lay out the manuscript,
- (iii) reformat tables and charts,
- (iv) encode corrections in the main text based on corrections received from the editor and EREA staff,
- (v) prepare final layout of manuscript,
- (vi) encode final text and graphical corrections,
- (vii) deliver the web-ready and print-quality-checked consolidated PDF for publication, and
- (viii) perform other related tasks as may be assigned by the EREA director.

**H. Development Economists with Sector Specialization (2–3 national, 6 person-months total)**

9. The consultants should have extensive working experience in general economics. Under the direct supervision of EREA staff, the consultants will assist the research undertaken by

EREA staff and the international consultant relating to economic analysis methodology, sector issues in project economic analysis, and other relevant factors. In particular, the consultants will

- (i) undertake research issues concerning the methodology and/or case study being undertaken, including data gathering;
- (ii) support the international consultant in preparing sections of the report;
- (iii) contribute to the finalization of the report; and
- (iv) undertake ad hoc research and other tasks as may be assigned by the EREA director.

#### **I. Project Economists** (1–2 national, 6 person-months total)

10. National consultants will be recruited to assist the international consultants, EREA staff, and resource persons in the preparation and conduct of the training as well as with administrative and logistics matters pertaining to the training workshops. In particular, the consultant(s) should have a background in project economic analysis, and will

- (i) support the international consultant in the preparation of the training materials, including the conduct of research for additional lecture materials, selection of appropriate case studies, and preparation of hands-on training exercises and materials;
- (ii) support the international consultant in the hands-on training exercise;
- (iii) support EREA, regional departments, and resident mission staff in the logistics of the workshop, including venue arrangements, international and local transportation and hotel accommodation of participants, and other administrative assistance for the training workshop; and
- (iv) prepare and submit a brief report on the conduct of the workshop, including the administrative aspects for incorporation in the report of the international consultant and to assist EREA staff in the liquidation of the workshop expenses.

#### **J. Research Assistants** (national, as needed)

11. Under the direct supervision of EREA staff, the consultants will help gather data in support of the methodological studies to be undertaken and related activities. The consultant will also provide support to the analytical requirements for the conduct of the economic analysis training workshops. The assignment will be at ADB headquarters in Manila, Philippines. In particular, the consultants will

- (i) support the preparation of research studies and analytical-related work under the technical assistance,
- (ii) assist in the preparation of the manuscript publication,
- (iii) undertake quantitative analysis as required, and
- (iv) perform other tasks as may be assigned by the designated EREA staff.



## **INDICATIVE OUTLINE OF ANALYTICAL REPORTS**

### **Output 2: Methodological Research on Economic Analysis**

#### **A. Greenhouse Gas Accounting for Project Economic Analysis**

- I. Introduction
- II. Why Account
- III. When to Account
- IV. Principles of Good Practice
  - a. Identifying With-Project and Without-Project Scenarios
  - b. Project Alternatives
  - c. Analytical Time Frames
  - d. Scope of Coverage
- V. Energy Sector Quantification
- VI. Transport Sector Quantification

#### **B. Guidelines for the Economic Analysis of Policy-Based Lending**

- I. Introduction
- II. Key Areas and Dimensions of Economic Analysis for Policy-Based Lending
- III. Assessing the Effects of Policy Change
- IV. Assessing the Poverty Impact of Policy Change
- V. Assessing the Benefits of Policy Change
- VI. Decision Rules

#### **C. Economic Analysis Practical Guide Book**

- I. Introduction
- II. Short Overview on Economic Analysis of Projects
- III. Good Practices for Conducting Demand Analysis in Social Sector Projects
- IV. Economic Analysis of Social Sector Projects (Case Study)
- V. Economic Analysis of Environmental Benefits (Case Study)
- VI. Economic Analysis of Health Projects (Case Study)
- VII. Economic Analysis of Integrated Multisector Projects (Case Study)

#### **D. Nonmarket Valuation Techniques (for application to various sectors)**

- I. Introduction
- II. Background on Willingness-to-Payok I and Literature Review
- III. Methodological Overview
- IV. Technique 1
- V. Technique 2
- VI. Technique 3
- VII. Technique 4
- VIII. Discussion