



Technical Assistance Report

Project Number: 44353
Research and Development Technical Assistance (RDTA)
December 2010

Implementing Impact Evaluation at ADB

ABBREVIATIONS

ADB	–	Asian Development Bank
DMC	–	developing member country
ERD	–	Economics and Research Department
TA	–	technical assistance

TECHNICAL ASSISTANCE CLASSIFICATION

Type	–	Research and development technical assistance (RDTA)
Targeting classification	–	General intervention
Sector (subsector)	–	Public sector management (economic and public affairs management)
Themes (subthemes)	–	Economic growth (promoting economic efficiency and enabling business environment, widening access to markets and economic opportunities); social development (human development)
Location impact	–	Rural (medium), urban (medium)
Partnership	–	Collaboration with reputable international research institutions as well as local research institutions and statistics offices will be sought to ensure the quality of impact evaluation studies.

NOTE

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

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I. INTRODUCTION

1. Impact evaluation¹ at the Asian Development Bank (ADB) has so far occurred through the individual efforts of departments, including impact assessments by regional departments and post-implementation evaluations by the Independent Evaluation Department. Despite these efforts, relatively few rigorous impact evaluations have been carried out on ADB projects.² The proposed technical assistance (TA), in line with the managing for development results agenda, will help mainstream impact evaluation at ADB. The design and monitoring framework is in Appendix 1.³

II. ISSUES

2. Bilateral and multilateral development agencies spend billions of dollars each year supporting development programs, and developing countries spend many times more on programs from their own resources.⁴ There is a substantial amount of empirical work on the effects of economic growth and human capital development on poverty reduction, for instance, but little evidence on the development effectiveness of individual projects and programs. In particular, questions often remain on whether a given intervention has produced its intended benefits, and how efficiently that intervention has contributed to the intended outcomes and impacts. Unless the evidence of project and program impact is available, it is not possible to advise policymakers and development partners adequately on how further assistance can be designed and implemented more effectively. ADB lags other development institutions in introducing programs to institutionalize impact evaluation analyses.

3. Since its establishment, ADB has supported its developing member countries (DMCs) in designing, financing, and implementing project and policy interventions aimed at fostering economic development and reducing poverty in the region. ADB's routine economic sector work, cost-benefit analysis, and project performance monitoring, as well as project completion and self-evaluation exercises provide the basis for determining project outcomes and impacts before (ex ante) and after the project (ex post). The ex-ante analysis used at ADB for identifying causal links between development interventions, outcome, and impact is relatively comprehensive. Monitoring of implementation progress and processes, especially inputs and outputs, is also done through a project performance reporting system. However, once projects are completed, the ex-post assessment of the causal links between outputs, outcomes, and impact is often limited by the absence of carefully constructed counterfactuals, which are needed to assess what would have happened to beneficiaries without the interventions. Often, evaluations at project completion are conducted by monitoring partial indicators, and the focus on available, rather than needed, data may lead to selection bias. The lack of good counterfactuals and baselines also leads to reliance on qualitative assessments and identification of ADB contribution rather than attribution, limiting the accountability for development outcomes.

¹ An impact evaluation assesses the changes in the well-being of individuals that can be attributed to a particular project, program or policy. The central impact evaluation question is what would have happened to those receiving the intervention if they had not received it.

² A common shortcoming of the impact evaluations was that they were not integrated into the project cycle and hence lacked sound baseline or benchmark scenarios. Other common shortcomings included weak analytical rigor on account of insufficient sample size and/or choice of impact assessment techniques and methodologies.

³ The TA first appeared in the business opportunities section of ADB's website on 2 September 2010.

⁴ The Center for Global Development, one of the world's leading policy research institutions, argues that despite spending billions of dollars on development-related interventions over decades, there is little knowledge or evidence about the impact of past development investments. See, for example, Birdsall, Levine, and Savedoff (2006) "When will we ever learn? Improving lives through impact evaluation", Center for Global Development <http://www.cgdev.org/section/initiatives/_active/evalgap>, and Banerjee and He (2007) "Making Aid Work", Boston Review/MIT Press.

4. The Independent Evaluation Department evaluates projects after completion, but its ability to carry out impact evaluations is limited by the lack of reliable counterfactuals and baseline surveys. It is recognized that counterfactual identification and baseline surveys are best started early in the project cycle, as part of the project monitoring and evaluation system, as they can be used to carry out impact evaluations at mid-term and project completion. Hence, impact evaluations should ideally be done by the regional departments responsible for operations.

5. ADB recognizes the need to measure outcomes and impact more systematically as a way of strengthening the management of effective development. This issue was also underscored by member countries in general capital increase (GCI V) and Asian Development Fund (ADF X) discussions. In response, ADB has initiated actions toward upscaling and mainstreaming impact evaluation.⁵ Better measurement of the outcome and impact of ADB interventions will help the institution and DMC policymakers to assess the consequences of the development initiatives and help allocate limited resources more efficiently, guide the design of more effective interventions, and enable evidence-based policy dialogue.

6. Integrating impact evaluation into ADB operations requires additional resources. These are needed to initiate DMC awareness raising and capacity building, and to provide “seed” funds to launch highly selective impact evaluations with the aim to promote and expand impact evaluation activities. All departments are expected to have a direct or indirect role in such an initiative, but the main implementing role is recognized to lie with the regional departments, with technical support from the Economics and Research Department (ERD). Regional technical assistance was selected as the most suitable modality. Designing and implementing impact evaluation studies is a complex undertaking and not necessary or even feasible for every project. The TA will design and implement (or initiate implementation of) impact evaluations of strategically selected interventions so as to build the knowledge base required to sharpen ADB's development effectiveness. The TA will be an important step toward implementing the initial ADB Impact Evaluation Work Program (2009–2010).⁶

III. THE TECHNICAL ASSISTANCE

7. Conducting impact evaluations for strategically selected interventions will improve the relevance and effectiveness of country and regional partnership strategies. Stronger impact evaluations will lead to a more strategic mix of effective interventions. The TA will also help create regional knowledge on what kind of interventions work, how and why.

A. Impact and Outcome

8. The impact of the TA will be for impact evaluation to be initiated and better integrated in ADB-supported operations and DMCs. The outcome of the TA will be for impact evaluation to be piloted in each regional department and related DMCs with an effective centralized technical support system.

⁵ In May 2009, a heads of department meeting discussed the need to revive the impact evaluation initiative and established a steering committee to do so. In September 2009, the steering committee set up a cross-department working group and endorsed a four-pronged program for upgrading impact evaluation at ADB: (i) advocacy and capacity building of ADB staff and DMC officials, (ii) support of impact evaluation initiatives in regional departments, (iii) conduct of impact evaluations, and (iv) knowledge sharing and learning.

⁶ The Impact Evaluation Work Program (2009–2010) agreed by the heads of department on 30 September 2009 will be updated to reflect the revised timeframe and the impact evaluation committee's arrangements incorporated in this TA paper for Management approval.

B. Methodology and Key Activities

9. The outputs of the TA will include (i) at least five impact evaluation studies (one to two per regional department) with published case study illustrations;⁷ (ii) awareness building and capacity development for DMC officials and ADB staff, and awareness building for Management; and (iii) technical support to regional departments in selecting and implementing impact evaluation interventions. The TA will provide financial and technical support for these interventions.

10. The impact of a project is the difference between a specific outcome for the units receiving the project intervention (e.g., individuals, households, and/or enterprises) and the outcome that would have resulted had the units never received the project intervention. Assessing the impact of a project requires comparing the units that receive the investments under the project with the same units in a counterfactual scenario in which they do not receive investments under the project.

11. The central challenge of conducting impact evaluation studies is that a unit cannot both receive and not receive the investments at the same time. Historically, this has been solved by monitoring the same unit before and after the project, and measuring the project's impact by contrasting outcomes for the same unit before and after, and with and without the project. The problem with this approach is that as time elapses, other factors affecting the impact indicators may appear. If a project has already been implemented, the measurement of outcomes could reflect not only the impact of the project (which is the main interest of project evaluators), but also the impact of external factors that came to bear during implementation. As a consequence, the difference between “before” and “after” might constitute a biased and inaccurate measure of the project's true impact.

12. Therefore, impact evaluation depends on the construction of a reliable control (counterfactual) group to be compared with the treated group so as to ascertain a project's effectiveness. The control group should be composed of units that are not receiving investments under the supported project but that resemble the treated units in every possible respect. If the control group is different from the treated group in some important and perhaps hidden way, the evaluation of the project may be biased. The source of this bias, called the selection bias, would be preexisting differences between treatment and control groups that influence how different units will react to, and benefit from a given project. Modern impact evaluation techniques deal with the task of generating reliable control groups, thus allowing the isolation of the treatment effect from the selection bias. Selecting the right methods by accessing external and internal technical expertise is expected to overcome the inherent methodological challenges of impact evaluation.

13. As a best-practice impact evaluation study ideally entails carrying out a baseline survey as well as an “endline” survey—which will be done after the project has been completed—the full set of activities in a given evaluation may go beyond the timeframe of a single TA. To minimize this risk, impact evaluation is best incorporated into the project cycle, with strong support from DMC governments in the early stages of the project cycle.⁸ An alternative

⁷ Advisory support and training workshops under the TA will be supplemented by in-house training courses on impact evaluation for ADB staff.

⁸ The Government of Nepal has conveyed its concurrence with the impact, outcome, outputs, implementation arrangements, cost, financing arrangements, and terms of reference. Other DMCs to be covered by the TA will be

approach is to base the impact evaluation of an ongoing or recently completed project on non-randomized techniques. Because the TA is the start of a process to integrate impact evaluation in ADB-supported operations, yet is limited to a 2-year implementation period, regional departments will prioritize impact evaluations on projects that are known to have credible baselines, or carry out evaluations that use proxy comparators and non-randomized methods, but support for the early stages of impact evaluations will also be considered where provisions have been made in loan projects for systematic monitoring and evaluation, and endline surveys.

14. Thus, the selection of impact evaluation subprojects will include the following criteria: (i) relevance of questions to be addressed by the proposed evaluation, (ii) effectiveness of the proposed evaluation design to learn policy lessons, (iii) adequacy of chosen methodology and alternatives, (iv) cost effectiveness of the proposed study design, (v) required technical expertise (in-house, external or local institutions), (vi) evaluation time needed, and (vii) buy-in of DMC agencies. Selection will be based on the information provided in impact evaluation proposals. Impact evaluations will be restricted to ADB project interventions, unless the impact evaluation committee makes an exception with sound justification.

C. Cost and Financing

15. The cost TA is estimated to cost \$1.0 million and will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other), of which about \$175,000 is budgeted for each regional department and \$125,000 for ERD, including contingencies. Actual allocations may vary depending on the availability of useful secondary data, the design of the evaluation (e.g., single or multiple treatment groups), nature of interventions, required sample size to get significant statistical power, and required external expertise. The impact evaluation committee will decide subproject budget allocations when reviewing impact evaluation design for quality assurance.

16. Subprojects, further in-house and DMC training, and awareness-building are expected to cost \$0.875 million. The remaining \$0.125 million will finance access to external expertise to support regional department and DMC evaluation teams, development and maintenance of an impact evaluation intranet website, and dissemination and publication activities.

D. Implementation Arrangements

17. To implement impact evaluation as part of the project cycle requires that the demand and responsibility for it will be with ADB's regional departments and their DMCs. Thus, ADB will be the executing agency for the TA, and the regional departments will propose, prepare, and implement impact evaluations under the TA on department-supported loan and TA projects in their DMCs, and in coordination with DMC counterpart agencies. ERD will provide overall coordination and technical support. An impact evaluation committee comprising ERD, the Regional and Sustainable Development Department, the Central Operations Services Office, and the regional departments, and chaired by a regional department, will have oversight responsibilities. The Independent Evaluation Department will be invited as an observer.

18. To ensure the relevance and feasibility of each impact evaluation subproject, the committee will review and approve project proposals and budgets to be considered for impact evaluation from regional technical assistance funds. ERD and the committee will advise on project design with support from external experts as required. Upon clearance by the committee,

selected during implementation, and concurrences of relevant governments will be obtained before commencing work in the particular DMC.

the regional departments' evaluation teams will seek endorsement from the DMC governments on a non-objection basis, or a written confirmation to support the proposed design of the impact evaluation subproject. ERD will provide overall coordination of the TA budget and the committee will approve TA budget allocations to the regional departments. These indicative amounts will be flexible and transferrable between departments with committee approval.

19. Once an individual impact evaluation subproject is submitted and approved by the committee, the TA allocations will be registered with the Controller's Department and ERD. The regional department will administer the subproject and related contracts. The department will be responsible for consultant selection and other budgeted items for the subproject. Although the exact requirements of the type of expertise and the length of their inputs will only be known during the implementation of the individual studies, it is envisaged that the TA will require about 18 person-months of international and 25 person-months of national consultant services. Given this limitation and the intermittent nature of assignments and anticipated variety of expertise required, the TA will primarily fulfill its consulting requirements by recruiting experts on an individual basis. If the studies require involvement of a research institution, the recruitment will be based on the Consultants Qualification Selection (CQS). On an exceptional basis, and where the subproject selections result in a country context where only one research institution can provide the required expertise, the recruitment will be conducted on a single-source selection (SSS) basis. All consultants, individual and research institutions, will be engaged in accordance with ADB's Guidelines on the Use of Consultants (2010, as amended from time to time). Outline terms of reference for the consultants are in Appendix 3.

20. Procurement of equipment (computer hardware and software) by ADB will be in accordance with its Procurement Guidelines (2010, as amended from time to time) and in coordination with ADB's Office of Information Systems and Technology, and the Office of Administrative Services. At TA completion, any equipment procured will be disposed off in accordance with project administration instructions.⁹

21. Disbursements under the TA will follow ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). Payments will be endorsed by the regional departments to ERD for overall budget management and submission to the controllers. ERD will administer TA funds for centralized expert advisory support. The departments will report the progress of the evaluations to ERD and the committee. Based on department reporting, ERD will provide overall reporting on TA budget utilization to the committee and controllers.

22. Regional departments will be responsible for the final subproject outputs and reports, and for quality. Results will be published as part of the project completion reports or as stand-alone working papers regardless of the nature of outcomes. The collection of data will be supervised by the evaluation study team members and staff assigned by the committee to ensure their quality. The data produced by impact evaluations will be stored and made accessible for further internal and external use.

⁹ ADB. 2009. Administering Grant-Financed Technical Assistance Projects. *Project Administration Instructions*. No. 5.11. Manila.

IV. THE PRESIDENT'S DECISION

23. 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 Implementing Impact Evaluation at ADB, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
Impact Impact evaluation firmly established in ADB operations	Number of project designs incorporating impact evaluation	Project performance reports	Impact evaluations will continue to be financed through TA and lending operations.
Outcome Impact evaluation piloted in each regional department with an effective centralized technical support system	Progress reports on impact evaluation	Regional department and ERD records	
Outputs 1. ADB staff and DMC counterparts understand impact evaluation concepts and practices	30 ADB staff trained DMC counterpart staff trained ADB staff and DMC counterparts manage pilot impact evaluation projects	Records from the Human Resources Division Regional department project files	ADB staff and government agencies understand and accept implications of impact evaluation studies for project design and implementation. Selected impact evaluation studies will either be completed within the TA implementation period or the funds will be made available through other sources, including loan or grant proceeds.
2. Impact evaluation methodology guidelines selected, advice provided to ADB staff and DMC counterparts on project design and implementation, and at least five new impact evaluation projects implemented	Impact evaluation method guides developed Technical advice on impact evaluation design provided and incorporated Impact evaluation implementation progress reports	Regional department project files ERD and regional department project files	
3. Lessons from pilot activities presented to Management and disseminated within ADB and DMCs	Impact evaluation reports and lessons made available to ADB staff and DMCs	Minutes of meetings ADB intranet and internet Published reports	

Activities with Milestones	Inputs
<ol style="list-style-type: none"> 1. Impact evaluation awareness building <ol style="list-style-type: none"> 1.1. Train mission leaders in impact evaluation practices (from first quarter 2011) 1.2. Raise awareness of Management and others on impact evaluation principles and concepts (December 2010) 2. Impact evaluation implementation <ol style="list-style-type: none"> 2.1 Impact evaluation committee advises on technical matters, including project selection and methodology (December 2010) 2.2 Select and approve impact evaluation methods for each selected project (December 2010) 2.3 Engage consultants as required (first quarter 2011) 2.4 Report implementation progress to committee (2011–2012) 3. Lesson dissemination <ol style="list-style-type: none"> 3.1 Committee meets regularly with communities of practice (from first quarter 2011) 3.2 Maintain impact evaluation intranet website (from first quarter 2011) 3.3 Disseminate lessons and methods report (fourth quarter 2012) 	<p>ADB: \$1.0 million</p>

ADB = Asian Development Bank, DMC = developing member country, ERD = Economics and Research Department.

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Total Cost
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants	360.00
ii. National consultants ^b	182.20
b. International and local travel	80.00
2. Equipment	25.00
3. Data, surveys, and in-depth studies	200.00
4. Workshops, training, seminars and conferences ^c	30.00
5. Miscellaneous administration and support costs ^d	22.80
6. Contingencies	100.00
Total	1,000.00

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

^b Includes research assistants.

^c Includes per diem and travel costs for ADB staff engaged as resource persons.

^d Includes publication costs.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. **Impact evaluation advisor** (international, 3 person-months, intermittent). The impact evaluation advisor should have more than 15 years of experience and a well-established reputation in impact evaluation research and practice. The advisor will mainly provide technical guidance and feedback on the evaluation studies under this TA. Specifically, the advisor will
 - (i) review and provide detailed comments and suggestions on the inception reports prepared by the impact evaluation specialists;
 - (ii) review and provide detailed comments and suggestions on the draft final impact evaluation studies;
 - (iii) provide guidance on questions raised by the evaluation team regarding the evaluation studies;
 - (iv) participate in the dissemination activities as requested; and
 - (v) provide guidance on the contents of the study website.

2. **International impact evaluation specialists** (international, 10 person-months, intermittent). The international impact evaluation specialists should have sufficient expertise and experience in impact evaluation of public interventions and a good understanding of the project sector in the developing countries. They will design the evaluation, guide and oversee its implementation, and produce high-quality TA deliverables. Specifically, the specialists will
 - (i) conduct a desk review of project documents and coordinate with the project team in designing and implementing the evaluation;
 - (ii) conduct a literature review with assistance from the national impact evaluation specialists;
 - (iii) identify and access existing data sources with assistance from the national specialists;
 - (iv) design an evaluation framework and develop an action plan for implementation;
 - (v) prepare an inception report that includes a description of the intervention to be evaluated, evaluation questions, evaluation design, implementation plan, and other information requested by the project team;
 - (vi) design survey instruments and guide the national specialists and survey team in the conduct of surveys;
 - (vii) conduct empirical analysis of the impacts of the project;
 - (viii) prepare a final report with details of the impact evaluation study, highlighting lessons learned and recommendations for future operations; and
 - (ix) assist in disseminating the evaluation findings through academic publications, policy briefs, and/or seminars and workshops.

3. **National impact evaluation specialists** (national, 20 person-months, intermittent). The national impact evaluation specialists should have sufficient expertise and experience in survey design and implementation, good knowledge of the project sector and of impact evaluation methodologies and application. Guided by the international impact evaluation specialists, they will assist in survey design, implement the surveys, and assist in data analysis and report preparation. Specifically, the specialists will
 - (i) assist the international specialists in literature review and in identifying and accessing existing data sources;
 - (ii) assist the international specialists in developing the impact evaluation framework and action plan;
 - (iii) conduct pretests of survey instruments and assist the international specialists in improving the survey design;
 - (iv) guide the survey team and implement surveys for data collection;

- (v) coordinate between the international specialists, project team, and executing agencies;
 - (vi) assist the international specialists in data analysis and report preparation; and
 - (vii) participate in and contribute to the dissemination activities.
4. **Project coordinator** (national, 5 person-months, intermittent). The project coordinator should have sufficient experience in coordinating research projects. Specifically, the project coordinator will
- (i) follow up and update the project team of this TA and the impact evaluation committee with progress of the evaluation study;
 - (ii) prepare periodic reports on project progress, and/or as requested;
 - (iii) monitor budget utilization by regional departments;
 - (iv) design, maintain, and update the study websites;
 - (v) consolidate TA reports as needed; and
 - (vi) coordinate events related to the project.
5. **Copy editor** (international, 2.5 person-months). The copy editor will ensure that the outputs under this TA adhere to ADB style and usage, and conform to high publication standards. The consultant should have expertise in copyediting and desktop publishing, and preferably have extensive experience in similar assignments involving preparation of economic publications.
6. **Research assistants** (national, as needed). The research assistants should be familiar with the impact evaluation literature and have experience in data processing and analysis. Under the guidance of the impact evaluation specialists, the research assistants will
- (i) collect, clean, and analyze data;
 - (ii) assist in preparing presentations, reports and other publications; and
 - (iii) provide inputs to the study website.
7. **Impact evaluation trainers** (international, 2.5 person-months, intermittent). The impact evaluation trainers should be familiar with the impact evaluation literature and key development issues in the developing member countries (DMCs). They should also have practical experience in impact evaluation in the developing countries. The trainers will
- (i) design training courses for DMC officials covering common experimental and non-experimental methods of impact evaluation, their respective merits and drawbacks, and circumstances where they are applicable;
 - (ii) prepare relevant training materials, including case studies to illustrate possible scenarios that the participants may face; and
 - (iii) prepare reports on course effectiveness based on feedback from participants and other indicators.